



# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

7590 02/23/2018  
DEEP LIQUIDITY, INC.  
3225 SMOKY RIDGE ROAD  
SUITE110  
AUSTIN, TX 78730

EXAMINER
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KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
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3691

MAIL DATE	DELIVERY MODE
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02/23/2018

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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Commissioner for Patents  
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In re Patent No. 8,484,121  
Issue Date: July 9, 2013  
Application No. 10/840,378  
Filed: May 7, 2004  
Attorney Docket No. 12664-3

:  
:  
: DECISION ON PETITION  
:  
:

This is a decision on the petition under 37 CFR 1.378(b), filed August 16, 2017, to accept the unintentionally delayed payment of a maintenance fee for the above-identified patent.

The petition under 37 CFR 1.378(b) is **GRANTED**.

This patent expired on July 10, 2017, for failure to pay the 3.5 year maintenance fee. The maintenance fee is hereby accepted and the above-identified patent is reinstated as of the mail date of this decision.

Petitioner has appointed a representative to conduct all business before the U.S. Patent and Trademark Office (Office). The Office will not engage in dual correspondence with petitioner and petitioner's representative. Accordingly, petitioner must conduct all future correspondence with this Office through the representative of record. If petitioner no longer wishes to be represented by the representative of record, then a revocation of the power of attorney or patent agent should be submitted. A correspondence address must be included on the correspondence instructing the Office where all future communications are to be mailed. *See* 37 CFR 1.33(a).

Telephone inquiries concerning this decision should be directed to the undersigned at (571) 272-6735.

/Diane C. Goodwyn/  
Diane C. Goodwyn  
Petitioners Paralegal Specialist  
Office of Petitions

## Office of Petitions: Decision Count Sheet

Mailing Month

2

Application No.

10840378



For US serial numbers: enter number only, no slashes or commas. Ex: 10123456

For PCT: enter "51+single digit of year of filing+last 5 numbers", Ex. for PCT/US05/12345, enter 51512345

Deciding Official:

Goodwyn, Diane

Count (1) - Palm Credit

10840378

Decision:

GRANT

FINANCE WORK NEEDED

☐ Select Check Box for YES

Decision Type:

533 - 37 CFR 1.378(c) - TO ACCEPT UNINTENTIONAL DE



Notes:

Count (2)

Decision:

n/a

FINANCE WORK NEEDED

☐ Select Check Box for YES

Decision Type:

NONE

Notes:

Count (3)

Decision:

n/a

FINANCE WORK NEEDED

☐ Select Check Box for YES

Decision Type:

NONE

Notes:

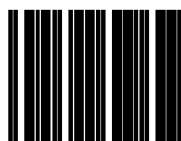
Initials of Approving Official (if required)

If more than 3 decisions, attach  
2nd count sheet & mark this box

Printed on:

2/21/2018

## Office of Petitions: Routing Sheet



4 7 0 0

Application No.

**This application is being forwarded to your office for further processing. A decision has been rendered on a petition filed in this application, as indicated below. For details of this decision, please see the document PET.OP.DEC filed on the same date as this document.**

☒ **GRANTED**

☐ **DISMISSED**

☐ **DENIED**





Box M

PTO/SB/66 (04-13)

Approved for use through 05/31/2015. OMB 0651-0016

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF  
MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))**

Docket Number (Optional)

Page 1 of 3

Mail to: Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Fax: (571) 273-8300

08/25/2017 DALLEN 00000002 8484121

01 FC:1599

1650.00 OP

NOTE: If information or assistance is needed in completing this form, please contact the Office of Petitions at (571) 272-3282.

Patent No. 8484121Application Number 10840378Issue Date 7/9/13Filing Date 2004-05-07 5/7/04

CAUTION: Maintenance fee payment must correctly identify: (1) the patent number (or reissue patent number, if a reissue) and (2) the application number of the actual U.S. application (or reissue application) leading to issuance of that patent to ensure the fee(s) is/are associated with the correct patent. 37 CFR 1.366(c) and (d).

Also complete the following information, if applicable.

The above-identified patent

☐ is a reissue of original Patent No. \_\_\_\_\_ original issue date \_\_\_\_\_

original application number \_\_\_\_\_

original filing date \_\_\_\_\_

☐ resulted from the entry into the U.S. under 35 U.S.C. 371 of international application \_\_\_\_\_

filed on \_\_\_\_\_

**CERTIFICATE OF MAILING (37 CFR 1.8(a))**

I hereby certify that this paper (\* along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class main in an envelope addressed to Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or facsimile transmitted to the U.S. Patent and Trademark Office on the date shown below.

8/16/17

Date

Signature

Sam Bababouh

Typed or Printed Name of Person Signing Certificate

[page 1 of 3]

This collection of information is required by 37 CFR 1.378(c). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 1 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

# **PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))**

Page 2 of 3

## **1. SMALL ENTITY**

☒ Patentee asserts, or has previously asserted, small entity status. See 37 CFR 1.27.

## **2. LOSS OF ENTITLEMENT TO SMALL ENTITY STATUS**

☐ Patentee is no longer entitled to small entity status. See 37 CFR 1.27(g).

## **3. MICRO ENTITY**

☐ Patentee certifies, or has previously certified, micro entity status. See 37 CFR 1.29  
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

## **4. LOSS OF ENTITLEMENT TO MICRO ENTITY STATUS**

☐ Patentee is no longer entitled to micro entity status. See 37 CFR 1.29(i).

## **5. MAINTENANCE FEE (37 CFR 1.20(e)-(g))**

The appropriate maintenance fee must be submitted with this petition, unless it was paid earlier.

Undiscounted			Small Entity			Micro Entity		
Amount	Fee	(Code)	Amount	Fee	(Code)	Amount	Fee	(Code)
<input type="checkbox"/> \$ _____	3½ yr fee	(1551)	<input type="checkbox"/> \$ <u>800</u>	3½ yr fee	(2551)	<input type="checkbox"/> \$ _____	3½ yr fee	(3551)
<input type="checkbox"/> \$ _____	7½ yr fee	(1552)	<input type="checkbox"/> \$ _____	7½ yr fee	(2552)	<input type="checkbox"/> \$ _____	7½ yr fee	(3552)
<input type="checkbox"/> \$ _____	11½ yr fee	(1553)	<input type="checkbox"/> \$ _____	11½ yr fee	(2553)	<input type="checkbox"/> \$ _____	11½ yr fee	(3553)

MAINTENANCE FEE BEING SUBMITTED \$ 800

## **6. PETITION FEE**

The surcharge required by 37 CFR 1.17(m) of:

\$ \_\_\_\_\_ Undiscounted (Fee Code 1558);

\$ 850 Small Entity (Fee Code 2558); or

must be paid as a condition of accepting an unintentionally delayed payment of a maintenance fee. (Note: There is currently no micro entity amount for the petition fee.)

PETITION FEE BEING SUBMITTED \$ 850

## **7. MANNER OF PAYMENT**

☐ Enclosed is a check for the sum of \$ \_\_\_\_\_

☐ Please charge Deposit Account No. \_\_\_\_\_ the sum of \$ \_\_\_\_\_

☒ Payment by credit card. Form PTO-2038 is attached.

☐ Payment made via EFS-Web.

## **8. AUTHORIZATION TO CHARGE ANY FEE DEFICIENCY**

☐ The Director is hereby authorized to charge any maintenance fee, surcharge or petition deficiency to Deposit Account No. \_\_\_\_\_

# **PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))**

Page 3 of 3

## **9. OVERPAYMENT**

As to any overpayment made, please

☐ Credit to Deposit Account No. \_\_\_\_\_

OR

☒ Send refund check

### **WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information, such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form (PTO-2038) submitted for payment purposes), is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms (PTO-2038) submitted for payment purposes are not retained in the application file and therefore are not publicly available.

## **10. STATEMENT**

The delay in payment of the maintenance fee for this patent was unintentional.

## **11. PETITIONER(S) REQUEST THAT THE DELAYED PAYMENT OF THE MAINTENANCE FEE BE ACCEPTED AND THE PATENT REINSTATED.**

8/16/17

Date

Sam Balabon

Signature(s) of Petitioner(s)

Sam Balabon

Typed or Printed Name(s)

Registration Number, if applicable

512 585 4589

Telephone Number

3225 Smoky Ridge Road, Austin

Address

TX

Address

37 CFR 1.378(c) states: "Any petition under this section must be signed in compliance with § 1.33(b)."

## **12. ENCLOSURES**

☒ Maintenance Fee Payment

☒ Petition fee under 37 CFR 1.17(m) (fee for filing the maintenance fee petition)

☐ \_\_\_\_\_

Document code: WFEE

United States Patent and Trademark Office  
Sales Receipt for Accounting Date: 02/16/2018

GARIAS	SALE	#00000001	Mailroom Dt:	08/16/2017	10840378
		01	FC : 2551	800.00	OP
		02	FC : 2558	850.00	OP

Document code: WFEE

United States Patent and Trademark Office  
Sales Receipt for Accounting Date: 02/16/2018

GARIAS	ADJ #00000001	Mailroom Dt: 08/16/2017	
	Seq No: 2	Sales Acctg Dt: 08/25/2017	10840378
	01 FC : 1599	-1650.00	OP



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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	07/09/2013	8484121	12664-3	1030

7590 06/19/2013

DEEP LIQUIDITY, INC.  
3225 SMOKY RIDGE ROAD  
SUITE110  
AUSTIN, TX 78730

## ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

### **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)** (application filed on or after May 29, 2000)

The Patent Term Adjustment is 1423 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

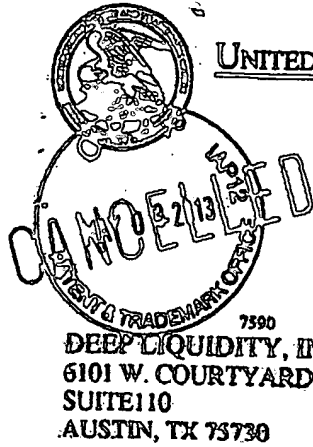
Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Sam Balabon, Houston, TX;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit [SelectUSA.gov](http://SelectUSA.gov).



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## NOTICE OF ALLOWANCE AND FEE(S) DUE



EXAMINER KANERVO, VIRPI H	
ART UNIT 3691	PAPER NUMBER

DATE MAILED: 02/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balaban	12664-3	1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$865	\$300	\$0	\$1165	05/20/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

## HOW TO REPLY TO THIS NOTICE:

05/30/2013 CNGUYEN3 00000027 10840378

01 FC:2501

890.00 0P

## I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

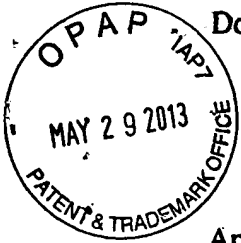
A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



Document Code: IMIS

## Notice of Fee Due

Application Number: 101840,378 Date: 05/03/13

Fees are due for the application or document dated 05/03/13. The payment was not collectable for the reason indicated below.

**Note: If the fee due is for any of the filing fees, the surcharge for late payment of the filing fees is now due as well.**

- ☐ Insufficient payment by check or money order.
- ☒ No authorization to charge a deposit account.
- ☐ Invalid deposit account number.
- ☐ User name not listed in deposit account \_\_\_\_\_ at \_\_\_\_\_:\_\_\_\_\_ (time).
- ☐ Insufficient funds in deposit account \_\_\_\_\_ at \_\_\_\_\_:\_\_\_\_\_ (time).
- ☒ Insufficient payment by credit card.
- ☐ Declined credit card \_\_\_\_\_:\_\_\_\_\_ (time).

Fee code(s) to be applied: 2501 \$ 890

\_\_\_\_\_  
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\_\_\_\_\_  
\$

Amount in holding fee code: 1506 \$ 885

1622/2622 \$  
1206/2206 \$  
1999 \$

Total remaining due from applicant: \$ 5

RAM Operator C

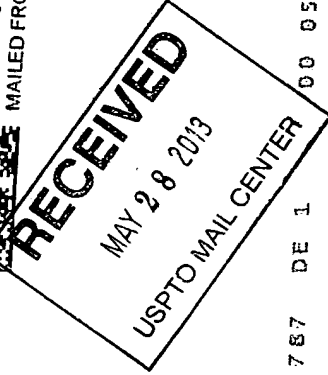


Organization \_\_\_\_\_ Bldg./Room \_\_\_\_\_  
UNITED STATES PATENT AND TRADEMARK OFFICE  
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AN EQUAL OPPORTUNITY EMPLOYER



02 1M  
\$ 00.460  
0004244975 MAY 20 2013  
MAILED FROM ZIP CODE 22314

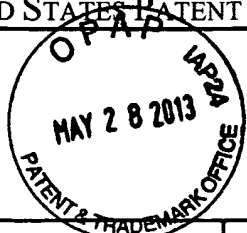


NIXIE 787 DE 1 00 05/23/13  
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BC: 22313145050 \*1892-05083-20-40  
787300322313 01450



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 05/17/2013  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
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EXAMINER

KANERVO, VIRPI H

ART UNIT.

PAPER NUMBER

3691

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[www.uspto.gov](http://www.uspto.gov)

DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN TX 75730

Application No.: 10840378

## NOTICE TO PAY BALANCE OF ISSUE FEE

Applicant is given a time period of **THREE (3) MONTHS** from the mailing date of this notice during which to pay the **BALANCE DUE** indicated below. The balance due is the difference between the issue fee required on the date that the correct issue fee is paid and the amount that was previously paid. This three-month time period may not be extended. If the balance due is not paid before the expiration of the three-month period, the application will become abandoned (if not issued) or the patent will lapse (if issued) at the termination of the three-month period.

	Column A			Column B	Balance Due
	Issue Fee Required			Issue Fee Paid	Column A - Column B
	Undiscounted	Small Entity	Micro Entity		
Application Type					
UTILITY	1,780.00	890.00	445.00	885.00	5.00
REISSUE	1,780.00	890.00	445.00		
DESIGN	1,020.00	510.00	255.00		
PLANT	1,400.00	700.00	350.00		

/Kimberly Terrell/  
Office of Data Management  
571-272-4100

### How to Pay:

Currently payments cannot be made via the Electronic Filing System

Submit payment by fax at 571-273-8300 – Include a copy of the letter and authorization to charge a deposit account or credit card on file.

Submit payment by mail – Include a copy of the letter, and either authorization to charge a deposit account/credit card or submit a check/ money order.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

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	Column A			Column B Issue Fee Paid	Balance Due Column A - Column B
	Issue Fee Required				
	Undiscounted	Small Entity	Micro Entity		
Application Type					
UTILITY	1,780.00	890.00	445.00	885.00	5.00
REISSUE	1,780.00	890.00	445.00		
DESIGN	1,020.00	510.00	255.00		
PLANT	1,400.00	700.00	350.00		

/Kimberly Terrell/  
Office of Data Management  
571-272-4100

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Organization 1C 5600 Bldg/Room ANIX  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
If Undeliverable Return in Ten Days



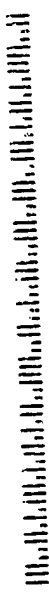
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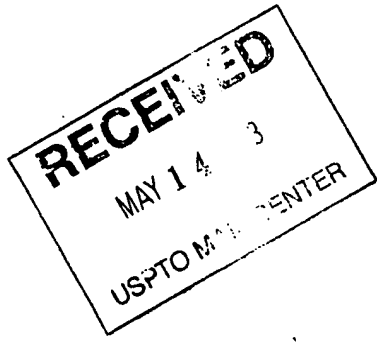
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# UNITED STATES PATENT AND TRADEMARK OFFICE

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE 110  
AUSTIN, TX 75730

02/19/2013

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

DATE MAILED: 02/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

# **PART B - FEE(S) TRANSMITTAL**

**Complete and send this form, together with applicable fee(s), to: Mail** **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
**or Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

7590 02/19/2013  
**DEEP LIQUIDITY, INC.**  
**6101 W. COURTYARD, BUILDING 1**  
**SUITE110**  
**AUSTIN, TX 75730**

## **Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

**TITLE OF INVENTION:** SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
KANERVO, VIRPI H	3691	705-037000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a **Customer Number is required.**

2. For printing on the patent front page, list  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

## **3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

## **4a. The following fee(s) are submitted:**

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

## **4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)**

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

## **5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

EXAMINER
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KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
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3691

DATE MAILED: 02/19/2013

7590 02/19/2013  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 429 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 429 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment filed on 01/23/2013.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 34-40, 53 and 54. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
 

☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> <li>4. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> </ol> | <ol style="list-style-type: none"> <li>5. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>6. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>7. <input type="checkbox"/> Other _____</li> </ol> |
|---|--|

/Virpi H Kanervo/  
Primary Examiner, Art Unit 3691

### NOTICE OF ALLOWANCE

1. Claims 34-40 and 53-54 are presented for examination. Applicant filed an after final amendment 01/23/2016 amending claims 34-6. After carefully reviewing Applicant's amendment, Examiner withdraws the outstanding rejection of claims 34-40 and 53-54. Therefore, claims 34-40 and 53-54 are ALLOWED.

#### *Examiner's Amendment*

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sam Balabon on October 27, 2009.

#### IN THE CLAIMS:

1-33. (Cancelled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order of trade of a financial instrument;

receiving by the computer from a second party a contra order of trade of the financial instrument;

matching by the computer the order of the first party with the contra order of the second party;

~~determining by the computer a market value of the financial instrument by conducting a scan of quotes in other systems of the market;~~

assigning a time period of up to 10 seconds, ~~which~~ wherein the assigned time period is not disclosed to the first and the second parties;

beginning the assigned time period at the exact time the ~~orders~~ order and the contra order are matched;

determining by the computer a market value of the financial instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period;

determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and

completing by the computer the order only if the market value of the financial instrument remains unchanged ~~for~~ between the beginning and the end of the assigned time period.

35. (Previously Amended) The method of claim 34, wherein the market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~ assigned time period includes a maximum time limit.

39. (Currently Amended) The method of claim 34, wherein ~~particular interval of time~~ assigned time period includes a time period between a minimum time limit and a maximum time limit.

40. (Currently Amended) The method of claim 39, wherein the ~~particular interval of time~~ assigned time period includes a random time period within the minimum time limit and the maximum time limit.

41 – 52. (Cancelled)

<b>Examiner-Initiated Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI KANERVO. (3) SAM BALABON.

(2) \_\_\_\_\_. (4) \_\_\_\_\_.

Date of Interview: 11 February 2013.

Type: ☒ Telephonic ☐ Video Conference  
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others  
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: all.

Identification of prior art discussed: N/A.

**Substance of Interview**  
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner and Applicant agreed on the examiner's amendment that was needed to place the application in the condition of allowance. The examiner's amendment is part of the allowance paperwork.

**Applicant recordation instructions:** It is not necessary for applicant to provide a separate record of the substance of interview.

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

Virpi H Kanervo/ Primary Examiner, Art Unit 3691	
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53. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~  
assigned time period includes a pre-set time period.

54. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~  
assigned time period includes a period of time during which the market value of the financial  
instrument is verified.

***Allowable Subject Matter***

3. Claims 34-40 and 53-54 are allowed. The following is a statement of reasons for the  
indication of allowable subject matter:

The claimed invention is directed to a method for determining a current market value of  
the financial instrument upon matching the order with the contra order.

The prior art of record, Tilfors et al., US patent No. 6,405,180 B2, teaches a method for:  
“receiving by a computer from a first party an order of trade of a financial instrument;  
receiving by the computer from a second party a contra order of trade of the financial  
instrument; matching by the computer the order of the first party with the contra order of  
the second party; beginning the assigned time period at the exact time the order and the  
contra order are matched; determining by the computer a market value of the financial



instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period; determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and completing by the computer the order only if the market value of the financial instrument remains unchanged between the beginning and the end of the assigned time period.

The prior art, however, fails to teach a method for: “assigning a time period of up to 10 seconds, wherein the assigned time period is not disclosed to the first and the second parties.”

These features are found in independent claim 34. Therefore, independent claim 34 is allowable. Claims 35-40 and 53-54 are dependent claims depending from independent claim 1. Therefore, dependent claims 35-40 and 53-54 are also allowable.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang, Pei Chann; *An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract)*; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569; December 1989.

Elton, Edwin J. *et al.*; *Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract)*; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129; February 1984.

Lake, David; *Inter-listing Forges Trans-Pacific Bonds*; Asian Finance; Volume 14, Issue 11, Page 52; November 1988.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is (571)272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 3691

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Virpi H Kanervo/

Primary Examiner, Art Unit 3691

<b>Notice of References Cited</b>	Application/Control No. 10/840,378	Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI KANERVO	Art Unit 3691	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,405,180 B2	06-2002	Tilfors et al.	705/36R
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Chang, Pei Chann; An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract); December 1989; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569.
	V	Elton, Edwin J. et al.; Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract); February 1984; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129.
	W	Lake, David; Inter-listing Forges Trans-Pacific Bonds; November 1988; Asian Finance; Volume 14, Issue 11, Page 52.
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



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Patent Number	
Issue Date	
Application Number	10/840378
Filing Date	5/7/09
First Named Inventor	Sam Balaban
Attorney Docket Number	12664-3

Please change the Correspondence Address for the above-identified patent to:

☐ The address associated with Customer Number:

OR

☒ Firm or  
Individual Name

Deep Liquidity, Inc.

Address

3225 Smoky Ridge Road

City

Austin

State

TX

ZIP

78730

Country

U.S.

Telephone

512 585 4589

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☐ Patentee.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

☐ Attorney or agent of record. Registration Number \_\_\_\_\_

Signature

S. Balaban

Typed or  
Printed Name

Sam Balaban P.O.S. Deep Liquidity, Inc.

Date

4/29/13

Telephone 512 585 4589

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

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 6101 W. COURTYARD, BUILDING 1  
 SUITE110  
 AUSTIN, TX 75730



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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013
EXAMINER		ART UNIT	CLASS-SUBCLASS	05/03/2013 CNGUYEN3 00000017 10840378		
KANERVO, VIRPI H		3691	705-037000	01 FC:1504 02 FC:1506 300.00 OP 885.00 OP		

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1	_____
2	_____
3	_____

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(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

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4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.  
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☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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### Notice of Fee Due

Application Number: 101840,378 Date: 05/03/13

Fees are due for the application or document dated 05/03/13. The payment was not collectable for the reason indicated below.

**Note: If the fee due is for any of the filing fees, the surcharge for late payment of the filing fees is now due as well.**

- ☐ Insufficient payment by check or money order.
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Fee code(s) to be applied:

<u>2501</u>	\$ <u>890</u>
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_____	\$ _____

Amount in holding fee code:

<u>1506</u>	\$ <u>885</u>
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<u>1999</u>	\$ _____

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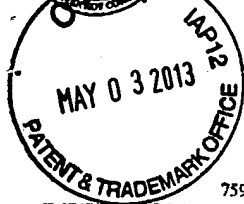
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SUITE 110  
AUSTIN, TX 75730

EXAMINER  
KANERVO, VIRPI H

ART UNIT PAPER NUMBER  
3691

DATE MAILED: 02/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

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**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

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If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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SUITE 110  
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(Depositor's name)
(Signature)
(Date)

APPLICATION NO. 10/840,378	FILING DATE 05/07/2004	FIRST NAMED INVENTOR Sam Balaban	ATTORNEY DOCKET NO. 12664-3	CONFIRMATION NO. 1030
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TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPL. TYPE nonprovisional	SMALL ENTITY YES	ISSUE FEE DUE \$885	PUBLICATION FEE DUE \$300	PREV. PAID ISSUE FEE \$0	TOTAL FEE(S) DUE \$1185	DATE DUE 05/20/2013
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EXAMINER KANERVO, VIRPI H	ART UNIT 3691	CLASS-SUBCLASS 705-037000
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05/03/2013 CNUYEN3 00000017 10840378  
01 FC:1584  
02 FC:1586

388.00 OP  
885.00 OP

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
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## 5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

- ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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Sam Balaban

Date

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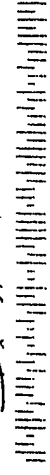
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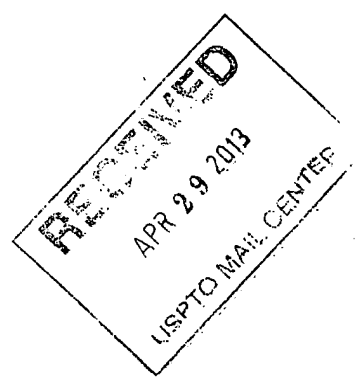
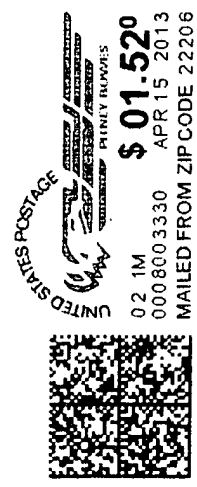
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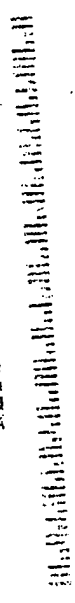
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SUITE 110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

DATE MAILED: 02/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

**TITLE OF INVENTION:** SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
KANERVO, VIRPI H	3691	705-037000

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4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

7590	02/19/2013
DEEP LIQUIDITY, INC.	
6101 W. COURTYARD, BUILDING 1	
SUITE110	
AUSTIN, TX 75730	

EXAMINER	
KANERVO, VIRPI H	

ART UNIT	PAPER NUMBER
3691	

DATE MAILED: 02/19/2013

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 429 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 429 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment filed on 01/23/2013.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 34-40, 53 and 54. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| 2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 6. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| 3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 7. <input type="checkbox"/> Other ____   |
| 4. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____            |  |

/Virpi H Kanervo/  
Primary Examiner, Art Unit 3691

**NOTICE OF ALLOWANCE**

1. Claims 34-40 and 53-54 are presented for examination. Applicant filed an after final amendment 01/23/2016 amending claims 34-6. After carefully reviewing Applicant's amendment, Examiner withdraws the outstanding rejection of claims 34-40 and 53-54. Therefore, claims 34-40 and 53-54 are ALLOWED.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sam Balabon on October 27, 2009.

**IN THE CLAIMS:**

1-33. (Cancelled)



34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order of trade of a financial instrument;

receiving by the computer from a second party a contra order of trade of the financial instrument;

matching by the computer the order of the first party with the contra order of the second party;

~~determining by the computer a market value of the financial instrument by conducting a scan of quotes in other systems of the market;~~

assigning a time period of up to 10 seconds, ~~which~~ wherein the assigned time period is not disclosed to the first and the second parties;

beginning the assigned time period at the exact time the ~~orders~~ order and the contra order are matched;

determining by the computer a market value of the financial instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period;

determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and

completing by the computer the order only if the market value of the financial instrument remains unchanged ~~for~~ between the beginning and the end of the assigned time period.

35. (Previously Amended) The method of claim 34, wherein the market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~ assigned time period includes a maximum time limit.

39. (Currently Amended) The method of claim 34, wherein ~~particular interval of time~~ assigned time period includes a time period between a minimum time limit and a maximum time limit.

40. (Currently Amended) The method of claim 39, wherein the ~~particular interval of time~~ assigned time period includes a random time period within the minimum time limit and the maximum time limit.

41 – 52. (Cancelled)

53. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~  
assigned time period includes a pre-set time period.

54. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~  
assigned time period includes a period of time during which the market value of the financial  
instrument is verified.

***Allowable Subject Matter***

3. Claims 34-40 and 53-54 are allowed. The following is a statement of reasons for the  
indication of allowable subject matter:

The claimed invention is directed to a method for determining a current market value of  
the financial instrument upon matching the order with the contra order.

The prior art of record, Tilfors et al., US patent No. 6,405,180 B2, teaches a method for:  
“receiving by a computer from a first party an order of trade of a financial instrument;  
receiving by the computer from a second party a contra order of trade of the financial  
instrument; matching by the computer the order of the first party with the contra order of  
the second party; beginning the assigned time period at the exact time the order and the  
contra order are matched; determining by the computer a market value of the financial

instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period; determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and completing by the computer the order only if the market value of the financial instrument remains unchanged between the beginning and the end of the assigned time period.

The prior art, however, fails to teach a method for: "assigning a time period of up to 10 seconds, wherein the assigned time period is not disclosed to the first and the second parties."

These features are found in independent claim 34. Therefore, independent claim 34 is allowable. Claims 35-40 and 53-54 are dependent claims depending from independent claim 1. Therefore, dependent claims 35-40 and 53-54 are also allowable.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang, Pei Chann; *An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract)*; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569; December 1989.

Elton, Edwin J. *et al.*; *Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract)*; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129; February 1984.

Lake, David; *Inter-listing Forges Trans-Pacific Bonds*; Asian Finance; Volume 14, Issue 11, Page 52; November 1988.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is (571)272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 3691

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Virpi H Kanervo/

Primary Examiner, Art Unit 3691

<b>Examiner-Initiated Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI KANERVO.

(3) SAM BALABON.

(2) \_\_\_\_\_.

(4) \_\_\_\_\_.

Date of Interview: 11 February 2013.

Type: ☒ Telephonic ☐ Video Conference  
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☐ 103 ☒ Others  
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: all.

Identification of prior art discussed: N/A.

#### Substance of Interview

(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner and Applicant agreed on the examiner's amendment that was needed to place the application in the condition of allowance. The examiner's amendment is part of the allowance paperwork.

**Applicant recordation instructions:** It is not necessary for applicant to provide a separate record of the substance of interview.

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Virpi H Kanervo/  
Primary Examiner, Art Unit 3691

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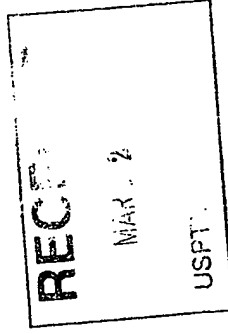
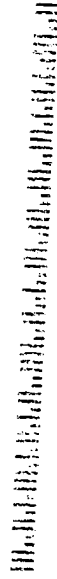
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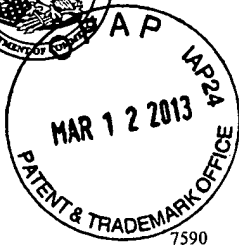






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NOTICE OF ALLOWANCE AND FEE(S) DUE

DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE 110  
AUSTIN, TX 75730

02/19/2013

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

DATE MAILED: 02/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

**PART B - FEE(S) TRANSMITTAL**

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**  
**Commissioner for Patents**  
**P.O. Box 1450**  
**Alexandria, Virginia 22313-1450**  
 or **Fax (571)-273-2885**

**INSTRUCTIONS:** This form should be used for transmitting the **ISSUE FEE** and **PUBLICATION FEE** (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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7590 02/19/2013  
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**6101 W. COURTYARD, BUILDING 1**  
**SUITE 110**  
**AUSTIN, TX 75730**

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

**Certificate of Mailing or Transmission**

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

**TITLE OF INVENTION:** SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
KANERVO, VIRPI H	3691	705-037000

**1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).**  
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

**2. For printing on the patent front page, list**  
 (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_  
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 \_\_\_\_\_  
 3 \_\_\_\_\_

**3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)**

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE \_\_\_\_\_ (B) RESIDENCE: (CITY and STATE OR COUNTRY) \_\_\_\_\_

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

**4a. The following fee(s) are submitted:**

- ☐ Issue Fee  
☐ Publication Fee (No small entity discount permitted)  
☐ Advance Order - # of Copies \_\_\_\_\_

**4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)**

- ☐ A check is enclosed.  
☐ Payment by credit card. Form PTO-2038 is attached.  
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

**5. Change in Entity Status (from status indicated above)**

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

**NOTE:** The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

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This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

7590 02/19/2013  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE 110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
----------	--------------

3691

DATE MAILED: 02/19/2013

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 429 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 429 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment filed on 01/23/2013.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 34-40, 53 and 54. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| 2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 6. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| 3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 7. <input type="checkbox"/> Other ____   |
| 4. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____            |  |

/Virpi H Kanervo/  
 Primary Examiner, Art Unit 3691

**NOTICE OF ALLOWANCE**

1. Claims 34-40 and 53-54 are presented for examination. Applicant filed an after final amendment 01/23/2016 amending claims 34-6. After carefully reviewing Applicant's amendment, Examiner withdraws the outstanding rejection of claims 34-40 and 53-54. Therefore, claims 34-40 and 53-54 are ALLOWED.

***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sam Balabon on October 27, 2009.

**IN THE CLAIMS:**

1-33. (Cancelled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

- receiving by a computer from a first party an order of trade of a financial instrument;
- receiving by the computer from a second party a contra order of trade of the financial instrument;
- matching by the computer the order of the first party with the contra order of the second party;
- ~~determining by the computer a market value of the financial instrument by conducting a scan of quotes in other systems of the market;~~
- assigning a time period of up to 10 seconds, ~~which~~ wherein the assigned time period is not disclosed to the first and the second parties;
- beginning the assigned time period at the exact time the ~~orders~~ order and the contra order are matched;
- determining by the computer a market value of the financial instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period;
- determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and
- completing by the computer the order only if the market value of the financial instrument remains unchanged ~~for~~ between the beginning and the end of the assigned time period.

35. (Previously Amended) The method of claim 34, wherein the market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~ assigned time period includes a maximum time limit.

39. (Currently Amended) The method of claim 34, wherein ~~particular interval of time~~ assigned time period includes a time period between a minimum time limit and a maximum time limit.

40. (Currently Amended) The method of claim 39, wherein the ~~particular interval of time~~ assigned time period includes a random time period within the minimum time limit and the maximum time limit.

41 – 52. (Cancelled)



53. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~  
assigned time period includes a pre-set time period.

54. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~  
assigned time period includes a period of time during which the market value of the financial  
instrument is verified.

*Allowable Subject Matter*

3. Claims 34-40 and 53-54 are allowed. The following is a statement of reasons for the  
indication of allowable subject matter:

The claimed invention is directed to a method for determining a current market value of  
the financial instrument upon matching the order with the contra order.

The prior art of record, Tilfors et al., US patent No. 6,405,180 B2, teaches a method for:  
“receiving by a computer from a first party an order of trade of a financial instrument;  
receiving by the computer from a second party a contra order of trade of the financial  
instrument; matching by the computer the order of the first party with the contra order of  
the second party; beginning the assigned time period at the exact time the order and the  
contra order are matched; determining by the computer a market value of the financial

Art Unit: 3691

instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period; determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and completing by the computer the order only if the market value of the financial instrument remains unchanged between the beginning and the end of the assigned time period.

The prior art, however, fails to teach a method for: “assigning a time period of up to 10 seconds, wherein the assigned time period is not disclosed to the first and the second parties.”

These features are found in independent claim 34. Therefore, independent claim 34 is allowable. Claims 35-40 and 53-54 are dependent claims depending from independent claim 1. Therefore, dependent claims 35-40 and 53-54 are also allowable.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang, Pei Chann; *An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract)*; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569; December 1989.

Elton, Edwin J. *et al.*; *Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract)*; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129; February 1984.

Lake, David; *Inter-listing Forges Trans-Pacific Bonds*; Asian Finance; Volume 14, Issue 11, Page 52; November 1988.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is (571)272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 3691

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Virpi H Kanervo/

Primary Examiner, Art Unit 3691

<b>Examiner-Initiated Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI KANERVO. (3) SAM BALABON.

(2) \_\_\_\_\_. (4) \_\_\_\_\_.

Date of Interview: 11 February 2013.

Type: ☒ Telephonic ☐ Video Conference  
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.  
If Yes, brief description: \_\_\_\_\_.

Issues Discussed ☐ 101 ☐ 112 ☐ 102 ☐ 103 ☒ Others  
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: all.

Identification of prior art discussed: N/A.

**Substance of Interview**  
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner and Applicant agreed on the examiner's amendment that was needed to place the application in the condition of allowance. The examiner's amendment is part of the allowance paperwork.

**Applicant recordation instructions:** It is not necessary for applicant to provide a separate record of the substance of interview.

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Virpi H Kanervo/ Primary Examiner, Art Unit 3691	
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<b>Notice of References Cited</b>	Application/Control No. 10/840,378	Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI KANERVO	Art Unit 3691	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,405,180 B2	06-2002	Tilfors et al.	705/36R
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Chang, Pei Chann; An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract); December 1989; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569.
	V	Elton, Edwin J. et al.; Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract); February 1984; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129.
	W	Lake, David; Inter-listing Forges Trans-Pacific Bonds; November 1988; Asian Finance; Volume 14, Issue 11, Page 52.
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

[Back to previous page](#)

**document 1 of 1**

## **An on-line rescheduling algorithm for maintaining efficiency and stability of failure-prone manufacturing systems**

Chang, P. C. (1989). An on-line rescheduling algorithm for maintaining efficiency and stability of failure-prone manufacturing systems. Lehigh University). ProQuest Dissertations and Theses, , 147-147 p. Retrieved from [http://search.proquest.com/docview/303716418?](http://search.proquest.com/docview/303716418?accountid=14753) accountid=14753. (303716418).

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### **Abstract (summary)**

The control of a flexible manufacturing system (FMS) has presented major challenges to recent industrial practice and research. Two major concerns of the control problem involve the scheduling machines and routing of jobs so that the FMS can be more effectively utilized. The difficulties of these control tasks are compounded because of the following facts: (1) Combinatorial complexity. Scheduling problems under the context of an FMS are similar to job shop scheduling, which are well known to be NP-hard, and (2) Executional uncertainties. During the execution of the schedule, random disruption will constantly interrupt the process which will render the pre-generated schedule invalid. These problems highlight the need for the development of new control methodologies.

In this research, an on-line rescheduling algorithm is developed, which includes the following: firstly, the match-up heuristic for machine rescheduling problems after a random disruption is investigated to study the relationship among the match-up time, time delay, and the system impact. As a result, a cost model is specifically defined and formulated, which measures the system impact of schedule change caused by the random disruptions. Secondly, owing to the complexity of the problem, a two-stage solution was taken: (1) decomposing the problem into the one-machine level from which a bicriterion one-machine rescheduling problem is formulated. By manipulating two control parameters, i.e.,  $\alpha$  and  $\epsilon$ , adjust the ready time,  $a_{i,j}$ , and tail,  $q_{i,j}$ , of each job, a grid-search method which

takes advantage of the Carlier's branch and bound procedure is developed to resolve this bicriterion one-machine problem, and (2) embedding this one-machine rescheduling heuristic into the "shifting bottleneck" procedure, a job shop rescheduling procedure results. The rescheduling algorithm generates new schedules with a similar effect as the match-up heuristic where cost impact of a schedule change is reduced with a minor trade-off to schedule efficiency.

The rescheduling procedure can be implemented in a cell-level on-line controller. On occurrence of a random failure, the controller can efficiently reschedule the whole shop to maintain the production efficiency as well as stability. Using the approach, which extensive computational results show to be very time-efficient and robust, the impact of random disruption to the system is significantly better controlled than in earlier approaches.

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## Indexing (details)

<b>Subject</b>	Industrial engineering
<b>Classification</b>	0546: Industrial engineering
<b>Identifier / keyword</b>	Applied sciences
<b>Title</b>	An on-line rescheduling algorithm for maintaining efficiency and stability of failure-prone manufacturing systems
<b>Author</b>	Chang, Pei Chann
<b>Pages</b>	147 p.
<b>Number of pages</b>	147
<b>Publication year</b>	1989
<b>Degree date</b>	1989
<b>School code</b>	0105
<b>Source</b>	DAI-B 50/06, p. 2569, Dec 1989
<b>University/institution</b>	Lehigh University
<b>University location</b>	United States -- Pennsylvania
<b>Degree</b>	Ph.D.
<b>Source type</b>	Dissertations & Theses
<b>Language</b>	English
<b>Document type</b>	Dissertation/Thesis
<b>Dissertation/thesis number</b>	8921623
<b>ProQuest document ID</b>	303716418
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**Bibliography**

Citation style: APA6

Chang, P. C. (1989). An on-line rescheduling algorithm for maintaining efficiency and stability of failure-prone manufacturing systems. Lehigh University). ProQuest Dissertations and Theses, , 147-147 p. Retrieved from <http://search.proquest.com/docview/303716418?accountid=14753>; [http://zj5lm7ny2a.search.serialssolutions.com/?ctx\\_ver=Z39.88-2004&ctx\\_enc=info:ofi/enc:UTF-8&rft\\_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft\\_val\\_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Chang%2C+Pei+Chann&rft.aulast=Chang&rft.aufirst=Pei&rft.date=1989-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=An+on-line+rescheduling+algorithm+for+maintaining+efficiency+and+stability+of+failure-prone+manufacturing+systems&rft.issn=.](http://zj5lm7ny2a.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info:ofi/enc:UTF-8&rft_id=info:sid/ProQuest+Dissertations+%26+Theses+%28PQDT%29&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&rft.genre=dissertations+%26+theses&rft.jtitle=&rft.atitle=&rft.au=Chang%2C+Pei+Chann&rft.aulast=Chang&rft.aufirst=Pei&rft.date=1989-01-01&rft.volume=&rft.issue=&rft.spage=&rft.isbn=&rft.btitle=&rft.title=An+on-line+rescheduling+algorithm+for+maintaining+efficiency+and+stability+of+failure-prone+manufacturing+systems&rft.issn=.) (303716418).

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## CORPORATE FINANCE

# Inter-listing forges trans-Pacific bonds

*The success of Hong Kong's RJP Electronics on the Vancouver Stock Exchange will accelerate linkages between Asian and North American equity markets.*

By David Lake

**T**he Vancouver Stock Exchange and RJP Electronics of Hong Kong have bridged the gap between the Asian and North American equity markets with their first inter-listing. RJP was listed on the Hong Kong Stock Exchange (HKSE) in January 1988, and in Vancouver eight months later. Shares opened in Hong Kong at about 60 Hong Kong cents, and were trading at about HK\$1.05 in mid-October. On the first day of trading on the Vancouver Stock Exchange (VSE), 281,000 shares changed hands in 14 transactions, making RJP the most active non-resource stock of the day.

The inter-listing is an important step in the globalisation process between two emerging markets, but there are quirks to be worked out. In theory, an inter-listing means that investors can buy shares on one exchange and sell on another. However, Hong Kong has a 24-hour settlement period, while Vancouver allows five days. Thus, Hong Kong share certificates must be exchanged for new ones if a trade is to be settled on VSE.

Even so, the RJP inter-listing has been deemed a success by exchange observers, though Hong Kong companies looking to inter-list must be ready to deal with cultural barriers.

### □ Outstanding shares

"The structure of capitalisation is very different between Hong Kong and Canada," says **Max Meier**, president of Pacific International Securities, the Vancouver brokerage house that sponsored RJP's listing. "Hong Kong companies tend to have a larger number of shares outstanding because Hong Kong investors prefer stocks that cost less than a dollar."

"Many HKSE blue chips have share prices trading at under a dollar and billions



**Robert Li:** With sales of HK\$178 million, RJP is one of the top ten electronics companies

of shares outstanding. Canadian investors just wouldn't buy a stock that has a share price set at that level," Meier explains. "RJP trades at about 23 cents here, and Canadians look at it as a penny stock. They think that the company is almost broke. So, there is a lot of educating that must go on if this is to work."

In May 1987, the exchange sent a seven-member group to Hong Kong to attract Asian listings and investment. Vancouver's traditional commercial and trading ties with the region left the delegation convinced of its potential as an important source of

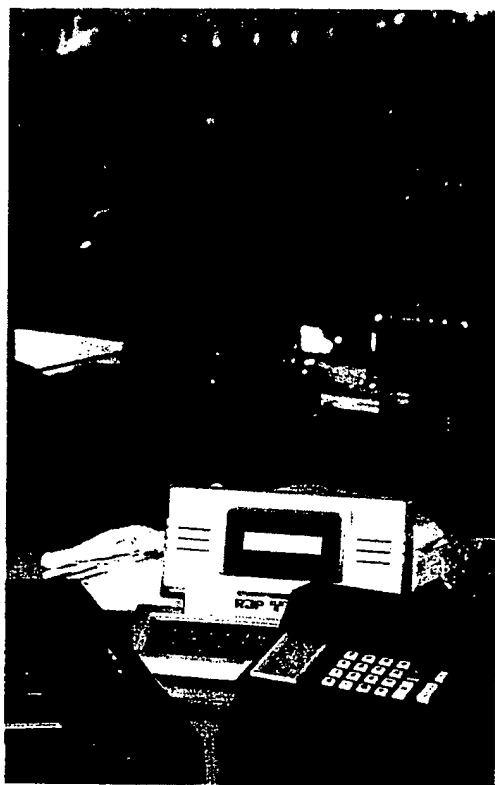
investment and venture capital listings.

The match between HKSE and VSE is perfect when it comes to similarities in character. VSE has a reputation as a penny stock market that is rife with gamblers and prone to share scandals. Though VSE cannot match the "bad boy" reputation of HKSE, it has been known to turn the heads of regulators.

VSE was incorporated in 1907 and presently has 2,115 listings. As in other markets, trading levels have dropped since the 1987 October crash. Daily volumes fell from an average of 21 million shares worth

over C\$30 million to about 13 million shares worth C\$13.5 million. Though dollar value is low, Vancouver is just behind Toronto and New York in terms of the number of shares traded.

The exchange plays a vital role in financing junior businesses, and is widely recognised as North America's — and perhaps the world's — leading venture capital market. About 25% of all trading activity originates in the US and a further 15% comes from Europe and Asia. The RJP inter-listing brings the number of newly-listed VSE companies to 194 this year. While listing costs may reach as high as C\$1 million for some North American exchanges, VSE bargain basement prices range from C\$25,000 to C\$100,000.



in Hong Kong.

Small or new companies usually find a particularly receptive market at VSE. Its listing policies are designed expressly to attract promising new businesses. Its accessibility and the relatively low listing costs make it a desirable target for a new venture or an inter-listing. As long as a company meets financial standards, shareholder and distribution requirements, there are no regulations barring multinationals from obtaining a listing.

With all the play in the local media about the VSE-Hong Kong inter-listing, RJP has come under the spotlight. Formed as a

manufacturer of light-dimmer switches in 1971 by **Robert and Peter Li**, the firm presently designs, produces, and markets, consumer electronics, and ranks among the top ten Hong Kong electronics producers. The Li brothers hold about 74% of the 300 million shares issued and outstanding.

RJP has over 700 employees, and sells its products in more than 15 countries. Sales for the year ended March 1988 reached HK\$178 million (US\$22.8 million) and net earnings hit HK\$24 million, up from HK\$10 million in 1987 and HK\$6 million in 1986. The firm has one factory in Hong Kong and two in China's Shenzhen Special Economic Zone. It has set up North American distribution offices in Los Angeles and Atlanta. It has opened an office in Vancouver and plans to use the city as its North American base. Another office is planned for France.

### □ Fast growing

RJP's principal product lines are electronic toys, databank memory devices, calculators, keyboards, medical products, and solar-powered watches. The fast-growing concern has introduced several new products in 1988, including an automatic telephone dialer with built-in databank functions and two new medical products. It is planning a joint venture with a Japanese firm to produce car radio-cassette players.

"We specialise in doing start-ups for junior companies," says **Joyce Courtney** of VSE. "RJP is an emerging growth firm, and was already established in Hong Kong. We sincerely want to list a Far Eastern corporation that is not listed anywhere else. The idea of doing a Japanese small business start-up is very interesting to the exchange."

Traditionally, VSE companies are resource-based, but with recent changes in the Canadian economy, a trend towards non-resource companies is emerging along with a strong interest in the Pacific Rim. Almost 50 VSE firms have targeted China as their primary market, and several are active in Hong Kong, Japan, Australia, the Philippines, and Indonesia.

### □ Breaking the ice

Following its Hong Kong jaunt, VSE engaged **John Henderson**, one-time head of the Canadian Hong Kong Chamber of Commerce and managing director of Pacific Rim Ventures in Hong Kong. Henderson will act as the exchange's Asian representative, and interest has been mounting steadily since the VSE office opened. Hong Kong's two English language newspapers carry daily VSE quotations, and Henderson has fielded a number

of inquiries following the RJP listing.

As evidence of the growing mutual interest between Vancouver and Hong Kong companies, Pacific International Securities has become the first Vancouver-based broker to set up a Hong Kong representative office. VSE hopes the move by RJP's sponsor will break the ice, and that more VSE members will follow that broker's lead in establishing a Hong Kong office.

"Our main interest in Hong Kong is to help companies list in Canada," says Pacific International's Meier. "We have been in touch with several that are interested in a Canadian listing to raise money for expansion. There are many Hong Kong family-owned businesses that do quite well by our standards and are looking for a safeguard against 1997. They need to diversify, and they like Canada. Vancouver is particularly attractive because of its time zone. We can talk to Hong Kong at the end of our business day."

Pacific International, the fifth largest VSE trader, had considered a subsidiary in Hong Kong to enter the tough retail business. After examining the cost of a takeover or a joint venture, the firm opted instead for a representative office that will target institutional investors. Its Hong Kong bureau is headed by **Robert Silin**, a former vice-president of Bank of America (Asia).

With Pacific's push for business, Hong Kong may soon see another inter-listing in Vancouver, or perhaps even an initial public offering. Most of the firms approached by Pacific are private companies interested in going public. They are being enticed by the VSE because they find the HKSE requirements of a five-year earnings record and a minimum market capitalisation of HK\$50 million at the time of issue, onerous.

### □ Expansion plans

Canadian brokers are not the only ones looking to expand. Hong Kong-based ChinTung Securities bought a seat on VSE in 1987 for a record C\$275,000. The timing was unfortunate, however. The purchase was made on October 19. As a result of the crash, ChinTung was taken over by Standard Chartered Bank. Though the Hong Kong broker's expansion into Vancouver was put on hold, the ball is rolling again, and ChinTung is waiting for final approval of its VSE membership application.

"After Canada's financial deregulation in June 1987, there were a lot of inquiries from the US, the UK, and the Far East concerning VSE seats," says Courtney. "ChinTung is the only one that's taken it this far. But our industry is very much a copycat business, and other brokers are interested."

[Back to previous page](#)

**document 1 of 1**

## Intra-Day Tests of the Efficiency of the Treasury Bill Futures Market

Elton, E. J., Gruber, M. J., & Rentzler, J. (1984). Intra-day tests of the efficiency of the treasury bill futures market. *The Review of Economics and Statistics*, 66(1), 129-129. Retrieved from <http://search.proquest.com/docview/194670185?accountid=14753>

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### Abstract (summary)

The efficiency of the Treasury bill (T-bill) futures market is examined for 3 market equilibrating strategies, using intra-day prices to match trading in the futures and cash markets. The trading strategies are realistic, since cash and futures trades are matched in time, and delays are allowed between observation of inefficiencies and trading. The T-bill futures market allows construction of a portfolio which contains a futures contract for a T-bill and a cash T-bill. This portfolio is a pseudo T-bill, and if the market is efficient, it should sell for the same price as a cash T-bill of the same maturity. The strategies of initially purchasing the apparently more profitable contract, swapping, and arbitrage are tested using data on intra-day cash and futures T-bill prices for the period 1976-1982. The T-bill futures market is found to be somewhat inefficient. Profits from initial purchase strategies are higher when buying a pseudo T-bill than a cash T-bill, and swapping a cash bill for a pseudo bill generates higher profits. Substantial profits result from pure arbitrage.

### Indexing (details)

<b>Subject</b>	Treasury bills; Portfolio management; Futures market; Equilibrium; Efficiency; Economic theory
<b>Classification</b>	9130: Experimental/theoretical treatment, 3400: Investment analysis, 1130: Economic theory
<b>Title</b>	Intra-Day Tests of the Efficiency of the Treasury Bill Futures Market
<b>Author</b>	Elton, Edwin J; Gruber, Martin J; Rentzler, Joel
<b>Publication title</b>	The Review of Economics and Statistics
<b>Volume</b>	66
<b>Issue</b>	1
<b>Pages</b>	129

<b>Number of pages</b>	9
<b>Publication year</b>	1984
<b>Publication date</b>	Feb 1984
<b>Year</b>	1984
<b>Publisher</b>	MIT Press Journals
<b>Place of publication</b>	Cambridge
<b>Country of publication</b>	United States
<b>Journal subject</b>	Business And Economics, Statistics
<b>ISSN</b>	00346535
<b>CODEN</b>	RECSA9
<b>Source type</b>	Scholarly Journals
<b>Language of publication</b>	English
<b>Document type</b>	PERIODICAL
<b>Accession number</b>	00234067
<b>ProQuest document ID</b>	194670185
<b>Document URL</b>	<a href="http://search.proquest.com/docview/194670185?accountid=14753">http://search.proquest.com/docview/194670185?accountid=14753</a>
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<b>Last updated</b>	2010-06-05
<b>Database</b>	ProQuest Central

### Bibliography

Citation style: APA6

Elton, E. J., Gruber, M. J., & Rentzler, J. (1984). Intra-day tests of the efficiency of the treasury bill futures market. *The Review of Economics and Statistics*, 66(1), 129-129. Retrieved from <http://search.proquest.com/docview/194670185?accountid=14753>;  
[http://ZJ5LM7NY2A.search.serialssolutions.com/directLink?&title=Intra-Day+Tests+of+the+Efficiency+of+the+Treasury+Bill+Futures+Market&author=Elton%2C+Edwin+J%3BGruber%2C+Martin+J%3BRentzler%2C+Joel&issn=00346535&title=The+Review+of+Economics+and+Statistics&volume=66&issue=1&date=1984-02-01&spage=129&id=doi:&sid=ProQ\\_ss&genre=article](http://ZJ5LM7NY2A.search.serialssolutions.com/directLink?&title=Intra-Day+Tests+of+the+Efficiency+of+the+Treasury+Bill+Futures+Market&author=Elton%2C+Edwin+J%3BGruber%2C+Martin+J%3BRentzler%2C+Joel&issn=00346535&title=The+Review+of+Economics+and+Statistics&volume=66&issue=1&date=1984-02-01&spage=129&id=doi:&sid=ProQ_ss&genre=article)

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 02/19/2013  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

DATE MAILED: 02/19/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.**

**THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.**

### HOW TO REPLY TO THIS NOTICE:

#### I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

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**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE  
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**INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

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7590 02/19/2013

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AUSTIN, TX 75730

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378	05/07/2004	Sam Balabon	12664-3	1030
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TITLE OF INVENTION: SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

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nonprovisional	YES	\$885	\$300	\$0	\$1185	05/20/2013
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EXAMINER	ART UNIT	CLASS-SUBCLASS
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KANERVO, VIRPI H	3691	705-037000
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1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 \_\_\_\_\_
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3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

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5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_ Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

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AUSTIN, TX 75730

EXAMINER
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KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
----------	--------------

3691

DATE MAILED: 02/19/2013

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 429 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 429 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.



## Privacy Act Statement

**The Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
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5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI KANERVO	3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment filed on 01/23/2013.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 34-40,53 and 54. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see [http://www.uspto.gov/patents/init\\_events/pph/index.jsp](http://www.uspto.gov/patents/init_events/pph/index.jsp) or send an inquiry to [PPHfeedback@uspto.gov](mailto:PPHfeedback@uspto.gov).
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                  |
| 2. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 6. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| 3. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 7. <input type="checkbox"/> Other ____.  |
| 4. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____.           |  |

/Virpi H Kanervo/  
Primary Examiner, Art Unit 3691

### **NOTICE OF ALLOWANCE**

1. Claims 34-40 and 53-54 are presented for examination. Applicant filed an after final amendment 01/23/2016 amending claims 34-6. After carefully reviewing Applicant's amendment, Examiner withdraws the outstanding rejection of claims 34-40 and 53-54. Therefore, claims 34-40 and 53-54 are ALLOWED.

#### ***Examiner's Amendment***

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Sam Balabon on October 27, 2009.

#### **IN THE CLAIMS:**

1-33. (Cancelled)

Art Unit: 3691

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order of trade of a financial instrument;

receiving by the computer from a second party a contra order of trade of the financial instrument;

matching by the computer the order of the first party with the contra order of the second party;

~~determining by the computer a market value of the financial instrument by conducting a scan of quotes in other systems of the market;~~

assigning a time period of up to 10 seconds, ~~which~~ wherein the assigned time period is not disclosed to the first and the second parties;

beginning the assigned time period at the exact time the ~~orders~~ order and the contra order are matched;

determining by the computer a market value of the financial instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period;

determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and

completing by the computer the order only if the market value of the financial instrument remains unchanged ~~for~~ between the beginning and the end of the assigned time period.

35. (Previously Amended) The method of claim 34, wherein the market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~ assigned time period includes a maximum time limit.

39. (Currently Amended) The method of claim 34, wherein ~~particular interval of time~~ assigned time period includes a time period between a minimum time limit and a maximum time limit.

40. (Currently Amended) The method of claim 39, wherein the ~~particular interval of time~~ assigned time period includes a random time period within the minimum time limit and the maximum time limit.

41 – 52. (Cancelled)

53. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~ assigned time period includes a pre-set time period.

54. (Currently Amended) The method of claim 34, wherein the ~~particular interval of time~~ assigned time period includes a period of time during which the market value of the financial instrument is verified.

***Allowable Subject Matter***

3. Claims 34-40 and 53-54 are allowed. The following is a statement of reasons for the indication of allowable subject matter:

The claimed invention is directed to a method for determining a current market value of the financial instrument upon matching the order with the contra order.

The prior art of record, Tilfors et al., US patent No. 6,405,180 B2, teaches a method for: “receiving by a computer from a first party an order of trade of a financial instrument; receiving by the computer from a second party a contra order of trade of the financial instrument; matching by the computer the order of the first party with the contra order of the second party; beginning the assigned time period at the exact time the order and the contra order are matched; determining by the computer a market value of the financial

Art Unit: 3691

instrument by conducting a first scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the beginning of the assigned time period; determining by the computer an updated market value of the financial instrument by conducting a second scan of quotes for the financial instrument in the match of the order and the contra order in other systems of the market at the end of the assigned time period; and completing by the computer the order only if the market value of the financial instrument remains unchanged between the beginning and the end of the assigned time period.

The prior art, however, fails to teach a method for: “assigning a time period of up to 10 seconds, wherein the assigned time period is not disclosed to the first and the second parties.”

These features are found in independent claim 34. Therefore, independent claim 34 is allowable. Claims 35-40 and 53-54 are dependent claims depending from independent claim 1. Therefore, dependent claims 35-40 and 53-54 are also allowable.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.



Chang, Pei Chann; *An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract)*; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569; December 1989.

Elton, Edwin J. *et al.*; *Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract)*; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129; February 1984.

Lake, David; *Inter-listing Forges Trans-Pacific Bonds*; Asian Finance; Volume 14, Issue 11, Page 52; November 1988.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is (571)272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571) 272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.
6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published

Art Unit: 3691

applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Virpi H Kanervo/

Primary Examiner, Art Unit 3691

<b>Notice of References Cited</b>	Application/Control No. 10/840,378	Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI KANERVO	Art Unit 3691	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,405,180 B2	06-2002	Tilfors et al.	705/36R
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	Chang, Pei Chann; An On-line Rescheduling Algorithm for Maintaining Efficiency and Stability of Failure-prone Manufacturing Systems (Abstract); December 1989; Lehigh University, Dissertations/Thesis; DAI-B 50/06, p. 2569.
	V	Elton, Edwin J. et al.; Intra-Day Tests of the Efficiency of the Treasure Bill Futures Market (Abstract); February 1984; The Review of Economics and Statistics; Volume 66, Issue 1, Page 129.
	W	Lake, David; Inter-listing Forges Trans-Pacific Bonds; November 1988; Asian Finance; Volume 14, Issue 11, Page 52.
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1769081	time near5 period	US-PGPUB; USPAT	OR	ON	2013/02/11 13:58
L2	2938	disclosed near5 parties	US-PGPUB; USPAT	OR	ON	2013/02/11 13:58
L3	71	undisclosed near5 parties	US-PGPUB; USPAT	OR	ON	2013/02/11 13:58
L4	2	L1 same L3	US-PGPUB; USPAT	OR	ON	2013/02/11 13:58
L5	50	L1 same L2	US-PGPUB; USPAT	OR	ON	2013/02/11 13:59
L6	4	L1 same (invisible near5 parties)	US-PGPUB; USPAT	OR	ON	2013/02/11 14:05
L7	32	L1 same (unknown near5 parties)	US-PGPUB; USPAT	OR	ON	2013/02/11 14:16

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L8	118086	"L1"	USPAT; UPAD	OR	ON	2013/02/11 15:09
L9	100167	"L2"	USPAT; UPAD	OR	ON	2013/02/11 15:09
L10	49500	"L3"	USPAT; UPAD	OR	ON	2013/02/11 15:09
L11	28986	"L4"	USPAT; UPAD	OR	ON	2013/02/11 15:09
L12	18946	"L5"	USPAT; UPAD	OR	ON	2013/02/11 15:09
L13	13174	"L6"	USPAT; UPAD	OR	ON	2013/02/11 15:09
L14	8926	"L7"	USPAT; UPAD	OR	ON	2013/02/11 15:10

2/ 11/ 2013 3:10:29 PM

C:\ Users\ vkanervo\ Documents\ EAST\ Workspaces\ Balabon\_378.wsp

## I. Inventor Search Results from Dialog

33/3,K/1 (Item 1 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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0022703219

WPI Acc no: 2011-P51962/201179

Related WPI Acc No: 2004-525556; 2006-153300; 2008-D13448; 2011-D14009

**Computer-implemented method for block trading financial instrument e.g. stock, involves generating dummy order to trade instrument and displaying order received from party and dummy order to another party**

Patent Assignee: BALABON S (BALA-I)

Inventor: **BALABON S**

Patent Family ( 1 patents, 1 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20110288980	A1	20111124	US 2002431913	P	20021209	201179	B
			US 2007821988	A	20070626		
			US 2005191046	A	20050728		
			US 2004840378	A	20040507		
			US 2003730360	A	20031209		
			US 201166101	A	20110407		

Priority Applications (no., kind, date): US 2002431913 P 20021209; US 2003730360 A 20031209; US 2004840378 A 20040507; US 2005191046 A 20050728; US 2007821988 A 20070626; US 201166101 A 20110407

**Original Abstracts:**used to reduce trading interest leakage when limit orders are placed into order books. In another embodiment of the invention, a trading system will only **match** liquidity taking **orders** with single liquidity providing orders of equal or greater in size.

33/3,K/2 (Item 2 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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0017493007

WPI Acc no: 2008-D13448/200822

Related WPI Acc No: 2004-525556; 2006-153300; 2011-D14009; 2011-P51962

**Sell order trading method for ordering book, involves receiving sell order from party at particular price with fee per share, and completing order by crediting fee to party's account and debiting fee to another party's account**

Patent Assignee: BALABON S (BALA-I); DEEP LIQUIDITY INC (DEEP-N)

Inventor: **BALABON S**

Patent Family ( 2 patents, 1 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20080015974	A1	20080117	US 2002431913	P	20021209	200822	B
			US 2003730360	A	20031209		
			US 2004840378	A	20040507		

			US 2005191046	A	20050728		
			US 2006830320	P	20060712		
			US 2006841508	P	20060831		
			US 2007821988	A	20070626		
US 7921054	B2	20110405	US 2002431913	P	20021209	201126	E
			US 2003730360	A	20031209		
			US 2004840378	A	20040507		
			US 2005191046	A	20050728		
			US 2006830320	P	20060712		
			US 2006841508	P	20060831		
			US 2007821988	A	20070626		

Priority Applications (no., kind, date): US 2002431913 P 20021209; US 2003730360 A 20031209; US 2004840378 A 20040507; US 2005191046 A 20050728; US 2006830320 P 20060712; US 2006841508 P 20060831; US 2007821988 A 20070626

**Alerting Abstract** ...instrument. The sell order with the fee is displayed via a user interface. A buy order is received by another party, and party's buy **order** is **matched** with another party's sell **order**. The order is completed by crediting the fee to the former party's account and debiting the fee to latter party's account. The fee... ... a computer-implemented method for trading large quantities of financial instruments a computer-implemented method for **matching orders** of financial instruments... Original Publication Data by AuthorityArgentina**Publication No.** Inventor name & address:**Balabon, Sam...** ...**Balabon, Sam** ...**Original Abstracts:**used to reduce trading interest leakage when limit orders are placed into order books. In another embodiment of the invention, a trading system will only **match** liquidity taking **orders** with single liquidity providing orders of equal or greater in size... ... used to reduce trading interest leakage when limit orders are placed into order books. In another embodiment of the invention, a trading system will only **match** liquidity taking **orders** with single liquidity providing orders of equal or greater in size. ...**Claims:**price with a fee per share to trade a financial instrument; displaying the sell order with the fee via a user interface; receiving a buy **order** by a second party; **matching** first party's buy **order** with the second party's sell order; completing the order by crediting the fee to the first party's account and debiting the fee to...

33/3,K/3 (Item 3 from file: 350)

DIALOG(R)File 350: Derwent WPIX

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0014337589 *Drawing available*

WPI Acc no: 2004-525556/200450

Related WPI Acc No: 2006-153300; 2008-D13448; 2011-D14009; 2011-P51962

**On-line stock trading method involves determining updated market value of instrument upon acceptance of order and completing order only if accepted price is at least predetermined distance and direction away from market value**

Patent Assignee: BALABON S (BALA-I)

Inventor: **BALABON S**

Patent Family ( 9 patents, 105 countries )							
Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2004057440	A2	20040708	WO 2003US38908	A	20031209	200450	B

US 20040177026	A1	20040909	US 2002431913	P	20021209	200459	E
			US 2003730360	A	20031209		
AU 2003302327	A1	20040714	AU 2003302327	A	20031209	200474	E
US 20050075963	A1	20050407	US 2002431913	P	20021209	200525	E
			US 2003730360	A	20031209		
			US 2004840378	A	20040507		
JP 2006509308	W	20060316	WO 2003US38908	A	20031209	200620	E
			JP 2004562252	A	20031209		
AU 2003302327	A8	20051103	AU 2003302327	A	20031209	200629	E
US 7076461	B2	20060711	US 2002431913	P	20021209	200646	E
			US 2003730360	A	20031209		
JP 4464281	B2	20100519	WO 2003US38908	A	20031209	201034	E
			JP 2004562252	A	20031209		
WO 2004057440	A3	20041229	WO 2003US38908	A	20031209	201214	E

Priority Applications (no., kind, date): US 2002431913 P 20021209; US 2003730360 A 20031209; US 2004840378 A 20040507

Inventor: **BALABON S** Original Publication Data by AuthorityArgentina**Publication No.** Inventor name & address:**BALABON S... ..BALABON S... ..Balabon, Sam... ..Balabon, Sam... ..Balabon, Sam... ..BALABON, Sam... ..BALABON S, US ...Original Abstracts:**trade a financial instrument, the order specifying timing information for delaying completion of the order, determines a current market value of the financial instrument upon **matching** the **order** with a contra **order** of a second party, and completes the order only if the determined market value of the financial instrument remains unchanged for an amount of time... ..**Claims:**financial instruments, comprising: receiving from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the **order**;upon **matching** the **order** with a contra **order** of a second party, determining a current market value of the financial instrument; andcompleting the order only if the determined market value of the...

33/3K/4 (Item 1 from file: 349)

DIALOG(R)File 349: PCT FULLTEXT

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01389854

# **SYSTEM AND METHOD FOR FACILITATING TRADING OF FINANCIAL INSTRUMENTS** **SYSTEME ET PROCEDE DESTINES A FACILITER LA NEGOCIATION D'INSTRUMENTS FINANCIERS**

## **Patent Applicant/Inventor:**

- **BALABON Sam**  
7934 S. Wellington Court, Houston, Texas 77055-3511; US; US (Residence); US (Nationality); (Designated for all)
- **BALABON Sam**

## **Legal Representative:**

- **MEIER Bradley J et al (agent)**  
KENYON & KENYON, 1500 K. Street, N.W., Suite 700, Washington, DC 20005; US

	Country	Number	Kind	Date
Patent	WO	200671889	A2-A3	20060706
Application	WO	2005US47134		20051223
Priorities	US	2004639374		20041223
	US	2005191046		20050728

#### Detailed Description:

...fill rate from the trading interest that is expressed in the master blotters it receivesf even though probably only 20% of the master blotter is **matched**. Few **matches** result in **trades** .

-- 3 -

[0014] Nasdaq Stock Market manages large numbers of limit orders at any given time during trading hours. All market participants such as investors., traders... ...Market and NYSE trading systems have flaws in how buyers and sellers communicate with one another, how these systems determine the final execution price of **matched orders** and how these systems protect information generated by order placement.

[0021], "Accordingly, there is a need in the art for a system and methods that... ...acceptance of indications of interest in accordance with an embodiment of the present invention.

6

[0026] FIG. 5 is a block diagram that depicts automatic **matching** of **offers** to **trade** with indications of interest in accordance with an embodiment of the present invention.

[0027] FIG. 6 is a block diagram that depicts automatic **matching** and acceptance of **offers** and indications of interest in accordance with an embodiment of the present invention.

(0028] FIG. 7 is a block diagram that depicts condition based trade... ...information.

Trading client 1000 provides the IOI and authorization indication to trading server 1020 (step 310), which then searches for matching IOIs (step 320). A **matching** IOI is one that specifies **trade** information (e.g., financial instrument identifier,, amount of shares, side of trade, etc.) that could potentially fill an offer based on the trade information specified... ...and/or'a side of trade contra to that of the first user's IOL Upon identifying a matching IOI,, trading server 1020 generates an **offer** in connection with the **matching** IOI (step 330), which may then be submitted to a trading client machine of a second user associated with the matching 101 for acceptance or... ...an offer to trade. If so,, trading server 1020 completes a trade (step 440) between the first user and a second user associated with the **matching** IOI, based on the **trade** information associated with the first user's IOL If not, trading server 1020 generates an **offer** in connection with the **matching** 101 (step 450), which may then be submitted to a trading client machine of the second user for acceptance or rejection by the second user.

[0064] FIG. 5 describes an embodiment in which a trading server **matches** **trade offers** with IOIs. In FIG. 5, trading client 1000 receives an offer to trade a financial instrument entered by a first user (step 500). Trading client 1000 provides the offer to trade to trading server 1020 (step 510), which then searches for matching IOIs (step 520). A **matching** IOI is one that specifies **trade** information (e.g., financial instrument identifier, amount of shares, side of trade, etc.) that could potentially fill the offer provided by trading client 1000. For example, a matching IOI may specify a



financial instrument symbol **identical** to that of the provided **offer**, a share amount at or above that of the provided offer,, and/or a side of trade contra to that of the provided **offer**. Upon identifying a **matching** IOI,, trading server 1020 forwards the offer to a trading client machine of a second user associated with the matching IOI (step 530) for acceptance or rejection by the second user.

[0065] FIG. 6 describes an embodiment in which a trading server **matches** **trade offers** with IOIs that may be associated with an "auto-acceptrr instruction.

Steps 600, 610 and 620 of FIG. 6. are identical to steps 500,, 510... ..an offer to trade. If so, trading server 1020 completes a trade (step 640) between the first user and a second user associated with the **matching** IOI, based on the **trade** information associated with the first user's offer to trade. If not, trading server 1020 forwards the offer to a trading . 12 -client machine of...cross, the offer may flash green.

-- 21 -

. When the user is awaiting a response from the other user, but the midpoint price for the stock **matches** the midpoint price on the **offer** (or if the Price Type was Peg to Midpoint), then the user's offer may flash in a red color.

3. When the users offer... ..cross, the offer may flash green.

2. When the user has not yet responded to an outside offer,, but the midpoint price for the stock **matches** the midpoint price on the **offer**, then the outside offer may flash red.

3. When the outside offer becomes inactive, it may be colored gray.

Depending on the user's Show...box will appear with 60,000 shares of IBM and new live midpoint price will automatically be filled in the offer dialog box. A counter **offer** dialog popup box is **identical** to a dialog pop-up box generated by clicking on an IOI; the only difference is a counter offer dialog box automatically fills the live... ..price of the symbol (IBM) is at \$76.290, which is not equal to the mutually agreed upon midpoint price \$76.295 of the accepted ( **matched**) **offer**. As shown in FIG. 30, the offer is thus posted in the Outside Offers column of the first party's client application as green,, which indicates that a match has occurred but is waiting for a price event (i.e., midpoint crossing in this embodiment) to occur.

When **orders** are **matched**,, the timer of the original **offer** may be deactivated, and the **matches** may be cancelled individually by either party to the match.

[00117] Because the price event has not yet occurred, the first party's client application...

33/3K/5 (Item 2 from file: 349)

DIALOG(R)File 349: PCT FULLTEXT

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01136029

**SYSTEM AND METHOD FOR BELOW-MARKET TRADING**

**SYSTEME ET PROCEDE D'OPERATIONS AU-DESSUS OU AU-DESSOUS DU MARCHE**

**Patent Applicant/Inventor:**

- **BALABON Sam**  
7934 S. Wellington Court, Houston, TX 77055-3511; US; US(Residence); US(Nationality)
- **BALABON Sam**

**Legal Representative:**

- **MEIER Bradley J(et al)(agent)**  
Kenyon & Kenyon, 1500 K Street, N.W., Suite 700, Washington, DC 20005; US

	Country	Number	Kind	Date
Patent	WO	200457440	A2-A3	20040708
Application	WO	2003US38908		20031209
Priorities	US	2002431913		20021209

**Detailed Description:**

...If so, choose.

A. Execute my order only if I minute after the initial match the DRA index increases in that minute.

B. Execute my **order** only if after the initial **match**, the **bid** price remains unchanged for a random time period between 15-45 seconds.

C. Execute my order based on my own market criteria see advanced features... ..In another embodiment, - a user may enter -an order on the opposite side of an existing order in the system, and the system will automatically **match** the two **orders** (if conforming), resulting in acceptance.

- 13 Users of trading system 405 may be registered with the system, and be required to enter user identification and... ..represents that the buyer will buy 100,000 shares of stock XYZ if the bid price remains unchanged for 15-45 seconds after the initial **matching** of **orders**. This particular execution condition prevents gaming of the system (the exact time period need not be disclosed to either the buyer or seller... ..order (hence, the "A" in the code stands for pegging to the ask price and the " 1 5" stands for the particular execution condition and **corresponding** time interval). Thus, **order** H represents that the seller will sell 75,000 shares of stock XYZ if the ask price remains unchanged for 15-45 seconds after the initial **matching** of **orders**. Similarly, the buyer sees the code identifier and accepts the execution condition A1 5 set forth by the seller. Once the buyer accepts to buy 75...

**II. Text Search Results from Dialog****A. Patent Files**

**File 347:JAPIO Dec 1976-2009/May(Updated 090903)**

(c) 2009 JPO & JAPIO

**File 350:Derwent WPIX 1963-2009/UD=200956**

(c) 2009 Thomson Reuters

**File 348:EUROPEAN PATENTS 1978-200936**

(c) 2009 European Patent Office

**File 349:PCT FULLTEXT 1979-2009/UB=20090827|UT=20090709**

(c) 2009 WIPO/Thomson

Set	Items	Description
S1	2032534	(TIME(3N)(PERIOD? ? OR INTERVAL? ? OR DURATION? ? OR WINDOW? ? OR AMOUNT? ?) OR TIMEFRAME? ? OR TIMELINE? ? OR CLOCK? ?

OR TIMECLOCK? ? OR COUNTDOWN OR COUNT?()DOWN OR DEADLINE OR TIMEOUT OR TIMETABLE? ? OR TIMER? ?)

S2 2215991 ("NOT" OR (ISN OR DOESN OR WASN OR DON)()T OR WITHOUT)(3W)-(DISCLOS? OR REVEAL? OR REPORT? OR INDICATE? ? OR INDICATING - OR EXPOS? OR (MAKE OR MADE OR MAKING)(2W)KNOWN OR DIVULG? OR - COMMUNICAT? OR SHOW OR SHOWED OR SHOWING OR SHOWN OR DISPLAY? OR NOTIF? OR (INFORMATION OR INFO OR FACT OR FACTS OR DETAIL OR DETAILS)(2N)(PROVIDE? ? OR GIVE OR GIVES OR GIVEN OR FURNISH? OR SUPPLY OR SUPPLIED))

S3 159005 ((KEEP? OR KEPT OR MADE OR MAINTAIN? OR PRESERV? OR RETAIN-?) (2W) (PRIVATE OR PRIVACY OR SECRET OR CONFIDENTIAL OR ANONYMOUS? OR ANONYMITY OR HIDDEN) OR HIDE OR CONCEAL? OR HIDING)

S4 64254 (S2 OR S3)(8W)(TRADER? ? OR BROKER? ? OR PARTY OR PARTIES - OR USER? ? OR BIDDER? ? OR INVESTOR? ? OR CLIENT? ? OR CUSTOMER? ? OR CONSUMER? ? OR BUYER? ? OR SELLER? ? OR PEOPLE? ? OR INDIVIDUAL? ?)

S5 185484 S1(5N)(BEGIN? OR START? OR OPEN? OR OUTSET OR COMMENC? OR - INITIAT? OR INCEPTION OR TRIGGER? OR LAUNCH?)

S6 146808 (ORDER? ? OR TRADEORDER? ? OR TRADE OR TRADES OR OFFER? ? - OR BID OR BIDS)(5N)(MATCH? OR COORDINATING OR IDENTICAL OR CORRELATED OR CORRELATING OR CORRESPOND? OR COMPLEMENTARY)

S7 6243 (WHEN OR AS()SOON()AS OR AFTER OR ONCE OR FOLLOWING OR IN(-)RESPONSE OR ACHIEV? OR UPON OR AT(3W)TIME)(5W)S6

S8 16984 (SCAN OR SCANNED OR SCANS OR SCANNING OR SEARCH? OR QUERY? OR QUERIE? ? OR FILTER? OR CHECK? OR MONITOR? OR TRACK? OR POLL OR POLLED OR POLLS OR POLLING OR SWEEP? OR SURVEY? OR BROWS?) (5N) (QUOTE OR QUOTES OR BID OR BIDS OR OFFER? ? OR QUOTATION? ?)

S9 1198972 (OTHER OR ANOTHER OR ALTERNAT? OR VARIOUS OR NUMEROUS OR DIFFERENT OR SEPARATE OR DIVERS? OR COMPARABLE OR SIMILAR)(4N)-(SYSTEM? ? OR PLATFORM? ? OR MARKET? ? OR MARKETPLACE? ? OR EXCHANGE OR EXCHANGES)

S10 337101 S1(5N)(ELAPS? OR LAPS? OR PASS OR PASSES OR PASSED OR PASSING OR (RUN OR RUNNING OR RAN OR RUNS)()OUT OR END OR ENDS OR ENDED OR ENDING OR EXPIR? OR AFTER OR FOLLOWING OR AFTERWARD? ?)

S11 703 S1 (10N) S4

S12 8 S5 (10N) S7

S13 3 S8 (10N) S9 (10N) S10

S14 0 S11 AND S12 AND S13

S15 2 S11 AND (S12 OR S13)

S16 9 (S12 OR S13) NOT S15

S17 5 S11 (30N) S6

S18 1 S11 (50N) S8

S19 4 (S17 OR S18) NOT (S15 OR S16)

S20 16759 S1 (5N) (S2 OR S3)

S21 30 S20 (50N) S6

S22 0 S21 (60N) S8

S23 14 S21 (50N) (S5 OR S10)

S24 11 S23 NOT (S15 OR S16 OR S19)

S25 14 S21 NOT (S15 OR S16 OR S19 OR S24)

S26 329225 (UNCHANG? OR STATIC OR SAME OR CONSTANT OR ("NOT" OR (HASN OR ISN OR DIDN OR DOESN)()T)(3W)(CHANG? OR FLUCTUAT? OR INCREASE? OR DECREASE? OR ALTER?)) (5N) (QUOTE OR QUOTES OR PRICE? ? OR PRICING OR VALUE? ? OR BID OR BIDS OR OFFER? ?)

S27 40 S6 (10N) S26 (10N) S1

S28 6 S27 AND S11

S29 0 S28 NOT (S15 OR S16 OR S19 OR S24 OR S25)

S30 12 S27 AND S20

S31 5 S30 NOT (S15 OR S16 OR S19 OR S24 OR S25)

S32 12 AU=(BALABON, S? OR BALABON S? OR BALABON(2N)S?)

S33 5 S32 AND S6

### III. Text Search Results from Dialog

#### A. NPL Files

File 15:ABI/Inform(R) 1971-2013/Feb 07  
(c) 2013 ProQuest Info&Learning

File 9:Business & Industry(R) Jul/1994-2013/Feb 07  
(c) 2013 Gale/Cengage

File 610:Business Wire 1999-2013/Feb 08  
(c) 2013 Business Wire.

File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire

File 275:Gale Group Computer DB(TM) 1983-2013/Feb 07  
(c) 2013 Gale/Cengage

File 624:McGraw-Hill Publications 1985-2013/Feb 07  
(c) 2013 McGraw-Hill Co. Inc

File 621:Gale Group New Prod.Annou.(R) 1985-2013/Feb 07  
(c) 2013 Gale/Cengage

File 636:Gale Group Newsletter DB(TM) 1987-2013/Jan 31  
(c) 2013 Gale/Cengage

File 613:PR Newswire 1999-2013/Feb 08  
(c) 2013 PR Newswire Association Inc

File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc

File 16:Gale Group PROMT(R) 1990-2013/Jan 31  
(c) 2013 Gale/Cengage

File 160:Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group

File 634:San Jose Mercury Jun 1985-2012/Jan 28  
(c) 2012 San Jose Mercury News

File 148:Gale Group Trade & Industry DB 1976-2013/Feb 01  
(c) 2013 Gale/Cengage

File 625:American Banker Publications 1981-2008/Jun 26  
(c) 2008 American Banker

File 268:Banking Info Source 1981-2013/Jan W3  
(c) 2013 ProQuest Info&Learning

File 626:Bond Buyer Full Text 1981-2008/Jul 07  
(c) 2008 Bond Buyer

File 267:Finance & Banking Newsletters 2008/Sep 29  
(c) 2008 Dialog

File 139:EconLit 1969-2013/Jan  
(c) 2013 American Economic Association

File 35:Dissertation Abs Online 1861-2012/Dec  
(c) 2012 ProQuest Info&Learning

File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 Gale/Cengage

File 65:Inside Conferences 1993-2013/Feb 07  
(c) 2013 BLDSC all rts. reserv.

File 2:INSPEC 1898-2013/Feb W1  
(c) 2013 The IET

File 474:New York Times Abs 1969-2013/Feb 08  
(c) 2013 The New York Times

File 475:Wall Street Journal Abs 1973-2011/Feb 14  
(c) 2011 The New York Times

File 99:Wilson Appl. Sci & Tech Abs 1983-2011/Nov  
(c) 2012 The HW Wilson Co.

Set	Items	Description
S1	3224956	(TIME(3N)(PERIOD? ? OR INTERVAL? ? OR DURATION? ? OR WINDO- W? ? OR AMOUNT? ?) OR TIMEFRAME? ? OR TIMELINE? ? OR CLOCK? ?

OR TIMECLOCK? ? OR COUNTDOWN OR COUNT?()DOWN OR DEADLINE OR TIMEOUT OR TIMETABLE? ? OR TIMER? ?)

S2 2047954 ("NOT" OR (ISN OR DOESN OR WASN OR DON)()T OR WITHOUT)(3W)-(DISCLOS? OR REVEAL? OR REPORT? OR INDICATE? ? OR INDICATING - OR EXPOS? OR (MAKE OR MADE OR MAKING)(2W)KNOWN OR DIVULG? OR - COMMUNICAT? OR SHOW OR SHOWED OR SHOWING OR SHOWN OR DISPLAY? OR NOTIF? OR (INFORMATION OR INFO OR FACT OR FACTS OR DETAIL OR DETAILS)(2N)(PROVIDE? ? OR GIVE OR GIVES OR GIVEN OR FURNISH? OR SUPPLY OR SUPPLIED))

S3 505088 ((KEEP? OR KEPT OR MADE OR MAINTAIN? OR PRESERV? OR RETAIN-?) (2W) (PRIVATE OR PRIVACY OR SECRET OR CONFIDENTIAL OR ANONYMOUS? OR ANONYMITY OR HIDDEN) OR HIDE OR CONCEAL? OR HIDING)

S4 120313 (S2 OR S3)(8W)(TRADER? ? OR BROKER? ? OR PARTY OR PARTIES - OR USER? ? OR BIDDER? ? OR INVESTOR? ? OR CLIENT? ? OR CUSTOMER? ? OR CONSUMER? ? OR BUYER? ? OR SELLER? ? OR PEOPLE? ? OR INDIVIDUAL? ?)

S5 116252 S1(5N)(BEGIN? OR START? OR OPEN? OR OUTSET OR COMMENC? OR - INITIAT? ? OR INCEPTION OR TRIGGER? OR LAUNCH?)

S6 170768 (ORDER? ? OR TRADEORDER? ? OR TRADE OR TRADES OR OFFER? ? - OR BID OR BIDS)(5N)(MATCH? OR COORDINATING OR IDENTICAL OR CORRELATED OR CORRELATING OR CORRESPOND? OR COMPLEMENTARY)

S7 3736 (WHEN OR AS()SOON()AS OR AFTER OR ONCE OR FOLLOWING OR IN(-)RESPONSE OR ACHIEV? OR UPON OR AT(3W)TIME)(5W)S6

S8 415932 (SCAN OR SCANNED OR SCANS OR SCANNING OR SEARCH? OR QUERY? OR QUERIE? ? OR FILTER? OR CHECK? OR MONITOR? OR TRACK? OR POLL OR POLLED OR POLLS OR POLLING OR SWEEP? OR SURVEY? OR BROW-S?)(5N)(QUOTE OR QUOTES OR BID OR BIDS OR OFFER? ? OR QUOTATION? ?)

S9 5349440 (OTHER OR ANOTHER OR ALTERNAT? OR VARIOUS OR NUMEROUS OR DIFFERENT OR SEPARATE OR DIVERS? OR COMPARABLE OR SIMILAR)(4N)-(SYSTEM? ? OR PLATFORM? ? OR MARKET? ? OR MARKETPLACE? ? OR EXCHANGE OR EXCHANGES)

S10 165098 S1(5N)(ELAPS? OR LAPS? OR PASS OR PASSES OR PASSED OR PASSING OR (RUN OR RUNNING OR RAN OR RUNS)()OUT OR END OR ENDS OR ENDED OR ENDING OR EXPIR? OR AFTER OR FOLLOWING OR AFTERWARD? ?)

S11 328 S1(10N)S4

S12 1 S5 (10N) S7

S13 9 S5 (10N) S6

S14 0 S13 (50N) S11

S15 3 S8 (S) S9 (S) S10

S16 0 S15 (F) S11

S17 8 S11 (F) S6

S18 7605 S1 (10N)(S2 OR S3)

S19 9 S18 (50N) S6

S20 0 S19 (50N)S8

S21 13 (S12 OR S13 OR S15 OR S17 OR S19) NOT PY>2002

S22 8 RD (unique items)


S23 2626988 (MARKET OR CURRENT OR PRESENT)(3N)(VALUE? ? OR VALUATION? ? OR WORTH? ? OR PRICE OR PRICES OR PRICING)

S24 41 CONTRA(10N)S6

S25 0 S24 (50N) S8 (20N) S9


S26 0 S11 (F) S6 (F) S23 (F) S8 (F) S9

S27 0 AU=(BALABON, S? OR BALABON S? OR BALABON(2N)S?)

<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI KANERVO	<b>Art Unit</b>  3691

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> <b>CPA</b> <input type="checkbox"/> <b>T.D.</b> <input type="checkbox"/> <b>R.1.47</b>									
CLAIM		DATE							
Final	Original	07/21/2008	03/05/2009	11/10/2009	06/30/2011	05/08/2012	02/11/2013		
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2	35	✓	✓	✓	✓	✓	=		
3	36	✓	✓	✓	✓	✓	=		

<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI KANERVO	<b>Art Unit</b>  3691


✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> <b>CPA</b> <input type="checkbox"/> <b>T.D.</b> <input type="checkbox"/> <b>R.1.47</b>									
CLAIM		DATE							
Final	Original	07/21/2008	03/05/2009	11/10/2009	06/30/2011	05/08/2012	02/11/2013		
4	37	✓	✓	✓	✓	✓	=		
5	38	✓	✓	✓	✓	✓	=		
6	39	✓	✓	✓	✓	✓	=		
7	40	✓	✓	✓	✓	✓	=		
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	51	✓	✓	✓	✓	-	-		
	52			✓	✓	-	-		
8	53				✓	✓	=		
9	54				✓	✓	=		








<b>Issue Classification</b> 	<b>Application/Control No.</b> 10840378	<b>Applicant(s)/Patent Under Reexamination</b> BALABON, SAM
	<b>Examiner</b> VIRPI KANERVO	<b>Art Unit</b> 3691

<input checked="" type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b> <input type="checkbox"/> <b>CPA</b> <input type="checkbox"/> <b>T.D.</b> <input type="checkbox"/> <b>R.1.47</b>															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1		17		33		49								
	2		18	1	34		50								
	3		19	2	35		51								
	4		20	3	36		52								
	5		21	4	37	8	53								
	6		22	5	38	9	54								
	7		23	6	39										
	8		24	7	40										
	9		25		41										
	10		26		42										
	11		27		43										
	12		28		44										
	13		29		45										
	14		30		46										
	15		31		47										
	16		32		48										

NONE		<b>Total Claims Allowed:</b> 9	
(Assistant Examiner)	(Date)		
/VIRPI KANERVO/ Primary Examiner.Art Unit 3691	02/11/2013	O.G. Print Claim(s) 34	O.G. Print Figure 1
(Primary Examiner)	(Date)		

<b>Search Notes</b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H. KANERVO	<b>Art Unit</b>  3691

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
705	35-40 (text only)	02/26/2009	vhk
705	35-40 (text only)	11/03/2009	vhk
705	35-40 (text only)	06/30/2011	vhk
705	35-40 (text only)	05/08/2012	vhk
705	35-40 (text only)	02/11/2013	vhk

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search	7/16/2008	/JJC/
East text search	7/16/2008	/JJC/
EAST search. See enclosed search history.	02/26/2009	vhk
EAST search. See enclosed search history.Consulted	11/03/2009	vhk
Consulted Alex kalinowski regarding objections/section 112.	06/29/2011	vhk
Consulted Jeff Smith regarding section 101.	06/30/2011	vhk
Consulted James Trammel regarding double patenting.	06/30/2011	vhk
EAST search. See enclosed search history.	06/30/2011	vhk
DIALOG search. See enclosed search history.	07/06/2011	vhk
EAST search. See enclosed search history.	05/08/2012	vhk
DIALOG search. See enclosed search history.	02/08/2013	vhk
EAST search. See enclosed search history.	02/11/2013	vhk

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## INTERFERENCE SEARCH

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
705	35-40 (text only)	06/30/2011	vhk
705	35-40 (text only)	02/11/2013	vhk

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JAN 23 2013

Attorney Docket No.: 12664-3

10/840,378

**AMENDMENT AND RESPONSE UNDER RULE 1.116**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed May 16, 2012. Applicants respectfully request reconsideration and favorable action in this case.

Applicant has added 3 new restrictive steps/elements to Claim 34; the step "assigning a time period of up to 10 seconds," which is supported on paragraph 56 of the application and the step "which is not disclosed to the first and the second parties;" which is supported on paragraph 91 of the application and the element "the assigned time period;" which is supported on the original claim 39.

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Attorney Docket No.: 12664-3

10/840.378

**WHAT IS CLAIMED IS:**

Claims 1-33 (Cancelled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order of trade of a financial instrument;

receiving by the computer from a second party a contra order of trade of the financial instrument;

upmatching by the computer the order with a of the first party with the a contra order of a the second party[.];

determining by a the computer an initial a market value of the financial instrument by conducting a scan of quotes in other systems of the market;

assigning a time period of up to 10 seconds, which is not disclosed to the first and the second parties;

beginning the assigned time period at the exact time the orders are matched;

determining by the computer an updated market value of the financial instrument by conducting a scan of quotes in other systems of the market at the end of the time period; wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a the computer the order only if the determined market value of the financial instrument remains unchanged for the assigned time period; particular interval of time to verify that quote in other systems the market have not been effected by the match.

35. (Currently Amended) The method of claim 34, wherein the initial market value is based on a bid price.

Attorney Docket No.: 12664-3

10/840,378

36. (Currently Amended) The method of claim 34, wherein the ~~initial~~ market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

Claims 41 – 52 (Canceled)

53. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a pre-set time period.

54. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a period of time during which the ~~determined~~ market value of the financial instrument is verified.

Attorney Docket No.: 12664-3

10/840.378

CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent. Applicants respectfully request full allowance of Claims 34-40 and 43-54.



Attorney Docket No.: 12664-3

10/840.378

The Examiner is invited to contact the undersigned at 512-585-4589 to discuss any matter regarding this application.

Respectfully submitted,

/Sam Balabon, Inventor/

By: \_\_\_\_\_

Sam Balabon

(Inventor)

Dated: January 23, 2013

Sam Balabon

Deep Liquidity, Inc.

3225 Smoky Ridge

Austin, Texas 78730

(512) 585-4589

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AF

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JAN 23 2013

Attorney Docket No.: 12664-3

10/840.378

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Sam Balabon  
Serial No.: 10/840.378  
Filing Date: May 7, 2004  
Examiner: Kanervo, Virpi H.  
Group Art Unit: 3691  
Confirmation No. 1030  
Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

Mail Stop: Amendments  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Certification Under 37 C.F.R. 1.8****Date of Mailing or Facsimile Transmission: 1/23/2013**

I hereby certify that this correspondence is being faxed deposited with the United States Postal Service via First Class Mail with sufficient postage for mailing under 37 CFR § 1.8 on the date indicated above and addressed to the Mail Stop: Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office at 571-273-8300 under 37 CFR § 1.8 on the date indicated.



Sam Balabon

RECEIVED  
OPAP/IAP  
JAN 29 2013

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required; see below.

The collection of information is required by 37 CFR 1.138(e). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.1 and 1.4. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1430, Alexandria, VA 22313-1430. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop FCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed	
<b>APPLICATION AS FILED – PART I</b>										
(Column 1)			(Column 2)			SMALL ENTITY <input checked="" type="checkbox"/> OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=	OR	X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=			
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
			TOTAL			TOTAL				
* If the difference in column 1 is less than zero, enter "0" in column 2.										
<b>APPLICATION AS AMENDED – PART II</b>										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	01/23/2013	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 9	Minus	** 51	= 0	X \$31 =	0	OR	X \$	=
	Independent (37 CFR 1.16(h))	* 1	Minus	*** 7	= 0	X \$125 =	0	OR	X \$	=
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								OR		
						TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE	
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$	=	OR	X \$	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$	=	OR	X \$	=
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>										

Legal Instrument Examiner:  
/CASSANDRA B. DOWNS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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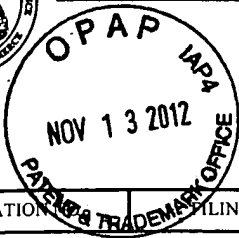
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 11/05/2012  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

11/05/2012

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Notice of Panel Decision from Pre-Appeal Brief Review

Application No.

10/840,378

Examiner

VIRPI KANERVO

Applicant(s)

BALABON, SAM

Art Unit

3691

This is in response to the Pre-Appeal Brief Request for Review filed 15 October, 2012.

1. ☐ **Improper Request** – The Request is improper and a conference will not be held for the following reason(s):

- ☐ The Notice of Appeal has not been filed concurrent with the Pre-Appeal Brief Request.
- ☐ The request does not include reasons why a review is appropriate.
- ☐ A proposed amendment is included with the Pre-Appeal Brief request.
- ☐ Other:

The time period for filing a response continues to run from the receipt date of the Notice of Appeal or from the mail date of the last Office communication, if no Notice of Appeal has been received.

2. ☒ **Proceed to Board of Patent Appeals and Interferences** – A Pre-Appeal Brief conference has been held. The application remains under appeal because there is at least one actual issue for appeal. Applicant is required to submit an appeal brief in accordance with 37 CFR 41.37. The time period for filing an appeal brief will be reset to be one month from mailing this decision, or the balance of the two-month time period running from the receipt of the notice of appeal, whichever is greater. Further, the time period for filing of the appeal brief is extendible under 37 CFR 1.136 based upon the mail date of this decision or the receipt date of the notice of appeal, as applicable.

☒ The panel has determined the status of the claim(s) is as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 34-40, 53 and 54.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

3. ☐ **Allowable application** – A conference has been held. The rejection is withdrawn and a Notice of Allowance will be mailed. Prosecution on the merits remains closed. No further action is required by applicant at this time.

4. ☐ **Reopen Prosecution** – A conference has been held. The rejection is withdrawn and a new Office action will be mailed. No further action is required by applicant at this time.

All participants:

(1) VIRPI KANERVO.

(3) Vincent Millin/vm/.

(2) Alexander Kalinowski/AK/.

(4) \_\_\_\_\_.

/Virpi H Kanervo/  
Examiner, Art Unit 3691

/A. K./  
Supervisory Patent Examiner, Art  
Unit 3691



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

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MAIL DATE

DELIVERY MODE

11/05/2012

PAPER

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The time period for reply, if any, is set in the attached communication.



# **Notice of Panel Decision from Pre-Appeal Brief Review**

**Application No.**

10/840,378

**Examiner**

VIRPI KANERVO

**Applicant(s)**

BALABON, SAM

**Art Unit**

3691

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 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 34-40, 53 and 54.  
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All participants:

(1) VIRPI KANERVO.

(2) Alexander Kalinowski/AK/.

(3) Vincent Millin/vm/.

(4) \_\_\_\_\_.

/Virpi H Kanervo/  
Examiner, Art Unit 3691

/A. K./  
Supervisory Patent Examiner, Art  
Unit 3691

**PRE APPEAL BRIEF****REMARKS**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed May 16, 2012, 2011. Applicant disagrees with Examiner in multiple arguments contained in the Official Action mailed May 16, 2012.

Page 4 Second Paragraph Examiner States:

*and "checking if there are matching orders" is "determining an initial market value" because matching buy order price and sell order price is the initial market value);*

This statement is false: The process of checking if two orders are matched in a trading system is "not" the same as checking market value "after" two orders have been matched.

With the invention the checking of market value is an independent second step after the matching process and is not related to the matching process.

Page 4 Second Paragraph Examiner Further States:

*Determining by the computer an updated market value of the financial instrument, wherein the market value and the updated market value are taken at two distinct points separated in time by a particular<sup>4</sup> interval of time (Tilfers: col. 5, lines 61-65, and Fig. 3, steps 307 and 309; where "waiting a short time, e.g., 2 seconds, step 307" is "a particular interval of time", and "after the time has elapsed, the prices are updated, step 309" is "determining an updated value of the financial instrument");*

This statement is false: The time needed to complete a comparative analysis after checking the market value of a financial instrument in other trading systems is not the same as time needed for a trading system to resolve a problem that is due to unintended scenario or flaw in a trading system. Tilfor's time delay is basically a warning system e.g. ("Warning your limit order has been matched with another market marker's limit order, you have two seconds to cancel your order or we will execute the matched orders"). The time delay of Tilfers is meant to deal with a flaw in their trading system. The time delay in the invention is meant to determine if other market centers that trade the same financial instrument have been affected by the match.

Page 5 First Paragraph Examiner States:

*completing by the computer the order only if the market value of the financial instrument remains unchanged for the particular interval of time (Tilfors: col. 5, lines 65-67; col. 6, lines 1-2 and 7-14; and Fig. 3, steps 313 and 315; where "checking if there are still matching prices, step 313 ... [and if yes, proceeding] ... to a step 315 where a match takes place" is completing by a computer the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time")*

This statement is false: Checking if either of the orders that have been entered into a trading system have been cancelled after a particular interval of time has elapsed is not the same as completing an execution based on a time interval intended to study market impact.

#### Other Arguments:

In Tilfors the method to interrupt two matched orders from becoming an execution must be conducted by a user of their trading system "market maker." With the invention the method to interrupt two matched orders from becoming an execution must be achieved by an internal process. Triggering event to stop match is different, Tilfors originates from an independent party outside the trading system and the invention originates from an internal function of the trading system.

Examiner's reference "Helweg" shows a single scan of the market to determine market value. The invention requires at least two scans of market value to determine "market impact." None of the Examiner's references identified a trading system that analyzes "market impact" of matched orders to determine "if" to grant an execution. The study of market impact as orders enter the market has never been associated with order execution mechanisms.

#### Novel Process:

Step 1 match orders

Step 2 has the market been impacted by matched orders

Step 3 if so stop execution if not proceed with execution

The Novel process of the invention result in unanticipated and unexpected results:

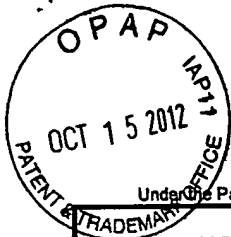
A. It encourages lit liquidity in our markets because it conditions its executions based on trader behavior that favors liquidity providers e.g. "I will trade with you providing after we trade I will have first dibs to trade the market before you." "Don't think about running

over my quote with your marketable limit order because it is not possible.” None of the Examiner’s references identify solutions to these basic market problems.

B. It is a process that “forces” peer to peer negotiations rather than peer to multiple market participant negotiations. This has never been done before.

Conclusion: Combining references Tilfors and Helweg in view of Foley do not result in the invention, however even if they did, there is no motivation to combine them in such a manner suggested by the Examiner because the problems that the invention solves have not been identified, such as; types of trading processes that prevent market makers from being run over by other market participants; types of trading processes that force market participants to negotiate with one another rather than negotiate with groups. The combinations used by the Examiner are invalid because no one has ever attempted to solve the problems identified in the invention. How can there be motivation to solve something that does not exist?

THE FOLLOWING ARE APPLICANTS CLAIMS AND ARGUMENTS MADE IN  
RESPONSE TO THE PRIOR OFFICE ACTION:



1 full A

PTO/SB/31 (07-09)

Approved for use through 07/31/2012. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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# NOTICE OF APPEAL FROM THE EXAMINER TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

Docket Number (Optional)

12664-3

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] 10/12/2012 on

Signature

*Sam Balabon*

Typed or printed name Sam Balabon

In re Application of

Application Number 10840378

Filed 05/07/2004

For

Art Unit 3691

Examiner Kanervo, Virpi H

Applicant hereby appeals to the Board of Patent Appeals and Interferences from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1))

\$ 630

☒ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is:

\$ 315

☒ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. \_\_\_\_\_

☐ A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.

# 285  
2 month extension  
# 600 Total

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

☒ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☐ attorney or agent of record. Registration number \_\_\_\_\_

☐ attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34. \_\_\_\_\_

*Sam Balabon*

Signature

Sam Balabon

Typed or printed name

512-512-4589

Telephone number

10/11/2012

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed	
<b>APPLICATION AS FILED – PART I</b>										
(Column 1)			(Column 2)			SMALL ENTITY <input checked="" type="checkbox"/> OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=		X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=			
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.					TOTAL		TOTAL			
<b>APPLICATION AS AMENDED – PART II</b>										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	10/15/2012	CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 9	Minus	** 51	= 0	X \$31 =	0		X \$	=
	Independent (37 CFR 1.16(h))	* 1	Minus	*** 7	= 0	X \$125 =	0		X \$	=
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
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						TOTAL ADD'L FEE	0		TOTAL ADD'L FEE	
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	MINUS	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$	=		X \$	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$	=		X \$	=
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						TOTAL ADD'L FEE			TOTAL ADD'L FEE	
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>										

Legal Instrument Examiner:  
/LASHAWN HINTON/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

7590 05/16/2012  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER
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KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
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3691

MAIL DATE	DELIVERY MODE
-----------	---------------

05/16/2012

PAPER

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The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI KANERVO	<b>Art Unit</b> 3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 March 2012.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on \_\_\_\_; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 5) ☒ Claim(s) 34-40, 53 and 54 is/are pending in the application.
- 5a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 6) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 7) ☒ Claim(s) 34-40, 53 and 54 is/are rejected.
- 8) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 9) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.   | 6) <input type="checkbox"/> Other: ____.                          |



## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 34-40 and 53-54 are presented for examination. Applicant filed an amendment on 03/08/2012 amending claims 34-36 and 54; and canceling claims 43-52. In light of Applicant's amendments, Examiner withdraws all the previous objections, except one for claim 34, all the previous § 112 rejections, and the previous grounds of prior art rejection for claims 34-40 and 53-54. Examiner has, however, established a new objection for claim 34; and new grounds of § 103 rejection for claims 34-40 and 53-54 in the instant Office action. Because the new grounds of § 103 rejection were necessitated by Applicant's amendment of the claims, the rejection of claims 34-40 and 53-54 is the FINAL rejection of the claims.

### ***Response to Arguments***

2. Examiner has carefully considered Applicant's arguments directed to the § 103 rejection claims 34-40 and 53-54, but they are moot in view of new grounds of rejection necessitated by Applicant's amendment of the claims.

***Claim Objections***

3. Claim 34 is objected to because of the following informalities: Applicant appears to have cancelled claim 34 because the claim set begins with “1-34. (Canceled).” Claim 34, however, is not cancelled, and Applicant should change the beginning of the claim set to: “1-[34]33. (Canceled).” Examiner will consider the claim 34 not to be canceled for the purpose of the further examination of the application.
4. Claim 34 is objected to because of the following informalities: Applicant appears to have mistakenly added a phrase “~~to~~ by scanning ~~that~~ quotes in other systems of the market have not been effected by the match” to the end of the claim after the claim has ended in a period. It appears that this phrase should be canceled in its entirety. Examiner will consider that this phrase is not part of the claim 34, and thus should not be examined, for the purpose of the further examination of the application.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 34, 35, 36, 39, 40, 53, and 54, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tilfors (6,405,180 B2) in view of Helweg (7,461,023 B1).

As to claim 34, Tilfors shows receiving by a computer from a first party an order of a financial instrument (Tilfors: col. 5, lines 55-59; and Fig. 3, step 301; where “one of the two market makers” is “the first party”; and “receiving a buy price” is “receiving a first party’s order”); receiving by the computer from a second party an order of the financial instrument (Tilfors: col. 5, lines 55-60; and Fig. 3, step 303; where “another of the two market makers” is “the second party”; and “receiving a sell price” is “receiving a second party’s order”); matching by the computer the order of the first party with the order of the second party (Tilfors: col. 5, lines 60-61; and Fig. 3, step 305); determining by the computer a market value of the financial instrument (Tilfors: col. 5, lines 59-61; and Fig. 3, step 305; where “other of the two market makers” is “the second party”; “receiving a sell price” is “receiving a contra order”; and “checking if there are matching orders” is “determining an initial market value” because matching buy order price and sell order price is the initial market value); determining by the computer an updated market value of the financial instrument, wherein the market value and the updated market value are taken at two distinct points separated in time by a particular interval of time (Tilfors: col. 5, lines 61-65; and Fig. 3, steps 307 and 309; where “waiting a short time, e.g., 2 seconds, step 307” is “a particular interval of time”, and “after the time has elapsed, the prices are updated, step 309” is “determining an updated value of the financial instrument”); and

Art Unit: 3691

completing by the computer the order only if the market value of the financial instrument remains unchanged for the particular interval of time (Tilfors: col. 5, lines 65-67; col. 6, lines 1-2 and 7-14; and Fig. 3, steps 313 and 315; where “checking if there are still matching prices, step 313 ... [and if yes, proceeding] ... to a step 315 where a match takes place” is “completing by a computer the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time”).

Tilfors does not show determining a market value and an updated market value by conducting a scan of quotes in other systems of the market. Helweg shows determining a market value and an updated market value by conducting a scan of quotes in other systems of the market (Helweg: col. 20, lines 8-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors by determining a market value and an updated market value by conducting a scan of quotes in other systems of the market of Helweg in order to track and trade in more markets (Helweg: col. 20, lines 16-17).

As to claim 35, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors also shows that the market value is based on a bid price (Tilfors: col. 5, lines 59-65).

As to claim 36, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors also shows that the market value is based on an ask price (Tilfors: col. 5, lines 59-65).

As to claim 39, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors also shows that the particular interval of time includes a time period between a minimum time limit and a maximum time limit (Tilfors: col. 5, line 62; where “short time, *e.g.*, 2 seconds” is “included in a time period between a minimum time limit and a maximum time limit” because these time limits are not specified).

As to claim 40, Tilfors in view of Helweg shows all the elements of claim 39. Tilfors also shows that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit (Tilfors: col. 5, line 62; where “short time, *e.g.*, 2 seconds” is “included in a random time period within the minimum time limit and the maximum time limit” because these time limits are not specified).

As to claim 53, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors also shows that the particular interval of time includes a pre-set time period (Tilfors: col. 5, lines 61-62).

As to claim 54, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors also shows that the particular interval of time includes a period of time during which the market value of the financial instrument is verified (Tilfors: col. 5, lines 60-65).

7. Claims 37 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tilfors in view of Helweg, and further in view of Foley (2003/0216932 A1).

As to claim 37, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors in view of Helweg does not show that the particular interval of time includes a minimum time limit. Foley shows that the particular interval of time includes a minimum time limit (Foley: page 2, ¶ 15; showing that proposals may include terms “as for example on minimum or maximum prices, time limits, or minimum order and/or minimum fill sizes”). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors in view of Helweg by the particular interval of time including a minimum time limit of Foley in order to qualify or condition the proposals (Foley: page 2, ¶ 15).

As to claim 38, Tilfors in view of Helweg shows all the elements of claim 34. Tilfors in view of Helweg does not show that the particular interval of time includes a maximum time limit. Foley shows that the particular interval of time includes a maximum time limit (Foley: page 2, ¶ 15; showing that proposals may include terms “as for example on minimum or maximum prices, time limits, or minimum order and/or minimum fill sizes”). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors in view of Helweg by the particular

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interval of time including a maximum time limit of Foley in order to qualify or condition the proposals (Foley: page 2, ¶ 15).

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is 571-272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on 571-272-6771. The

Art Unit: 3691

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virpi H Kanervo

/Olabode Akintola/

Primary Examiner, Art Unit 3691



<b>Notice of References Cited</b>	Application/Control No. 10/840,378	Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI KANERVO	Art Unit 3691	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,405,180 B2	06-2002	Tilfors et al.	705/36R
*	B	US-7,461,023 B1	12-2008	Helweg, Mark Web	705/37
*	C	US-2003/0216932 A1	11-2003	Foley, Kevin	705/1
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	196	scan\$ near5 quotes	US-PGPUB; USPAT	OR	ON	2012/05/08 16:07
L2	16259	market near5 value	US-PGPUB; USPAT	OR	ON	2012/05/08 16:07
L3	0	L1 same L2	US-PGPUB; USPAT	OR	ON	2012/05/08 16:08
L4	143	scan\$ same L2	US-PGPUB; USPAT	OR	ON	2012/05/08 16:08
L5	22272	705/35,36,37,38,39,40.ccls.	US-PGPUB; USPAT	OR	ON	2012/05/08 16:08
L7	32	L4 and L5	US-PGPUB; USPAT	OR	ON	2012/05/08 16:09

EAST Search History (Interference)

<This search history is empty>

5/ 8/ 2012 4:26:26 PM

C:\ Users\ vkanervo\ Documents\ EAST\ Workspaces\ Balabon\_378.wsp

# I. Inventor Search Results from Dialog

27/3,K/1 (Item 1 from file: 350)  
DIALOG(R)File 350: Derwent WPIX  
(c) 2011 Thomson Reuters. All rights reserved.

0014337589 - Drawing available  
WPI ACC NO: 2004-525556/200450  
Related WPI Acc No: 2006-153300; 2008-D13448; 2011-D14009

**On-line** stock

**trading** method involves determining updated market value  
of instrument upon acceptance of order and completing order only if  
accepted price is at least predetermined distance and direction away from  
market value

Patent Assignee: BALABON S (BALA-I)

Inventor: **BALABON S**

Patent Family (8 patents, 105 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update
WO 2004057440	A2	20040708	WO 2003US38908	A	20031209	200450 B
US 20040177026	A1	20040909	US 2002431913	P	20021209	200459 E
			US 2003730360	A	20031209	
AU 2003302327	A1	20040714	AU 2003302327	A	20031209	200474 E
US 20050075963	A1	20050407	US 2002431913	P	20021209	200525 E
			US 2003730360	A	20031209	
			US 2004840378	A	20040507	
JP 2006509308	W	20060316	WO 2003US38908	A	20031209	200620 E
			JP 2004562252	A	20031209	
AU 2003302327	A8	20051103	AU 2003302327	A	20031209	200629 E
US 7076461	B2	20060711	US 2002431913	P	20021209	200646 E
			US 2003730360	A	20031209	
JP 4464281	B2	20100519	WO 2003US38908	A	20031209	201034 E
			JP 2004562252	A	20031209	

Priority Applications (no., kind, date): US 2002431913 P 20021209; US  
2003730360 A 20031209; US 2004840378 A 20040507

Patent Details

Number	Kind	Lan	Pg	Dwg	Filing	Notes
--------	------	-----	----	-----	--------	-------

WO 2004057440	A2	EN	29	7		
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National Designated States,Original: AE AG AL AM AT AU AZ BA BB BG BR BY  
BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU  
ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX  
MZ NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ  
UA UG UZ VC VN YU ZA ZM ZW

Regional Designated States,Original: AT BE BG BW CH CY CZ DE DK EA EE ES  
FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NL OA PT RO SD SE SI SK SL  
SZ TR TZ UG ZM ZW

US 20040177026	A1	EN			Related to Provisional	US 2002431913
AU 2003302327	A1	EN			Based on OPI patent	WO 2004057440
US 20050075963	A1	EN			Related to Provisional	US 2002431913

C-I-P of application US 2003730360  
JP 2006509308 W JA 18 PCT Application WO 2003US38908  
Based on OPI patent WO 2004057440  
AU 2003302327 A8 EN Based on OPI patent WO 2004057440  
US 7076461 B2 EN Related to Provisional US 2002431913  
JP 4464281 B2 JA 14 PCT Application WO 2003US38908  
Previously issued patent JP 2006509308

Based on OPI patent WO 2004057440

**On-line** stock

**trading** method involves determining updated market value  
of instrument upon acceptance of order and completing order only if  
accepted price is at least predetermined distance and...

Inventor: **BALABON S**

Alerting Abstract ...**on-line**  
**trading** system; and **on-**  
**line trading** apparatus...

...USE - For **on-line**  
**trading** of stocks, bonds, contract, option, future,  
commodity and currency...

...DESCRIPTION OF DRAWINGS - The figure shows a flowchart explaining  
**on-line trading**  
method.

Original Publication Data by Authority

Argentina

Assignee name & address:

Inventor name & address:

**BALABON S...**

31/3,K/1 (Item 1 from file: 349)  
DIALOG(R)File 349: PCT FULLTEXT  
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01389854 \*\* Image available\*\*

SYSTEM AND METHOD FOR FACILITATING TRADING OF FINANCIAL INSTRUMENTS  
SYSTEME ET PROCEDE DESTINES A FACILITER LA NEGOCIATION D'INSTRUMENTS  
FINANCIERS

Patent Applicant/Inventor:

**BALABON Sam**, 7934 S. Wellington

Court, Houston, Texas 77055-3511, US, US (Residence), US (Nationality),

(Designated for all)

Legal Representative:

MEIER Bradley J et al (agent), KENYON & KENYON, 1500 K. Street, N.W.,

Suite 700, Washington, DC 20005, US

Patent and Priority Information (Country, Number, Date):

Patent: WO 200671889 A2-A3 20060706 (WO 0671889)  
Application: WO 2005US47134 20051223 (PCT/WO US2005047134)  
Priority Application: US 2004639374 20041223; US 2005191046 20050728

Designated States:

(All protection types applied unless otherwise stated - for applications  
2004+)

AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM  
DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KN KP KR  
KZ LC LK LR LS LT LU LV LY MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG  
PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC  
VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LT LU LV MC NL  
PL PT RO SE SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ NA SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 20649

Patent Applicant/Inventor:

**BALABON Sam,**

Legal Representative:

Fulltext Availability:

Detailed Description

Detailed Description

... depicts opposite side dummy order  
generation in accordance with an embodiment of the present invention.

[0054] FIG. 33 is a block diagram that depicts an  
**automated** multiple party simultaneous  
**trade** execution in accordance with an embodiment of  
the present invention.

[0055] FIG. 34 is a block diagram that depicts condition based trade  
order activation using...was not reviewed. In another embodiment,  
the IOI originator discloses the side of his IOI

[0013i] FIG. 33 depicts another embodiment that provides for an  
**automated** multiple party simultaneous  
**trade**. This transaction provides an incentive to  
market makers and liquidity providers to place large limit orders into a  
central order book -- 44 -in exchange for...

31/3,K/2 (Item 2 from file: 349)

DIALOG(R)File 349: PCT FULLTEXT

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01136029 \*\* Image available\*\*

SYSTEM AND METHOD FOR BELOW-MARKET TRADING

SYSTEME ET PROCEDE D'OPERATIONS AU-DESSUS OU AU-DESSOUS DU MARCHÉ

Patent Applicant/Inventor:

**BALABON Sam**, 7934 S. Wellington

Court, Houston, TX 77055-3511, US, US (Residence), US (Nationality)

Legal Representative:

MEIER Bradley J (et al) (agent), Kenyon & Kenyon, 1500 K Street,

N.W., Suite 700, Washington, DC 20005, US,

Patent and Priority Information (Country, Number, Date):

Patent: WO 200457440 A2-A3 20040708 (WO 0457440)

Application: WO 2003US38908 20031209 (PCT/WO US03038908)

Priority Application: US 2002431913 20021209

Designated States:

(Protection type is "patent" unless otherwise stated - for applications prior to 2004)

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ

EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK

LR LS LT LU LV MA MD MG MK MN MW MX MZ NI NO NZ OM PG PH PL PT RO RU SC

SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG UZ VC VN YU ZA ZM ZW

(EP) AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU MC NL PT RO SE

SI SK TR

(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

(AP) BW GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW

(EA) AM AZ BY KG KZ MD RU TJ TM

Publication Language: English

Filing Language: English

Fulltext Word Count: 6214

Patent Applicant/Inventor:

**BALABON Sam**,

Legal Representative:

Fulltext Availability:

Detailed Description

Detailed Description

... or specialist and not the trader determines the price of execution. In

some cases the broker/dealer or specialist has its own interest in the

**trade**, but in most cases the

**automated** systems that the broker/dealer or specialist

uses to match, buyers and sellers - are simply inefficient and result in

poor executions, leading to higher costs...

...include any type of interconnected communication system, and may implement any communications protocol, which may be secured by any security protocol.

[00431 In one particular embodiment, **trading** system

405 may be an ECN ("**Electronic** Communication Network

") embodying the functionality of the present invention. Server 420

includes a processor and memory for executing program instructions, as

well as a network...

## II. Abstract Files from Dialog

### A. Abstract Databases

File 2:INSPEC 1898-2011/Jun W4  
(c) 2011 The IET  
File 35:Dissertation Abs Online 1861-2011/May  
(c) 2011 ProQuest Info&Learning  
File 65:Inside Conferences 1993-2011/Jul 05  
(c) 2011 BLDSC all rts. reserv.  
File 99:Wilson Appl. Sci & Tech Abs 1983-2011/May  
(c) 2011 The HW Wilson Co.  
File 474:New York Times Abs 1969-2011/Jul 06  
(c) 2011 The New York Times  
File 475:Wall Street Journal Abs 1973-2011/Feb 14  
(c) 2011 The New York Times  
File 583:Gale Group Globalbase(TM) 1986-2002/Dec 13  
(c) 2002 Gale/Cengage  
File 256:TecTrends 1982-2011/Apr W1  
(c) 2011 Info.Sources Inc. All rights res.  
File 347:JAPIO Dec 1976-2011/Mar(Updated 110627)  
(c) 2011 JPO & JAPIO  
File 350:Derwent WPIX 1963-2011/UD= 201141  
(c) 2011 Thomson Reuters  
File 371:French Patents 1961-2002/BOPI 200209  
(c) 2002 INPI. All rts. reserv.  
File 139:EconLit 1969-2011/Jun  
(c) 2011 American Economic Association

**? ds**

Set	Items	Description
S1	17590	(ELECTRONIC OR COMPUTERIS? OR COMPUTERIZ? OR AUTOMATED OR - ONLINE OR ON()LINE)(8N)(TRADE OR TRADES OR TRADING)
S2	160	S1(5N)(FINANCIAL()INSTRUMENT? ?)
S3	4006	S1(5N)(STOCK OR STOCKS OR SECURIT? OR COMMODIT? OR OPTION? ? OR ASSET? ? OR BOND? ? OR FUTURE? ?)
S4	558	S1(5N)(BID OR BIDS OR BIDDING OR OFFER OR OFFERS)
S5	37244	(MATCH OR MATCHES OR MATCHING OR COMPARI????? OR COMPARE OR COMPARES)(5N)(ORDER OR ORDERS OR ORDERING)
S6	112	CONTRA(5N)(ORDER OR ORDERS)
S7	468	UNCHANG?(5N)(MARKET OR MARKET()VALUE? ? OR QUOTE OR QUOTES)
S8	7448	(EFFECTED OR AFFECT?)(5N)(MARKET OR MARKET()VALUE? ?)
S9	686474	DELAY OR DELAYS OR DELAYING
S10	3508	S9(5N)(EXECUTION OR EXECUTE OR EXECUTES OR EXECUTING)
S11	1825	S9(5N)(COMPLETION OR COMPLETING)
S12	13884	S9(5N)(ORDER OR ORDERS OR ORDERING)
S13	17975	S9(5N)(TIMING OR TIMED)
S14	2619	S9(5N)(ACTIVATE OR ACTIVATES OR ACTIVATING OR ACTIVATION)
S15	6	AU= (BALABON, S? OR BALABON S? OR SAM(2N)BALABON)
S16	4474	S2:S4

S17	175	S16 AND S5
S18	15	S17 AND S6
S19	1	S18 AND (S7 OR S8)
S20	1	S18 AND (S10:S14)
S21	0	S20 NOT S19
S22	1687127	S9 OR POSTPONE? OR HOLD OR DEFER???
S23	9	S17 AND S22
S24	9	RD (unique items)
S25	8	S24 NOT S19
S26	8	RD (unique items)
S27	1	S15 AND S1

### **III. Fulltext Files from Dialog**

#### **A. Fulltext Databases**

File 625: American Banker Publications 1981-2008/Jun 26  
(c) 2008 American Banker

File 268: Banking Info Source 1981-2011/Jun W4  
(c) 2011 ProQuest Info&Learning

File 626: Bond Buyer Full Text 1981-2008/Jul 07  
(c) 2008 Bond Buyer

File 267: Finance & Banking Newsletters 2008/Sep 29  
(c) 2008 Dialog

File 9: Business & Industry(R) Jul/1994-2011/Jul 05  
(c) 2011 Gale/Cengage

File 16: Gale Group PROMT(R) 1990-2011/Jul 01  
(c) 2011 Gale/Cengage

File 20: Dialog Global Reporter 1997-2011/Jul 06  
(c) 2011 Dialog

File 15: ABI/Inform(R) 1971-2011/Jul 05  
(c) 2011 ProQuest Info&Learning

File 148: Gale Group Trade & Industry DB 1976-2011/Jul 04  
(c) 2011 Gale/Cengage

File 160: Gale Group PROMT(R) 1972-1989  
(c) 1999 The Gale Group

File 275: Gale Group Computer DB(TM) 1983-2011/May 13  
(c) 2011 Gale/Cengage

File 610: Business Wire 1999-2011/Jul 06  
(c) 2011 Business Wire.

File 613: PR Newswire 1999-2011/Jul 06  
(c) 2011 PR Newswire Association Inc

File 621: Gale Group New Prod. Annou.(R) 1985-2011/May 04  
(c) 2011 Gale/Cengage

File 636: Gale Group Newsletter DB(TM) 1987-2011/Jul 04  
(c) 2011 Gale/Cengage


File 624: McGraw-Hill Publications 1985-2011/Jul 05  
(c) 2011 McGraw-Hill Co. Inc

File 634: San Jose Mercury Jun 1985-2011/Jul 04  
(c) 2011 San Jose Mercury News




File 810:Business Wire 1986-1999/Feb 28  
(c) 1999 Business Wire  
File 813:PR Newswire 1987-1999/Apr 30  
(c) 1999 PR Newswire Association Inc  
File 324:GERMAN PATENTS FULLTEXT 1967-201126  
(c) 2011 UNIVENTIO/THOMSON  
File 348:EUROPEAN PATENTS 1978-201126  
(c) 2011 European Patent Office  
File 349:PCT FULLTEXT 1979-2011/UB= 20110609|UT= 20110602  
(c) 2011 WIPO/Thomson

Set	Items	Description
S1	581638	(ELECTRONIC OR COMPUTERIS? OR COMPUTERIZ? OR AUTOMATED OR - ONLINE OR ON()LINE)(8N)(TRADE OR TRADES OR TRADING)
S2	706	S1(5N)(FINANCIAL()INSTRUMENT? ?)
S3	129801	S1(5N)(STOCK OR STOCKS OR SECURIT? OR COMMODIT? OR OPTION? ? OR ASSET? ? OR BOND? ? OR FUTURE? ?)
S4	31222	S1(5N)(BID OR BIDS OR BIDDING OR OFFER OR OFFERS)
S5	122170	(MATCH OR MATCHES OR MATCHING OR COMPARI???? OR COMPARE OR COMPARES)(5N)(ORDER OR ORDERS OR ORDERING)
S6	695	CONTRA(5N)(ORDER OR ORDERS)
S7	96327	UNCHANG?(5N)(MARKET OR MARKET()VALUE? ? OR QUOTE OR QUOTES)
S8	335038	(EFFECTED OR AFFECT?)(5N)(MARKET OR MARKET()VALUE? ?)
S9	3693064	DELAY OR DELAYS OR DELAYING
S10	16348	S9(5N)(EXECUTION OR EXECUTE OR EXECUTES OR EXECUTING)
S11	56096	S9(5N)(COMPLETION OR COMPLETING)
S12	97090	S9(5N)(ORDER OR ORDERS OR ORDERING)
S13	41061	S9(5N)(TIMING OR TIMED)
S14	5702	S9(5N)(ACTIVATE OR ACTIVATES OR ACTIVATING OR ACTIVATION)
S15	5	AU= (BALABON, S? OR BALABON S? OR SAM(2N)BALABON)
S16	148273	S2:S4
S17	837	S16(S)S5
S18	2	S17(S)S6
S19	2	RD (unique items)
S20	2	S17(S)(S7 OR S8)
S21	2	S20 NOT S19
S22	6	S17(S)(S10:S14)
S23	5	RD (unique items)
S24	5	S23 NOT (S19 OR S21)
S25	63	S17(S)(DELAY OR DELAYS OR DELAYING OR POSTPON???? OR HOLD - OR HOLDING OR DEFER?)
S26	62	S25(S)(ORDER OR ORDERS OR ORDERING OR ACTIVATE OR ACTIVATES OR ACTIVATING OR ACTIVATION)
S27	43	S26(S)(EXECUTION OR EXECUTE OR EXECUTES OR EXECUTING OR TI- MING OR TIMED)
S28	31	RD (unique items)
S29	19	S27 NOT PY> 2002
S30	0	S15(S)S1
S31	2	S15 AND S1

<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H KANERVO	<b>Art Unit</b>  3691


✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b>		<input type="checkbox"/> <b>CPA</b>		<input type="checkbox"/> <b>T.D.</b>		<input type="checkbox"/> <b>R.1.47</b>			
CLAIM		DATE							
Final	Original	07/21/2008	03/05/2009	11/10/2009	06/30/2011	05/08/2012			
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	34	✓	✓	✓	✓	✓			
	35	✓	✓	✓	✓	✓			
	36	✓	✓	✓	✓	✓			

<p><b><i>Index of Claims</i></b></p> 	<b>Application/Control No.</b> 10840378	<b>Applicant(s)/Patent Under Reexamination</b> BALABON, SAM
	<b>Examiner</b> VIRPI H KANERVO	<b>Art Unit</b> 3691

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b>		<input type="checkbox"/> <b>CPA</b>		<input type="checkbox"/> <b>T.D.</b>		<input type="checkbox"/> <b>R.1.47</b>			
CLAIM		DATE							
Final	Original	07/21/2008	03/05/2009	11/10/2009	06/30/2011	05/08/2012			
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	52			✓	✓	-			
	53				✓	✓			
	54				✓	✓			

<b>Search Notes</b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H. KANERVO	<b>Art Unit</b>  3691

SEARCHED			
Class	Subclass	Date	Examiner
705	35-40 (text only)	02/26/2009	vhk
705	35-40 (text only)	11/03/2009	vhk
705	35-40 (text only)	06/30/2011	vhk
705	35-40 (text only)	05/08/2012	vhk

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search	7/16/2008	/JJC/
East text search	7/16/2008	/JJC/
EAST search. See enclosed search history.	02/26/2009	vhk
EAST search. See enclosed search history.Consulted	11/03/2009	vhk
Consulted Alex kalinowski regarding objections/section 112.	06/29/2011	vhk
Consulted Jeff Smith regarding section 101.	06/30/2011	vhk
Consulted James Trammel regarding double patenting.	06/30/2011	vhk
EAST search. See enclosed search history.	06/30/2011	vhk
DIALOG search. See enclosed search history.	07/06/2011	vhk
EAST search. See enclosed search history.	05/08/2012	vhk

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
705	35-40 (text only)	06/30/2011	vhk

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Sam Balabon  
Serial No.: 10/840,378  
Filing Date: May 7, 2004  
Examiner: Kanervo, Virpi H.  
Group Art Unit: 3691  
Confirmation No. 1030  
Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

Mail Stop: Amendments

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Certification Under 37 C.F.R. 1.8

Date of Mailing or Facsimile Transmission: 3/5/2012

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A handwritten signature in black ink, appearing to read "S. Balabon", written over a horizontal line.

Sam Balabon

**AMENDMENT**

**REMARKS**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed July 5, 2011. Applicants respectfully request reconsideration and favorable action in this case.

**WHAT IS CLAIMED IS:**

Claims 1-34 (Cancelled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order ~~of to trade~~ a financial instrument;

receiving by the computer from a second party an order of the financial instrument;

~~upon matching by the computer the order with a~~ of the first party with the ~~a contra~~ order of a the second party[.];

determining by a the computer ~~an initial~~ a market value of the financial instrument by conducting a scan of quotes in other systems of the market;

determining by the computer an updated market value of the financial instrument by conducting a scan of quotes in other systems of the market, wherein the ~~initial~~ market value and the updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a the computer the order only if the ~~determined~~ market value of the financial instrument remains unchanged for the particular interval of time ~~to verify that quote in other systems the market have not been effected by the match.~~

~~to~~ by scanning that quotes in other systems of the market have not been effected by the match.

35. (Currently Amended) The method of claim 34, wherein the ~~initial~~ market value is based on a bid price.

36. (Currently Amended) The method of claim 34, wherein the ~~initial~~ market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

Claims 41 – 52 (Canceled)

53. (Previously Presented) The method of claim 34, wherein the particular interval of time includes a pre-set time period.



54. (Currently Amended) The method of claim 34, wherein the particular interval of time includes a period of time during which the ~~determined~~ market value of the financial instrument is verified.

**CLAIM REJECTIONS - 35 USC §112**

Claims 34-36, 39, 40 and 52-54 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. Applicant has amended claims as per Examiner's suggestions.

Applicant replaced "other systems" with "the market" in claims 34, 43 and 52. This was to broaden the scope of the market to include the market generated in the system itself.

**CLAIM REJECTIONS - 35 USC §102 and 35 USC §103**

Claims 34-40 43-54 stand rejected under 35 U.S.C. § 102 and 35 USC §103 as being anticipated by Tilfors (6,405,180 B2 or in view of Shepherd (6,134,526) or Foley (2003/0216932 A1).

Applicant states that this reference is not applicable because:

Tilfors describes a system that is self contained. It requires no outside markets in order for it to operate. The invention cannot operate without scanning of quotes in other markets.

The invention requires at least two scans of quotes in systems of other markets. Tilfors does not require any scans of quotes contained in systems in other markets.

The invention requires a comparison analysis to be conducted between the two scans of quotes contained in systems in other markets in order to complete an order. Tilfors does not require any comparison analysis to be conducted between two scans of quotes in systems in other markets in order to complete an order.

The invention requires a comparison analysis between the two scans to generate a predetermined outcome in order to complete the order. Tilfors requires no scanning of quotes in other markets, no comparison analysis of the scans and no predetermined outcome from the comparison analysis in order to complete an order.

Tilfors describes what their system will do if in a particular case when two market maker quotes are contra to one another and entered at the same price. The Examiner's entire arguments are based on this one particular case of Tilfor's system.

Tilfor's teaches that their system will not cross a trade between two market makers unless market makers are given time to cancel their orders and back away from the match.. (Tilfors: col 5, lines 24-32) *"When the counterpart is a market maker in particular a market maker quote, no match takes place. Instead the incoming order/quote is inserted into the order book but no update of the best bid offer is sent out, i.e. now there are quotes in the order book crossing or locking, but it is not sent out in the best bid/offer, step 261. Both these orders can however trade against another order. After a time Y (predefined by the exchange) the algorithm checks if there still is a lock in the order book, Step 263."*

When this case occurs in Tilfors, their system will not cross the contra orders of market makers until enough time is give to both market makers to cancel or change their quotes. Interesting to note during the time given by the Tilfor's system both orders are still available to be matched with incoming non market maker orders. *"Both these orders can however trade against another order."* Matches can only take place in the event both market makers do not cancel or change their price of their orders and no non-market maker orders are received during the time predefined by the exchange. Tilfor's system default is to automatically match two market marker orders only in the event no new non-market maker orders are received and both market makers decide they want to go ahead with the match. The invention bases it conditions to match based on market conditions. The conditions that trigger matches are not related in any way between Tilfors and the invention.

Also note: *"When the counterpart is a market maker in particular a market maker quote, no match takes place."* This clearly states no match at all takes place with Tilfor's system discovers a crossed market between two market makers. Also market value is simply not at issue here at all. This particular case of Tilfor's is a simple stop gap measure when their

system fails. What is going on in the market at the time when this case takes place is none consequential to Tilfor's system.

Also the matches of Tilfors are discretionary. Both market markers of a locked market can back away if they choose to during the time given to them by the system. Matches only occur if they do nothing. The purpose of this case is to deal with the possibility that some market makers may have faster connections to the Tilfor's system. To equalize the playing field, when this unintended event occurs in Tilfors like a crossed market, ample time is given for each market marker of the crossed market to correct themselves.

This is supported (Tilfors: col 6, lines 5-6) *"a match only takes place if the same, marked marker makers still wants to trade."* It is also supported (Tilfors: col 6, lines 11-14) *"This supports that market makers do not take the risk to trade with other market makers just because there is a small delay in the system or because they are a bit slow to send in new quotes."*

The invention matches only take place after scanning the market for a given time period to check for changes. Tilfor's matches can only occur if there are none non market maker customers to trade with and after market markers of the crossed market are given able time to cancel or change their orders.

The conditions that trigger matches in both Tilfors and the invention are not related in anyway and thus applicant requests that Tilfor be withdrawn for all of examiner's 35 USC §102 and 35 USC §103 objections on this case.

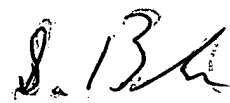
#### CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 34-40 and 43-54.

The Examiner is invited to contact the undersigned at 512-585-4589 to discuss any matter regarding this application.

Respectfully submitted,

/Sam Balabon, Inventor/

By: \_\_\_\_\_

Sam Balabon

(Inventor)

Dated: March 5, 2012

Sam Balabon

Deep Liquidity, Inc.

3225 Smoky Ridge

Austin, Texas 78730

(512) 585-4589



## TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission

Application Number

10840378

Filing Date

5/7/04

First Named Inventor

Sam Balabon

Art Unit

3600

Examiner Name

Kanervo

Attorney Docket Number

### ENCLOSURES (Check all that apply)



Fee Transmittal Form



Fee Attached



Amendment/Reply



After Final



Affidavits/declaration(s)



Extension of Time Request



Express Abandonment Request



Information Disclosure Statement



Certified Copy of Priority Document(s)



Reply to Missing Parts/  
Incomplete Application



Reply to Missing Parts  
under 37 CFR 1.52 or 1.53



Drawing(s)



Licensing-related Papers



Petition



Petition to Convert to a  
Provisional Application



Power of Attorney, Revocation  
Change of Correspondence Address



Terminal Disclaimer



Request for Refund



CD, Number of CD(s) \_\_\_\_\_



Landscape Table on CD



After Allowance Communication to TC



Appeal Communication to Board  
of Appeals and Interferences



Appeal Communication to TC  
(Appeal Notice, Brief, Reply Brief)



Proprietary Information



Status Letter



Other Enclosure(s) (please identify  
below):

Remarks

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Sam Balabon

Signature

S. Bal

Printed name

Sam Balabon

Date

3/5/12

Reg. No.

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Signature

S. Bal

Typed or printed name

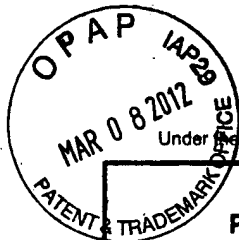
Sam Balabon

Date

3/5/12

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PTO/SB/23 (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(b)</b>		Docket Number (Optional)
In re Application of <del>10840378</del>		
Application Number	10840378	Filed
For <i>System &amp; Method for Execution Delayed Triggering</i>		
Art Unit	3600	Examiner
<i>Kanervo, Uispi</i>		
<p>This is a request for an extension of time of <u>One Month</u> (days), (weeks), (months) under 37 CFR 1.136(b) in this pending application. An extension of time is not available in this application under the provisions of 37 CFR 1.136(a); however, additional time to respond may still be granted under the patent statute. The petition fee under 37 CFR 1.17(g) is required. The reasons for requesting the extension of time are the following:</p>		
<p>03/08/2012 ZJUHR1 00000009 10840378 01 FC:2251 75.00</p>		
<i>S. B.</i> Signature		<u>11/05/12</u> Date
<i>Sam Bateman</i> Typed or printed name		Registration Number
<i>Inventor</i> Title		<i>512 585 4589</i> Telephone Number

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed	
<b>APPLICATION AS FILED – PART I</b>										
(Column 1)			(Column 2)			SMALL ENTITY <input checked="" type="checkbox"/> OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=	OR	X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=			
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL				
<b>APPLICATION AS AMENDED – PART II</b>										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	03/08/2012	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 9	Minus	** 51	=	0	OR	X \$	=	
	Independent (37 CFR 1.16(h))	* 1	Minus	*** 7	=	0	OR	X \$	=	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR			
					TOTAL ADD'L FEE	0	OR	TOTAL ADD'L FEE		
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=		OR	X \$	=	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		OR	X \$	=	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR			
					TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE		
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>										

Legal Instrument Examiner:  
/JULIET MCMILLAN/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

**Paper No.**

<b>Application No.:</b>	<b>10/840,378</b> 	<b>Date Mailed:</b>	<b>2012-01-05</b>
<b>First Named Inventor:</b>	Balabon, Sam,	<b>Examiner:</b>	KANERVO, VIRPI H
<b>Attorney Docket No.:</b>	12664-3	<b>Art Unit:</b>	3691
<b>Confirmation No.:</b>	1030	<b>Filing Date:</b>	2004-05-07

**Please find attached an Office communication concerning this application or proceeding.**

**Commissioner for Patents**

<b>Notice of Non-Compliant Amendment (37 CFR 1.121)</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM
		<b>Art Unit</b> 3600

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 03 October, 2011 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other \_\_\_\_\_.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other \_\_\_\_\_.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other \_\_\_\_\_.
- ☒ 4. Amendments to the claims:
  - ☒ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☒ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: Remarks should be presented on a separate sheet.
- ☒ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4): For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period if the non-compliant amendment is an** after-final amendment or an amendment filed after allowance, or a drawing submission (only) If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a Quayle action. If any of above boxes 1 to 4 are checked, the correction required is only the corrected section of the non-compliant amendment in compliance with 37 CFR 1.121.

**Extensions of time** are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

**Failure to timely respond** to this notice will result in:

**Abandonment** of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or

**Non-entry** of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Legal Instruments Examiner (LIE), if applicable /ERIC V. BURNS/

Telephone No: (571)272-6580

Attorney Docket No.: 12664-3

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10/840,378

OCT 03 2011

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Sam Balabon  
Serial No.: 10/840,378  
Filing Date: May 7, 2004  
Examiner: Kanervo, Virpi H.  
Group Art Unit: 3691  
Confirmation No. 1030  
Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

Mail Stop: Amendments

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Certification Under 37 C.F.R. 1.8

Date of Mailing or Facsimile Transmission: 10/2/2011

I hereby certify that this correspondence is being faxed deposited with the United States Postal Service via First Class Mail with sufficient postage for mailing under 37 CFR § 1.8 on the date indicated above and addressed to the Mail Stop: Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office at 571-273-8300 under 37 CFR § 1.8 on the date indicated.

\_\_\_\_\_  
Sam Balabon

**AMENDMENT**

**REMARKS**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed July 5, 2011. Applicants respectfully request reconsideration and favorable action in this case.

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34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order of to trade a financial instrument;

receiving by the computer from a second party an order of the financial instrument;

upon matching by the computer the order with a of the first party with the a contra order of a the second party[.];

determining by a the computer an initial a market value of the financial instrument by conducting a scan of quotes in other systems of the market;

determining by the computer an updated market value of the financial instrument by conducting a scan of quotes in other systems of the market, wherein the ~~initial~~ market value and the updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a the computer the order only if the ~~determined~~ market value of the financial instrument remains unchanged for the particular interval of time ~~to verify that quote in other systems the market have not been effected by the match.~~

to by scanning ~~that~~ quotes in other systems of the market have not been effected by the match.

35. (Currently Amended) The method of claim 34, wherein the ~~initial~~ market value is based on a bid price.

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~~43. — (Currently Amended) A computer implemented method for providing financial instruments for trading, comprising:~~

~~receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;~~

~~determining by a the computer an initial market value of the financial instrument;~~

~~determining by the computer an updated market value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and~~

~~activating by a the computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time, to verify that quotes in other systems the market have not been effected by the match.~~

~~44. — (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.~~

~~45. — (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.~~

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Sam Balabon

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receiving by the computer from a second party an order of the financial instrument;

~~upon matching by the computer the order with a of the first party with the a contra order of a the second party[.];~~

determining by ~~a the computer an initial~~ a market value of the financial instrument by conducting a scan of quotes in other systems of the market;

determining by the computer an updated market value of the financial instrument by conducting a scan of quotes in other systems of the market, wherein the ~~initial~~ market value and the updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by ~~a the computer the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time to verify that quote in other systems the market have not been effected by the match.~~



to by scanning that quotes in other systems of the market have not been effected by the match.

35. (Currently Amended) The method of claim 34, wherein the ~~initial~~ market value is based on a bid price.

36. (Currently Amended) The method of claim 34, wherein the ~~initial~~ market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

43. ~~(Currently Amended)~~ A computer implemented method for providing financial instruments for trading, comprising:

~~receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;~~

~~determining by a the computer an initial market value of the financial instrument;~~

~~determining by the computer an updated market value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and~~

~~activating by a the computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time, to verify that quotes in other systems the market have not been effected by the match.~~

44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

46. (Currently Amended) The method of claim 43, wherein the initial market value is based on a bid price.

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49. ~~(Currently Amended) The method of claim 43, wherein the timing information interval of time includes a maximum time limit.~~

50. ~~(Original) The method of claim 43, wherein the timing information interval of time includes a time period between a minimum time limit and a maximum time limit.~~

51. ~~(Original) The method of claim 50, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.~~

52. ~~(Currently Amended) A computer implemented method for trading financial instruments, comprising:~~

~~receiving by a computer from a first party an order to trade a financial instrument;~~

~~upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument by the computer;~~

~~determining by the computer an updated market value of the financial instrument, wherein the initial market value and the updated market value are taken at two distinct points separated in time by a particular interval of time; and~~

~~completing by a the computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and the updated market value a particular interval of time to verify quotes in other systems the market have not been effected by the match.~~

53. (Previously Added) The method of claim 34, wherein the particular interval of time includes a pre-set time period.

54. (Currently Amended) The method of claim 34, wherein the particular interval of time includes a period of time during which the ~~determined~~ market value of the financial instrument is verified.

55. (New) The method of claim 34, wherein

**CLAIM REJECTIONS - 35 USC §112**

Claims 34-36, 39, 40 and 52-54 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. Applicant has amended claims as per Examiner's suggestions.

Applicant replaced "other systems" with "the market" in claims 34, 43 and 52. This was to broaden the scope of the market to include the market generated in the system itself.

**CLAIM REJECTIONS - 35 USC §102 and 35 USC §103**

Claims 34-40 43-54 stand rejected under 35 U.S.C. § 102 and 35 USC §103 as being anticipated by Tilfors (6,405,180 B2 or in view of Shepherd (6,134,526) or Foley (2003/0216932 A1).

Applicant states that this reference is not applicable because:

Tilfors describes a system that is self contained. It requires no outside markets in order for it to operate. The invention cannot operate without scanning of quotes in other markets.

The invention requires at least two scans of quotes in systems of other markets. Tilfors does not require any scans of quotes contained in systems in other markets.

The invention requires a comparison analysis to be conducted between the two scans of quotes contained in systems in other markets in order to complete an order. Tilfors does not require any comparison analysis to be conducted between two scans of quotes in systems in other markets in order to complete an order.

The invention requires a comparison analysis between the two scans to generate a predetermined outcome in order to complete the order. Tilfors requires no scanning of quotes in other markets, no comparison analysis of the scans and no predetermined outcome from the comparison analysis in order to complete an order.

Tilfors describes what their system will do if in a particular case when two market maker quotes are contra to one another and entered at the same price. The Examiner's entire arguments are based on this one particular case of Tilfor's system.

Tilfor's teaches that their system will not cross a trade between two market makers unless market makers are given time to cancel their orders and back away from the match.. (Tilfors: col 5, lines 24-32) *"When the counterpart is a market maker in particular a market maker quote, no match takes place. Instead the incoming order/quote is inserted into the order book but no update of the best bid offer is sent out, i.e. now there are quotes in the order book crossing or locking, but it is not sent out in the best bid/offer, step 261. Both these orders can however trade against another order. After a time Y (predefined by the exchange) the algorithm checks if there still is a lock in the order book, Step 263."*

When this case occurs in Tilfors, their system will not cross the contra orders of market makers until enough time is give to both market makers to cancel or change their quotes. Interesting to note during the time given by the Tilfor's system both orders are still available to be matched with incoming non market maker orders. *"Both these orders can however trade against another order."* Matches can only take place in the event both market makers do not cancel or change their price of their orders and no non-market maker orders are received during the time predefined by the exchange. Tilfor's system default is to automatically match two market marker orders only in the event no new non-market maker orders are received and both market makers decide they want to go ahead with the match. The invention bases it conditions to match based on market conditions. The conditions that trigger matches are not related in any way between Tilfors and the invention.

Also note: *"When the counterpart is a market maker in particular a market maker quote, no match takes place."* This clearly states no match at all takes place with Tilfor's system discovers a crossed market between two market makers. Also market value is simply not at issue here at all. This particular case of Tilfor's is a simple stop gap measure when their

system fails. What is going on in the market at the time when this case takes place is none consequential to Tilfor's system.

Also the matches of Tilfors are discretionary. Both market makers of a locked market can back away if they choose to during the time given to them by the system. Matches only occur if they do nothing. The purpose of this case is to deal with the possibility that some market makers may have faster connections to the Tilfor's system. To equalize the playing field, when this unintended event occurs in Tilfors like a crossed market, ample time is given for each market marker of the crossed market to correct themselves.

This is supported (Tilfors: col 6, lines 5-6) *"a match only takes place if the same, marked marker makers still wants to trade."* It is also supported (Tilfors: col 6, lines 11-14) *"This supports that market makers do not take the risk to trade with other market makers just because there is a small delay in the system or because they are a bit slow to send in new quotes."*

The invention matches only take place after scanning the market for a given time period to check for changes. Tilfor's matches can only occur if there are none non market maker customers to trade with and after market markers of the crossed market are given able time to cancel or change their orders.

The conditions that trigger matches in both Tilfors and the invention are not related in anyway and thus applicant requests that Tilfor be withdrawn for all of examiner's 35 USC §102 and 35 USC §103 objections on this case.

### CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 34-40 and 43-54.

The Examiner is invited to contact the undersigned at 512-585-4589 to discuss any matter regarding this application.

Respectfully submitted,



/Sam Balabon, Inventor/

By: \_\_\_\_\_

Sam Balabon

(Inventor)

Dated: October 2, 2011

Sam Balabon

Deep Liquidity, Inc.

3225 Smoky Ridge

Austin, Texas 78730

(512) 585-4589

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Attorney Docket No.: 12664-3

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Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

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<p align="center"><u>Certification Under 37 C.F.R. 1.8</u></p> <p><u>Date of Mailing or Facsimile Transmission: 10/2/2011</u></p> <p>I hereby certify that this correspondence is being faxed deposited with the United States Postal Service via First Class Mail with sufficient postage for mailing under 37 CFR § 1.8 on the date indicated above and addressed to the Mail Stop: Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office at 571-273-8300 under 37 CFR § 1.8 on the date indicated.</p> <p align="center">_____ Sam Balabon</p>
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# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 09/07/2011  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

09/07/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b><i>Applicant-Initiated Interview Summary</i></b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI KANERVO	<b>Art Unit</b> 3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI KANERVO. (3) SAM BALABON.

(2) \_\_\_\_\_. (4) \_\_\_\_\_.

Date of Interview: 30 August 2011.

Type:    ☒ Telephonic    ☐ Video Conference  
           ☐ Personal [copy given to: ☐ applicant    ☐ applicant's representative]

Exhibit shown or demonstration conducted:    ☐ Yes    ☒ No.  
     If Yes, brief description: \_\_\_\_\_.

Issues Discussed    ☐101    ☒112    ☒102    ☐103    ☒Others  
 (For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: 34-40 and 43-54.

Identification of prior art discussed: Tilfors (6,405,180 B2).

**Substance of Interview**  
 (For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

(1) Examiner and Applicant discussed the corrections to claim 34 in order to overcome the 112 rejections; (2) Examiner and Applicant discussed the proposed amendment to overcome Tilfors reference - in Tilfors, the price data is not cathered from the outside systems; (3) Examiner and Applicant agreed that claims 43-51 are directed to a different invention than claims 34-40 and 53-54, and that claim 52 is a duplicate of claim 34; Applicant agreed to cancel claims 43-52 in the instant application, but can pursue the separate invention of claims 43-51 in Continuation Application; (4) Examiner will conduct a new search and consideration upon Applicant's filing of amendment of claims 34-40 and 53-54.

**Applicant recordation instructions:** The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

**Examiner recordation instructions:** Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/Olabode Akintola/ Primary Examiner, Art Unit 3691	
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## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



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Sam Balabon

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EXAMINER

KANERVO, VIRPI H

ART UNIT

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07/05/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI KANERVO	<b>Art Unit</b> 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2011.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-40 and 43-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-40 and 43-54 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05/07/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 34-40 and 43-54 are presented for examination. Applicant filed a Request for Continued Examination ('RCE') on 04/12/2011 amending claims 34, 43, and 51; canceling claims 41 and 42; and adding new claims 53 and 54. Examiner withdraws the previous objections, § 112 rejections, and § 103 rejection of claims 34-40 and 43-52. Examiner has, however, established new objections for claims 34-36, 43, 46-47, and 52; new § 112 rejections for claims 34, 43, 48-50, and 52; and new grounds of § 103 rejection for claims 34-40 and 43-54.

### ***Response to Arguments***

2. Examiner has carefully considered Applicant's arguments directed to the previous grounds of § 103 rejection claims 34-40 and 43-54, but they are moot in view of new grounds of rejection.

### ***Claim Objections***

3. Claim 34 is objected to because of the following informalities: Applicant appears to have cancelled claim 34 because the claim set begins with "1-34. (Canceled)." Claim 34,



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however, is not cancelled, and Applicant should change the beginning of the claim set to:  
“1-[34]33. (Canceled).”

4. Claims 34, 43, and 52, are objected to because of the following informalities: these claims all have a “receiving” step, where the receiving is accomplished “by a computer.” But, all of these claims then have following steps of which some are accomplished “by a computer” and others “by the computer.” It appears that all the steps should be accomplished using the one and the same computer. If this is the case, then the “receiving” step should be accomplished “by a computer” as is recited in the claims, and all the following steps should be accomplished “by the computer.” Applicant is asked to clarify whether all the steps are accomplished by the one and the same computer, or whether some of the steps are accomplished by another computer.
5. Claims 34, 43, and 52, are objected to because of the following informalities: these claims all have a “determining” step that includes following elements: “an updated value” and “updated market value.” It appears that these elements may be referring to the one and the same “updated market value.” If this is the case, then the first occurrence should read “an updated market value,” and the second occurrence should read “the updated market value.” Applicant is asked to clarify whether “an updated value” and “updated market value” are the one and the same element.

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6. Claims 34-36, 43, 46-47, and 52, are objected to because of the following informalities: these claims all include a limitation “initial market value.” There is no mention of “initial market value” in the Applicant’s Specification. Applicant’s Specification in ¶ 32, however, recites: “a trading system ... determines a current market value of the financial instrument upon matching the order with a contra order of a second party.” It appears that “current market value” may be what Applicant means by “initial market value.” Alternatively, Applicant’s Specification in ¶¶ 81 and ¶ 89; and Fig. 8 (Step 830) and Fig. 9 (Step 910) recites: “the system ... determines the market value (e.g., bid, ask, or midpoint) of the financial instrument.” Thus, “market value” may also be what Applicant means with “initial market value.” Applicant is asked to clarify the concept “initial market value.”

***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 34, 43, 48-50, and 52, are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 34, 43, and 52, each recite: “determining an initial market value,” “determining an updated value,” and “determined market value.” It is unclear how these concepts relate to each other because “determined market value” could refer to either “determining an initial market value” or “determining an updated value.” Applicant’s Specification in ¶ 81 and Fig. 8 recites: “the system ... determines the market value (e.g., bid, ask, or midpoint) of the financial instrument (step 830) ... the system then determines an updated market value (step 850), and if the value changes (step 860) ... then the clock is reset.” Similarly, Applicant’s Specification in ¶ 89 and Fig. 9 recites: “the system then determines the appropriate market value (e.g., bid, ask, or midpoint) of the financial instrument (step 910) ... the system next determines an updated market value (step 920), and if the value changes (step 925) before the execution delay time period expires (step 930) then the clock is reset (step 950).” From Applicant’s Specification, it appears that “the changed value” refers to “the market value”, *i.e.*, “the initial value”, of claims 34, 43, and 52. Based on this description in the Applicant’s Specification, it appears that the claim 34, and also similarly claims 43 and 52, should read in the following manner (see below). Note that Examiner will use this reading as an interpretation of the claims 34, 43, and 52, for the purpose of the further examination of the application. Also note that this reading will take earlier objections of the instant Office action into account.

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34. A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by ~~a~~ the computer ~~an initial~~ a market value of the financial instrument;

determining by the computer an updated market value of the financial instrument, wherein the ~~initial~~ market value and the updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by ~~a~~ the computer the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time to verify that quotes in other systems have not been effected by the match.

- Claim 43 recites the limitation “the match” in its activation step. There is insufficient antecedent basis for this limitation in the claim.
- Claim 43 is further rejected because it is unclear how “the match” of the activation step could be effecting quotes in other systems since no match has been made anywhere in claim 43. Examiner will interpret the activation step of claim without 43 giving any patentable weight to part of the claim reciting “to verify that quotes in other systems have not been effected by the match.”

- Claims 48-50 each recite the limitation “the timing information.” There is insufficient antecedent basis for this limitation in the claims. It appears that Applicant may be referring to earlier occurring element: “a particular interval of time.” If this is the case, Applicant should change “the timing information” to “the particular interval of time” in claims 48-50. Examiner will interpret “the timing information” to read “the particular interval of time” for the purpose of the further examination of the application.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

(e) A person shall be entitled to a patent unless – the invention was described in (1) an application for patent, published under § 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in § 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 34-36, 39, 40, and 52-54 are rejected under 35 U.S.C. § 102(e) as being anticipated by Tilfors (6,405,180 B2).

As to claim 34, Tilfors shows receiving by a computer from a first party an order to trade a financial instrument (Tilfors: col. 5, lines 55-59; and Fig. 3, step 303; where “one of the two market makers” is “the first party”; and “receiving a buy price” is “receiving a first

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party's order"); upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Tilfors: col. 5, lines 59-61; and Fig. 3, step 305; where "other of the two market makers" is "the second party"; "receiving a sell price" is "receiving a contra order"; and "checking if there are matching orders" is "determining an initial market value" because matching buy order price and sell order price is the initial market value); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Tilfors: col. 5, lines 61-65; and Fig. 3, steps 307 and 309; where "waiting a short time, e.g., 2 seconds, step 307" is "a particular interval of time", and "after the time has elapsed, the prices are updated, step 309" is "determining an updated value of the financial instrument"); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time to verify that quotes in other systems have not been effected by the match (Tilfors: col. 5, lines 65-67; col. 6, lines 1-2 and 7-14; and Fig. 3, steps 313 and 315; where "checking if there are still matching prices, step 313 ... [and if yes, proceeding] ... to a step 315 where a match takes place" is "completing by a computer the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time").

As to claim 35, Tilfors shows all the elements of claim 34. Tilfors also shows that the initial market value is based on a bid price (Tilfors: col. 5, lines 59-65).

As to claim 36, Tilfors shows all the elements of claim 34. Tilfors also shows that the initial market value is based on an ask price (Tilfors: col. 5, lines 59-65).

As to claim 39, Tilfors shows all the elements of claim 34. Tilfors also shows that the particular interval of time includes a time period between a minimum time limit and a maximum time limit (Tilfors: col. 5, line 62; where “short time, *e.g.*, 2 seconds” is “included in a time period between a minimum time limit and a maximum time limit” because these time limits are not specified).

As to claim 40, Tilfors shows all the elements of claim 39. Tilfors also shows that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit (Tilfors: col. 5, line 62; where “short time, *e.g.*, 2 seconds” is “included in a random time period within the minimum time limit and the maximum time limit” because these time limits are not specified).

As to claim 52, Tilfors shows receiving by a computer from a first party an order to trade a financial instrument (Tilfors: col. 5, lines 55-59; and Fig. 3, step 303); upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Tilfors: col. 5, lines 59-61; and Fig. 3, step 305); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points

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separated in time by a particular interval of time (Tilfors: col. 5, lines 61-65; and Fig. 3, steps 307 and 309); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match (Tilfors: col. 5, lines 65-67; col. 6, lines 1-2 and 7-14; and Fig. 3, steps 313 and 315).

As to claim 53, Tilfors shows all the elements of claim 34. Tilfors also shows that the particular interval of time includes a pre-set time period (Tilfors: col. 5, lines 61-62).

As to claim 54, Tilfors shows all the elements of claim 34. Tilfors also shows that the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified (Tilfors: col. 5, lines 60-65).

### ***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



12. Claims 37 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tilfors in view of Foley (2003/0216932 A1).

As to claim 37, Tilfors shows all the elements of claim 34. Tilfors does not show that the particular interval of time includes a minimum time limit. Foley shows that the particular interval of time includes a minimum time limit (Foley: page 2, ¶ 15; showing that proposals may include terms “as for example on minimum or maximum prices, time limits, or minimum order and/or minimum fill sizes”). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors by the particular interval of time including a minimum time limit of Foley in order to qualify or condition the proposals (Foley: page 2, ¶ 15).

As to claim 38, Tilfors shows all the elements of claim 34. Tilfors does not show that the particular interval of time includes a maximum time limit. Foley shows that the particular interval of time includes a maximum time limit (Foley: page 2, ¶ 15; showing that proposals may include terms “as for example on minimum or maximum prices, time limits, or minimum order and/or minimum fill sizes”). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors by the particular interval of time including a maximum time limit of Foley in order to qualify or condition the proposals (Foley: page 2, ¶ 15).

13. Claims 43, 46, 47, 50, and 51, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tilfors in view of Shepherd (6,134,526).

As to claim 43, Tilfors shows receiving by a computer an order to trade a financial instrument (Tilfors: col. 5, lines 55-60); determining by a computer an initial market value of the financial instrument (Tilfors: col. 5, lines 55-60); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay (Tilfors: col. 5, lines 61-65; and Fig. 3, steps 307 and 309); and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify that quotes in other systems have not been effected by the match (Tilfors: col. 5, lines 65-67; col. 6, lines 1-2; and Fig. 3, steps 313 and 315).

Tilfors does not show the order specifying timing information for delaying activation of the order. Shepherd shows the order specifying timing information for delaying activation of the order (Shepherd: col. 16, lines 41-57; showing “the order data fields include: ... the order retention time limit”). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors by the order specifying timing information for delaying activation of the order of Shepherd in order to give the system the ability to determine whether orders are to be processed at any time (Shepherd: col. 16, lines 33-35).

As to claim 46, Tilfors in view of Shepherd shows all the elements of claim 43. Tilfors also shows that the initial market value is based on a bid price (Tilfors: col. 5, lines 59-65).

As to claim 47, Tilfors in view of Shepherd shows all the elements of claim 43. Tilfors also shows that the initial market value is based on an ask price (Tilfors: col. 5, lines 59-65).

As to claim 50, Tilfors in view of Shepherd shows all the elements of claim 43. Tilfors also shows that the timing information includes a time period between a minimum time limit and a maximum time limit (Tilfors: col. 5, line 62).

As to claim 51, Tilfors in view of Shepherd shows all the elements of claim 50. Tilfors also shows that the particular interval amount of time includes a random time period within the minimum time limit and the maximum time limit (Tilfors: col. 5, line 62).

14. Claims 44 and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tilfors in view of Shepherd, and further in view of Fernholz (5,819,238).

As to claim 44, Tilfors in view of Shepherd shows all the elements of claim 43. Tilfors in view of Shepherd does not show that activating the order includes posting the order in a

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manner indicating that the order is available for trading. Fernholz shows that activating the order includes posting the order in a manner indicating that the order is available for trading (Fernholz: col. 3, lines 64-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors in view of Shepherd by activating the order including posting the order in a manner indicating that the order is available for trading of Fernholz in order to solicit the interest and bid of financial institutions (Fernholz: col. 3, lines 66-67).

As to claim 45, Tilfors in view of Shepherd, and further in view of Fernholz, shows all the elements of claim 44. Tilfors in view of Shepherd does not show that the order is posted on a bulletin board transmitted over a network. Fernholz shows that the order is posted on a bulletin board transmitted over a network (Fernholz: col. 3, lines 64-67). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors in view of Shepherd by the order being posted on a bulletin board transmitted over a network of Fernholz in order to solicit the interest and bid of financial institutions (Fernholz: col. 3, lines 66-67).

15. Claims 48 and 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Tilfors in view of Shepherd, and further in view of Foley.

As to claim 48, Tilfors in view of Shepherd shows all the elements of claim 43. Tilfors in view of Shepherd does not show that the timing information includes a minimum time limit. Foley shows that the particular interval of time includes a minimum time limit (Foley: page 2, ¶ 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors in view of Shepherd by the particular interval of time including a minimum time limit of Foley in order to qualify or condition the proposals (Foley: page 2, ¶ 15).

As to claim 49, Tilfors in view of Shepherd shows all the elements of claim 43. Tilfors in view of Shepherd does not show that the timing information includes a maximum time limit. Foley shows that the particular interval of time includes a maximum time limit (Foley: page 2, ¶ 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Tilfors in view of Shepherd by the particular interval of time including a maximum time limit of Foley in order to qualify or condition the proposals (Foley: page 2, ¶ 15).

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is 571-272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. -

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5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Virpi H Kanervo/

Examiner, Art Unit 3691

<b>Notice of References Cited</b>	Application/Control No. 10/840,378	Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI KANERVO	Art Unit 3691	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,405,180 B2	06-2002	Tilfors et al.	705/36R
*	B	US-2003/0216932 A1	11-2003	Foley, Kevin	705/1
*	C	US-6,134,536	10-2000	Shepherd, Ian Kenneth	705/37
*	D	US-5,819,238	10-1998	Fernholz, Erhard Robert	705/36R
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			


**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	


\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H KANERVO	<b>Art Unit</b>  3691

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b>		<input type="checkbox"/> <b>CPA</b>		<input type="checkbox"/> <b>T.D.</b>		<input type="checkbox"/> <b>R.1.47</b>			
CLAIM		DATE							
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	2	✓	✓	-	-				
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	36	✓	✓	✓	✓				



<p align="center"><b><i>Index of Claims</i></b></p> 	<b>Application/Control No.</b> 10840378	<b>Applicant(s)/Patent Under Reexamination</b> BALABON, SAM
	<b>Examiner</b> VIRPI H KANERVO	<b>Art Unit</b> 3691

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

<input type="checkbox"/> <b>Claims renumbered in the same order as presented by applicant</b>		<input type="checkbox"/> <b>CPA</b>		<input type="checkbox"/> <b>T.D.</b>		<input type="checkbox"/> <b>R.1.47</b>			
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	52			✓	✓				
	53				✓				
	54				✓				

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	354	order same specifying same time same delay	US-PGPUB; USPAT	OR	ON	2011/06/30 16:23
L2	19793	705/35,36,37,38,39,40.ccls.	US-PGPUB; USPAT	OR	ON	2011/06/30 16:24
L3	12	L1 and L2	US-PGPUB; USPAT	OR	ON	2011/06/30 16:24
L4	560	order same specifying same delay	US-PGPUB; USPAT	OR	ON	2011/06/30 16:30
L5	12	L4 and L2	US-PGPUB; USPAT	OR	ON	2011/06/30 16:31
L6	93689	"705"/\$.ccls.	US-PGPUB; USPAT	OR	ON	2011/06/30 16:32
L7	25	L4 and L6	US-PGPUB; USPAT	OR	ON	2011/06/30 16:32
L8	13	L7 not L5	US-PGPUB; USPAT	OR	ON	2011/06/30 16:32
L9	110	price near5 retention	US-PGPUB; USPAT	OR	ON	2011/06/30 16:36
L10	703	price near5 lock	US-PGPUB; USPAT	OR	ON	2011/06/30 16:36
L11	810	L9 or L10	US-PGPUB; USPAT	OR	ON	2011/06/30 16:36
L12	2	order same specifying same L11	US-PGPUB; USPAT	OR	ON	2011/06/30 16:36
L13	52	order same specifying same time same retention	US-PGPUB; USPAT	OR	ON	2011/06/30 16:37
L14	65	order same specifying same time same lock	US-PGPUB; USPAT	OR	ON	2011/06/30 16:37
L16	3	L13 and L2	US-PGPUB; USPAT	OR	ON	2011/06/30 16:37
L17	5	L14 and L2	US-PGPUB; USPAT	OR	ON	2011/06/30 16:37
L18	1	"6134536".pn.	US-PGPUB; USPAT	OR	ON	2011/06/30 16:49
L19	131447	time near5 limit	US-PGPUB; USPAT	OR	ON	2011/06/30 17:30
L20	3502	maximum same minimum same L19	US-PGPUB; USPAT	OR	ON	2011/06/30 17:30
L22	107	L2 and L20	US-PGPUB; USPAT	OR	ON	2011/06/30 17:31
L23	92	maximum same minimum same L19 same random	US-PGPUB; USPAT	OR	ON	2011/06/30 17:31

L24	6	L2 and L23	US-PGPUB; USPAT	OR	ON	2011/06/30 17:31
L25	7782	maximum near5 L19	US-PGPUB; USPAT	OR	ON	2011/06/30 17:32
L26	2819	minimum near5 L19	US-PGPUB; USPAT	OR	ON	2011/06/30 17:33
L27	720	L25 same L26	US-PGPUB; USPAT	OR	ON	2011/06/30 17:33
L28	31	L2 and L27	US-PGPUB; USPAT	OR	ON	2011/06/30 17:33
S95	87	MSRB	US-PGPUB; USPAT	OR	ON	2011/06/29 14:23
S96	249	price near5 unchanged	US-PGPUB; USPAT	OR	ON	2011/06/29 14:23
S97	0	S95 same S96	US-PGPUB; USPAT	OR	ON	2011/06/29 14:23
S98	0	S95 and S96	US-PGPUB; USPAT	OR	ON	2011/06/29 14:23
S99	110	price near5 retention	US-PGPUB; USPAT	OR	ON	2011/06/29 14:23
S100	0	S95 same S99	US-PGPUB; USPAT	OR	ON	2011/06/29 14:23
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S105	3312	completing near5 order	US-PGPUB; USPAT	OR	ON	2011/06/29 14:44
S106	0	S96 same S105	US-PGPUB; USPAT	OR	ON	2011/06/29 14:44
S107	6	S96 and S105	US-PGPUB; USPAT	OR	ON	2011/06/29 14:45
S108	11202	executing near5 order	US-PGPUB; USPAT	OR	ON	2011/06/29 14:46
S109	0	S96 same S108	US-PGPUB; USPAT	OR	ON	2011/06/29 14:46
S110	25	S96 and S108	US-PGPUB; USPAT	OR	ON	2011/06/29 14:46
S111	17	market near5 value near5 unchanged	US-PGPUB; USPAT	OR	ON	2011/06/29 14:49
S112	23632	(price or value) near5 (unchanged or retention)	US-PGPUB; USPAT	OR	ON	2011/06/29 15:05
S113	3	S105 same S112	US-PGPUB; USPAT	OR	ON	2011/06/29 15:05

S114	24	S105 and S112	US-PGPUB; USPAT	OR	ON	2011/06/29 15:05
S115	6	S114 and S102	US-PGPUB; USPAT	OR	ON	2011/06/29 15:06
S116	703	price near5 lock	US-PGPUB; USPAT	OR	ON	2011/06/29 15:07
S117	14294	(completing or executing) near5 order	US-PGPUB; USPAT	OR	ON	2011/06/29 15:08
S119	16	S116 same S117	US-PGPUB; USPAT	OR	ON	2011/06/29 15:08
S120	9067	lock near5 (window or price)	US-PGPUB; USPAT	OR	ON	2011/06/29 15:11
S121	19774	705/35,36,37,38,39,40.ccls.	US-PGPUB; USPAT	OR	ON	2011/06/29 15:11
S122	344	S120 and S121	US-PGPUB; USPAT	OR	ON	2011/06/29 15:11
S123	16	S120 same S117	US-PGPUB; USPAT	OR	ON	2011/06/29 15:13
S124	935	S120 same order	US-PGPUB; USPAT	OR	ON	2011/06/29 15:14
S125	139	S124 and S121	US-PGPUB; USPAT	OR	ON	2011/06/29 15:14
S126	6	"10840378"	US-PGPUB; USPAT	OR	ON	2011/06/29 16:20


### EAST Search History (I nterference)

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L32	18801	"S106"	USPAT; UPAD	OR	ON	2011/06/30 18:24
L33	14245	"S107"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L34	14901	"S108"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L35	10761	"S109"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L36	18491	"S110"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L37	11846	"S111"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L38	12998	"S112"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L39	9351	"S113"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L40	10088	"S114"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L41	7793	"S115"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L42	7763	"S116"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L43	5179	"S117"	USPAT; UPAD	OR	ON	2011/06/30 18:25
L44	3828	"S119"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L45	11636	"S120"	USPAT; UPAD	OR	ON	2011/06/30 18:26

L46	6684	"S121"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L47	7466	"S122"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L48	5557	"S123"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L49	5936	"S124"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L50	4770	"S125"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L51	4642	"S126"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L52	42309	"L3"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L53	25069	"L4"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L54	16274	"L5"	USPAT; UPAD	OR	ON	2011/06/30 18:26
L55	11573	"L6"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L56	7842	"L7"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L57	6866	"L8"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L58	4407	"L9"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L59	4975	"L10"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L60	5905	"L11"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L61	5371	"L12"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L62	3382	"L13"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L63	2696	"L14"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L64	1885	"L16"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L65	1481	"L17"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L66	1624	"L18"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L67	1319	"L19"	USPAT; UPAD	OR	ON	2011/06/30 18:27
L68	2061	"L20"	USPAT; UPAD	OR	ON	2011/06/30 18:27
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**6/ 30/ 2011 6:30:28 PM**

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<b>Search Notes</b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H. KANERVO	<b>Art Unit</b>  3691

SEARCHED			
Class	Subclass	Date	Examiner
705	35-40 (text only)	02/26/2009	vhk
705	35-40 (text only)	11/03/2009	vhk
705	35-40 (text only)	06/30/2011	vhk

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search	7/16/2008	/JJC/
East text search	7/16/2008	/JJC/
EAST search. See enclosed search history.	02/26/2009	vhk
EAST search. See enclosed search history.Consulted	11/03/2009	vhk
Consulted Alex kalinowski regarding objections/section 112.	06/29/2011	vhk
Consulted Jeff Smith regarding section 101.	06/30/2011	vhk
Consulted James Trammel regarding double patenting.	06/30/2011	vhk
EAST search. See enclosed search history.	06/30/2011	vhk

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner
705	35-40 (text only)	06/30/2011	vhk

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**Request  
for  
Continued Examination (RCE)  
Transmittal**

Address to:  
Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Application Number	10/840378
Filing Date	May 7, 2004
First Named Inventor	Sam Balabon
Art Unit	3691
Examiner Name	KANERVO, VIRPI H
Attorney Docket Number	12664-3

**This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application.**  
Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. See Instruction Sheet for RCEs (not to be submitted to the USPTO) on page 2.

- Submission required under 37 CFR 1.114** Note: If the RCE is proper, any previously filed unentered amendments and amendments enclosed with the RCE will be entered in the order in which they were filed unless applicant instructs otherwise. If applicant does not wish to have any previously filed unentered amendment(s) entered, applicant must request non-entry of such amendment(s).
  - ☐ Previously submitted. If a final Office action is outstanding, any amendments filed after the final Office action may be considered as a submission even if this box is not checked.
    - ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_
    - ☐ Other \_\_\_\_\_
  - ☒ Enclosed
    - ☐ Amendment/Reply
    - ☐ Affidavit(s)/Declaration(s)
    - ☐ Information Disclosure Statement (IDS)
    - ☒ Other Partial email sent to Examiner 6/22/10
- Miscellaneous**
  - ☐ Suspension of action on the above-identified application is requested under 37 CFR 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 CFR 1.17(f) required)
  - ☐ Other \_\_\_\_\_
- Fees** The RCE fee under 37 CFR 1.17(e) is required by 37 CFR 1.114 when the RCE is filed.
  - ☐ The Director is hereby authorized to charge the following fees, any underpayment of fees, or credit any overpayments, to Deposit Account No. \_\_\_\_\_
    - ☐ RCE fee required under 37 CFR 1.17(e)
    - ☐ Extension of time fee (37 CFR 1.136 and 1.17)
    - ☐ Other \_\_\_\_\_
  - ☐ Check in the amount of \$ \_\_\_\_\_ enclosed
  - ☒ Payment by credit card (Form PTO-2038 enclosed)

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

Signature	<u>R. Balabon</u>	Date	4/11/11
Name (Print/Type)	Sam Balabon	Registration No.	

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Signature	<u>R. Balabon</u>	Date	4/11/11
Name (Print/Type)	Sam Balabon		

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Partial of Email to Examiner for Application Number 10/840378 sent on 6/22/11

Comments:

First What is Fraser? (The reference cited against application)

Price retention of Fraser (see below) basically tells it's "bidding participants" (liquidity providers) that if you place a limit order in our book and you change the price of your limit order you may still be obligated to trade at the previous price (retained price, the price before you made the change) if your order is matched within a certain time period (they used "2 seconds") immediately after you changed the price.

It also states that it will notify the "aggressor" liquidity taker in the event the liquidity provider's order was cancelled or was removed by another liquidity taker with a "no trade" message. Basically this states that if the trading system has no contra order to match with the liquidity taker a "no trade" message is generated.

Note that in Fraser a trade can occur even if the price changes just prior to the match. This is contrary to examiner's arguments. It depends on the situation. If the liquidity provider changes the price of his sitting limit order, a trade can occur, if the sitting limit order is cancelled or picked off, no trade occurs.

In any event, this reference is not relevant simply because it looks at events that occurred back in time prior to a match between buyer and seller. The invention looks forward in time after a match between a buyer and seller has occurred. The invention looks to the future to determine an outcome, Fraser studies the past to determine an outcome. I feel this fact alone possess enough merit to drop this reference and issue the case.

Even if we view past and future the same, (which in my opinion is impossible) there are different events that trigger different outcomes in both inventions for different reasons.

The inventive step "Completing the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time" is not found in this reference in any way.

*The following are the examiner's comments, the excerpt of the reference cited against the invention and the best written claim that should have been allowed which we thought was going to be allowed after my last meeting in D.C.*

Examiners Comments (last office action):

Continuation of 11 does Not place the application in condition for allowance because: Applicant argues that Fraser (7,392,214 B1) does not disclose "completing the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time." Examiner respectfully disagrees. Fraser specifically taught that "the price retention state determines which price to apply to the hit or lift command based upon the amount of time between the time the price was changed and the subsequent hit or lift command" (Fraser: col. 15, lines 39-42; where "price retention



state" is "the determined market value of the financial instrument remains unchanged", and "the amount of time between the time the price was changed and the subsequent command" is "the particular interval of time"), and that "if a participant enters a hit or lift command just subsequent to another participant hitting or lifting a bid or offer, the price retention state signals to the potential aggressor that 'no trade' has been completed" (Frazer: col. 15, lines 28-51; showing completion only if the value remains unchanged for an interval of time.) therefore, Frazer shows "completing the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time."

(Cited Excerpt from Fraser 7,392,214 Yellow highlight Examiner's cited text)

#### Price Retention State

As can be appreciated, various participant moves in the market are often fast paced, and, on occasion, position and price changes may occur almost simultaneously. An example of this may be one participant hitting another participant's bid of a certain price an instant after the bidding participant has significantly decreased the bid price. In this situation, the aggressor has now unexpectedly sold his size at a much lower price than the aggressor planned. Naturally, this situation can be very disturbing to aggressors in rapidly shifting markets.

A Price Retention State in the present invention addresses this problem. If a passive side price is decreased or increased just prior to a hit or lift command, the price retention state determines which price to apply to the hit or lift command based upon the amount of time between the time the price was changed and the subsequent hit or lift command. For example, if the price for an offer increases three-quarters of a second prior to an aggressor lifting the offer, the price retention state will apply the pre-increase price to the lift rather than the post-increase price.

Similarly, if a bid or offer is canceled just prior to a hit or lift of that bid or offer, or if a participant enters a hit or lift command just subsequent to another participant hitting or lifting a bid or offer, the price retention state signals to the potential aggressor that "no trade" has been completed.

While the Price Retention State does protect the aggressor from changes in price, it also preferably requires that the aggressor hit or lift the whole size that was posted in the bid or offer prior in order to receive the early price. Any remaining size at the new price is then left uncleared as an outstanding bid or offer. Others may also add more size on the passive side, but this new size is subject to the priority of the first bidder or offerer. Once the aggressor has hit or lifted the whole size of the bid or offer at the early price, the aggressor assumes current worker status and has the right to: 1. Hit or lift the bid or offer at the new price and thus possibly enter the Qualified Workup State with the contra-trader(s); and 2. Refuse the new price by entering a "done" command, and thereby leave the outstanding bid or offer waiting for a hit or lift, and cause the aggressor to lose priority.

One embodiment of the Price Retention State of the present invention is illustrated in FIG. 9. At any time a trade is executed in the present invention, e.g., in the Bid/Offer State, Qualified Workup State, and Price Improvement State, the Price Retention State is preferably initiated to verify the price of the trade. As shown, once process 900 has begun at step 902, process 900 then retrieves information relating to a bid or offer that was hit or lifted by an aggressor at step 904. Then, at step 906, process 900 determines if the bid/offer price has changed within a past time interval (e.g., two seconds). If the price has changed, then at step 908 process 900 processes the hit or lift at the earlier bid/offer price. Process 900 then enables the aggressor to hit or lift the bid or offer at the current price at step 910. If the aggressor does not hit or lift the bid or offer at step 910, then process 900 terminates at step 914. Otherwise, if the aggressor hits or lifts the bid or offer at the current price at step 910, or if the price did not change at step 906, then process 900 processes the hit/lift at the current price at step 912 and terminates at step 914.

These principles are illustrated in QUAD 2300 of FIG. 23a and QUAD 2350 of FIG. 23b. Prior to the time of the display shown in QUAD 2300, participants CUST 3001, 3002, and 3003 each placed bids 2302, 2304, 2306 to buy at 121.205 YEN/\$ in sizes of \$5 million, \$1 million, and \$1 million, respectively. In response to these bids, participant CUST 3007 entered a "HIT ALL" command

to sell to bidders CUST 3001, 3002, and 3003. Unknown to participant CUST 3007, however, at an instant prior to placing the "HIT ALL" command, participant CUST 3004 placed a bid to buy at 121.100 YEN/\$. Under the process of the Price Retention State, participant CUST 3007 is obligated to sell the \$7 million at the original price of 121.205 YEN/\$, and has the option of also selling the \$10 million at 121.100 YEN/\$ requested by participant CUST 3004, but is under no obligation to do so.

If Participant, CUST 3007 decides to hit the outstanding \$10 million 2352 of participant CUST 3004, as shown in QUAD 2350 of FIG. 23b, the state moves out of Price Retention State and into the Qualified Workup State with participant CUST 3007 and participant CUST 3004 designated as the current workers. Participant CUST 3007 and participant CUST 3004 are highlighted in QUAD 2300 and QUAD 2350 to indicate that they are in the Qualified Workup State.

If participant CUST 3007 elects not to hit the bid of participant CUST 3004, the trade ends and the Price Retention State terminates.

Another aspect of the Price Retention State is the ability of the system to age all bids and offers through system controlled parameters. This provides participants with the ability to recognize and respond to commands that are entered by participants by requiring that the bids and offers are available for at least an aging period and thereby prevent "price noise" (i.e., bids and offers that are entered and then quickly removed) from excessive cancellations. Different currencies will have different parameter settings including the possibility of having zero aging.

One of the main claims of the invention that should have been allowed:

*A computer-implemented method for trading financial instruments, comprising:*

*receiving by a computer from a first party an order to trade a financial instrument;*

*upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;*

*determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and*

*Inventive step: completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been affected by the match.*

**APR 12 2011**

Yuliya Balabon  
Yuliya.Balabon@dlapiper.com  
T 512.457.7027  
F 512.457.7001

**Fax Transmission Cover Sheet**

April 12, 2011

To  
**Commissioner for Patents**  
**Examiner: Virpi H. Kanervo**

Telephone

Fax Number  
**571.273.8300**

From: Yuliya Balabon  
Re: **Application No. 10/840378**  
**Filed 5/7/2004**  
**Sam Balabon**

Client-Matter Number:

Pages: - 6 - (including this form)      Originals:

If there is a problem with this transmission, please call Yuliya Balabon at 512.457.7027  
Fax Operator/Ext.

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(Form Rev. 8/02/04)

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**DEEP LIQUIDITY, INC.**  
**6101 W. COURTYARD, BUILDING 1**  
**SUITE 110**  
**AUSTIN TX 75730**

**MAILED**  
**FEB 14 2011**  
**OFFICE OF PETITIONS**

In re Application of :  
Sam Balabon :  
Application No. 10/840,378 : **DECISION ON PETITION**  
Filed: May 7, 2004 :  
Attorney Docket No. 12664-3 :

This is a decision on the petition under the unintentional provisions of 37 CFR 1.137(b), filed January 20, 2011, to revive the above-identified application.

The petition is **GRANTED**.

**The two-month period for filing an appeal brief under 37 CFR 41.37 (accompanied by the fee required by 37 CFR 41.20(b)(2)), runs from the date of this decision.**

This application became abandoned for failure to timely file a reply within the meaning of 37 CFR 1.113 to the final Office action of November 10, 2009. The proposed reply required for consideration of a petition to revive must be a Notice of Appeal (and appeal fee required by 37 CFR 41.20(b)(2)), an amendment that *prima facie* places the application in condition for allowance, a Request for Continued Examination (RCE) and submission (37 CFR 1.114), or the filing of a continuing application under 37 CFR 1.53(b). See MPEP 711.03(c)(III)(A)(2).

The petition satisfies the requirements of 37 CFR 1.137(b) in that petitioner has supplied (1) the reply in the form of a Notice of Appeal; (2) the petition fee of \$810.00; and (3) a proper statement of unintentional delay.

Telephone inquiries concerning this decision should be directed to the undersigned at (571) 272-3208.

This application is being referred to Technology Center AU 3691 to await the filing of an appeal brief or for such other appropriate reply as may be submitted to continue prosecution of the application.

/KOC/

Karen Creasy  
Petitions Examiner  
Office of Petitions

JAN 20 2011

Doc Code: PET.OP

Document Description: Petition for Review by the Office of Petitions

PTO/SB/64 (07-08)

Approved for use through 07/31/2012. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT  
ABANDONED UNINTENTIONALLY UNDER 37 CFR 1.137(b)**

Docket Number (Optional)

First named inventor: Sam Balabon

Application No.: 10/840,378

Art Unit: 3691

Filed: 05-07-2004

Examiner: KANERVO, VIRPI H

Title: System and method for execution delayed trading

Attention: Office of Petitions

Mail Stop Petition

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

FAX (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.

The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the office notice or action plus any extensions of time actually obtained.

**APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION**

NOTE: A grantable petition requires the following items:

- (1) Petition fee;
- (2) Reply and/or issue fee;
- (3) Terminal disclaimer with disclaimer fee - required for all utility and plant applications filed before June 8, 1995; and for all design applications; and
- (4) Statement that the entire delay was unintentional

**1. Petition Fee**

☒ Small entity-fee \$ 810.00 (37 CFR 1.17(m)). Application claims small entity status. See 37 CFR 1.27.

☐ Other than small entity-fee \$ \_\_\_\_\_ (37 CFR 1.17(m))

**2. Reply and/or fee**

A. The reply and/or fee to the above-noted Office action in the form of Notice of Appeal (Identify type of reply):

☒ has been filed previously on 7/27/10

☐ is enclosed herewith.

B. The issue fee and publication fee (if applicable) of \$ \_\_\_\_\_

☐ has been paid previously on \_\_\_\_\_

☐ is enclosed herewith.

[Page 1 of 2]

This collection of information is required by 37 CFR 1.137(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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JAN 20 2011

PTO/SB/64 (07-09)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

3. Terminal disclaimer with disclaimer fee

- ☐ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

4. STATEMENT: The entire delay in filing the required reply from the due date for the required reply until the filing of a grantable petition under 37 CFR 1.137(b) was unintentional. [NOTE: The United States Patent and Trademark Office may require additional information if there is a question as to whether either the abandonment or the delay in filing a petition under 37 CFR 1.137(b) was unintentional (MPEP 711.03(c), subsections (III)(C) and (D)).]

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

Sam Balabon  
Signature  
Type or Printed name  
6101 West Courtyard Drive, Building 1, Suite 110  
Address  
Austin, TX 78730  
Address

1/20/11  
Date  
Registration Number, if applicable  
512-372-8001  
Telephone Number

- Enclosures:
- ☒ Fee Payment
  - ☒ Reply
  - ☐ Terminal Disclaimer Form
  - ☐ Additional sheets containing statements establishing unintentional delay
  - ☒ Other: Please refer to the prior petition for unavoidable abandonment to support request

**CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR 1.8(a)]**

I hereby certify that this correspondence is being:

- ☐ Deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Petition, Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450.
- ☒ Transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

1/20/2011  
Date

Sam Balabon  
Signature

Sam Balabon  
Typed or printed name of person signing certificate



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DNW Nov-10

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6101 W. COURTYARD, BUILDING 1  
SUITE 110  
AUSTIN TX 75730

MAILED

NOV 22 2010

OFFICE OF PETITIONS

In re Application of  
Sam Balabon.  
Application No. 10/840,378  
Filing Date: May 7, 2004  
Attorney Docket No. 12664-3

ON PETITION

This is a decision on the petition under 37 CFR 1.137(a), filed on July 27, 2010, to revive the above-identified application.

The petition is **DISMISSED**.

Any request for reconsideration of this decision must be submitted within TWO (2) MONTHS from the mail date of this decision. Extensions of time under 37 CFR 1.136(a) are permitted. The reconsideration request should include a cover letter entitled "Renewed Petition under 37 CFR 1.137(a)" or "Renewed Petition under 37 CFR 1.137(b)." This is not a final agency decision.

This application became abandoned for failure to timely file a proper response to the final Office action mailed on November 10, 2009, which set a three (3)-month shortened statutory period for reply. No extensions of the time for reply in accordance with 37 CFR 1.136(a) were obtained. A Notice of Abandonment was mailed on July 7, 2010.

A grantable petition to revive an abandoned application under 37 CFR 1.137(a) must be accompanied by:

(1) the required reply, unless previously filed. In a nonprovisional application abandoned for failure to prosecute, the required reply may be met by the filing of a continuing application. In a nonprovisional application filed on or after June 8, 1995, and abandoned for failure to prosecute, the required reply may also be met by the filing of a request for continued examination in compliance with § 1.114. In an application or patent, abandoned or lapsed for failure to pay the issue fee or any portion thereof, the required reply must be the payment of the issue fee or any outstanding balance thereof. In an application, abandoned for failure to pay the publication fee, the required reply must include payment of the publication fee;

(2) the petition fee as set forth in § 1.17(l);



- (3) a showing to the satisfaction of the Director that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition pursuant to this paragraph was unavoidable; and
- (4) any terminal disclaimer (and fee as set forth in § 1.20(d)) required pursuant to paragraph (c) of this section.

This petition lacks item (3) above.

Petitioner states that “On January 26, 2010, Applicant filed an after final amendment in response to the Examiner’s instructions. On May 17, 2010 the Examiner called applicant and told applicant that she never received an after final amendment and the cutoff date to receive the amendment was May 10, 2010. Applicant told her that he did submit an after final amendment and then emailed her the after final amendment and proof of the electronic filing (see attached, EFS ID: 6879895). She said that she would take a look at the late (lost by PTO) amendment after final, but the claim language would have to be exact condition for allowance in order for her to issue the patent. She said her hands were tied the 6 month window for the case was closed and she could not work on the case. There was even talk that if the examiner worked on the case after the 6 month window elapsed and the patent was issued it could be deemed invalid at a later date.”

Petitioner further states that “The applicant was very upset after hearing about the state of the application, on two fronts, the time delay and the additional expense he would have to be incurred to further prosecute the application. He then requested a telephone conference call with the supervising examiner. This conference call occurred on July 7, 2010. On the call, there was, Primary Examiner Virpi Kanervo, Examiner Hani Kazimi and the Supervising Examiner Alexander Kalinowski. The applicant told the examiners that he was going to stand pat on the case and would rather appeal the case than pursue a continuation of the case. Applicant asked what he should do next. Mr. Kalinowski told him that he should file a petition to revive the application and stated that it was “unavoidable” and to file a notice of appeal. Applicant followed these instructions and filed the petition and notice of appeal.”

As to item (3), the Office may revive an abandoned application if the delay in responding to the relevant outstanding office requirement is shown to the satisfaction of the Director to have been “avoidable.” See, 37 CFR 1.137(a)(3). Decisions on reviving abandoned applications on the basis of “unavoidable” delay have adopted the reasonably prudent person standard in determining if the delay was unavoidable:

The word ‘unavoidable’ . . . is applicable to ordinary human affairs, and requires no more or greater care or diligence than is generally used and observed by prudent and careful men in relation to their most important business. It permits them in the exercise of this care to rely upon the ordinary and trustworthy agencies of mail and telegraph, worthy and reliable employees, and such other means and instrumentalities as are usually

employed in such important business. If unexpectedly, or through the unforeseen fault or imperfection of these agencies and instrumentalities, there occurs a failure, it may properly be said to be unavoidable, all other conditions of promptness in its rectification being present.<sup>1</sup>

Regrettably, the petition under 37 CFR 1.137(a) is dismissed. In the instant case, petitioner has failed to provide adequate evidence that the delay was unavoidable.

The rules of practice are clear that prosecution of an application to save it from abandonment must include such complete and proper action as the condition of the case may require. The admission of an amendment not responsive to the last Office action, or refusal to admit the same, shall not operate to save the application from abandonment. "[T]he admission of, or refusal to admit, any amendment after final rejection, and any proceedings relative thereto, shall not operate to relieve the application or patent under reexamination from its condition as subject to appeal or to save the application from abandonment under § 1.135." See 37 CFR 1.116(a).

Further, the abandonment of an application subject to a final Office action is not "unavoidable" within the meaning of 35 U.S.C. 133 and 37 CFR 1.137(a) in the situation in which the applicant simply permits the maximum extendable statutory period for reply to a final Office action to expire while awaiting a notice of allowance or other action. See Changes to Patent Practice and Procedure; Final Rule Notice, 62 Fed. Reg. At 53162, 1203 Off. Gaz. Pat. Office at 89 (response to comment 66).

Petitioner is reminded that an Advisory Action does not start a new period for response. The application became abandoned because petitioner did not submit a **proper** reply to the final Office action mailed November 10, 2009. The amendments filed on January 11, 2010 and January 26, 2010 was **not proper**.

Applicant is encouraged to note 37 CFR § 1.2 regarding applicant's statement that "Mr. Kalinowski told him that he should file a petition to revive the application and stated that it was "unavoidable."

*37 CFR § 1.2 states that:*

All business with the Patent and Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

---

<sup>1</sup> In re Mattullath, 38 App. D.C. 497, 514-15 (1912) (quoting Ex parte Pratt, 1887 Dec. Comm'r Pat. 31, 32-33 (1887)); see also Winkler v. Ladd, 221 F. Supp. 550, 552, 138 USPQ 666, 167-68 (D.D.C. 1963), aff'd, 143 USPQ 172 (D.C. Cir. 1963); Ex parte Henrich, 1913 Dec. Comm'r Pat. 139, 141 (1913). In addition, decisions on revival are made on a "case-by-case basis, taking all the facts and circumstances into account."

Also, applicant should be aware of the two-month period for filing an appeal brief under 37 CFR 41.37 (accompanied by the fee required by 37 CFR 41.20(b)(2)). The Notice of Appeal was filed on July 27, 2010.

Petitioner may wish to consider filing a petition stating that the delay was unintentional. Public Law 97-247, § 3, 96 Stat. 317 (1982), which revised patent and trademark fees, amended 35 U.S.C. § 41(a)(7) to provide for the revival of an “unintentionally” abandoned application without a showing that the delay in prosecution or in late payment of the issue fee was “unavoidable.” This amendment to 35 U.S.C. § 41(a)(7) has been implemented in 37 CFR 1.137(b). An “unintentional” petition under 37 CFR 1.137(b) must be accompanied by the petition fee set forth in 37 CFR 1.17(m).

The filing of a petition under 37 CFR 1.137(b) cannot be intentionally delayed and therefore must be filed promptly. A person seeking revival due to unintentional delay cannot make a statement that the delay was unintentional unless the entire delay, including the date it was discovered that the application was abandoned until the filing of the petition to revive under 37 CFR 1.137(b), was unintentional. A statement that the delay was unintentional is not appropriate if petitioner intentionally delayed the filing of a petition for revival under 37 CFR 1.137(b).

Further correspondence with respect to this matter should be delivered through one of the following mediums:

- By mail:                      Mail Stop PETITIONS  
                                    Commissioner for Patents  
                                    Post Office Box 1450  
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                                    at (866) 217-9197)

Any questions concerning this matter may be directed to the undersigned at (571) 272-3208.

/KOC/  
Karen Creasy  
Petitions Examiner  
Office of Petitions

JUL 27 2010

PAGE 3/7 \* RCVD AT 7/27/2010 11:47:24 AM [Eastern Daylight Time] \* SVR:USPTO-EFAXRF-5/29 \* DNIS:2738300 \* CSID: \* DURATION (mm:ss):05:54

PTO/SB/61 (07-09)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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<b>PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED UNAVOIDABLY UNDER 37 CFR 1.137(a)</b>	Docket Number (Optional)
First Named Inventor: <u>Sam Balaban</u>	Art Unit: <u>3691</u>
Application Number: <u>10/840,378</u>	Examiner: <u>V. H. Kanervo</u>
Filed: <u>05/07/2004</u>	
Title: <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <u>System and method for execution delayed Trading.</u> </div>	
Attention: Office of Petitions Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
NOTE: If information or assistance is needed in completing this form, please contact Petitions Information at (571) 272-3282.	
The above-identified application became abandoned for failure to file a timely and proper reply to a notice or action by the United States Patent and Trademark Office. The date of abandonment is the day after the expiration date of the period set for reply in the Office notice or action plus any extensions of time actually obtained.	
<b>APPLICANT HEREBY PETITIONS FOR REVIVAL OF THIS APPLICATION.</b> NOTE: A grantable petition requires the following items:	
(1) Petition fee. (2) Reply and/or issue fee. (3) Terminal disclaimer with disclaimer fee – required for all utility and plant applications filed before June 8, 1995, and for all design applications; and (4) Adequate showing of the cause of unavoidable delay.	
<b>1. Petition fee</b> <input checked="" type="checkbox"/> Small entity – fee \$ <u>270</u> (37 CFR 1.17(l)). Applicant claims small entity status. See 37 CFR 1.27. <input type="checkbox"/> Other than small entity – fee \$ _____ (37 CFR 1.17(l)).	
<b>2. Reply and/or fee</b> <b>A</b> The reply and/or fee to the above-noted Office action in the form of _____ (identify the type of reply): <input type="checkbox"/> has been filed previously on _____ <input type="checkbox"/> is enclosed herewith. <b>B</b> The issue fee of \$ _____ <input type="checkbox"/> has been filed previously on _____ <input type="checkbox"/> is enclosed herewith.	

[Page 1 of 3]

This collection of information is required by 37 CFR 1.137(a). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

07/28/2010 JVONG1 00000014 18840378

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JUL 27 2010

PAGE 4/7 \* RCVD AT 7/27/2010 11:47:24 AM [Eastern Daylight Time] \* SVR:USPTO-EF-XRF-5/29 \* DNS:2738300 \* CSID: \* DURATION (mm:ss):05:54

PTO/SB/61 (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED  
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

**3. Terminal disclaimer with disclaimer fee**

- ☒ Since this utility/plant application was filed on or after June 8, 1995, no terminal disclaimer is required.
- ☐ A terminal disclaimer (and disclaimer fee (37 CFR 1.20(d)) of \$ \_\_\_\_\_ for a small entity or \$ \_\_\_\_\_ for other than a small entity) disclaiming the required period of time is enclosed herewith (see PTO/SB/63).

**4. An adequate showing of the cause of the delay, and that the entire delay in filing the required reply from the due date for the reply until the filing of a grantable petition under 37 CFR 1.137(a) was unavoidable, is enclosed.**

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

*S. Balaban*

Signature

*Sam Balaban*

Typed or printed name

*6101 West Court Drive*

Address

*Building 1, Suite 110*

Address

*7/18/10*

Date

Registration Number, if applicable

*512-372-8001*

Telephone Number

Enclosure ☒ Fee Payment

☐ Reply

☐ Terminal Disclaimer Form

☒ <sup>2</sup> Additional sheets containing statements establishing unavoidable delay

☐

**CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(a))**

I hereby certify that this correspondence is being:

☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to **Mail Stop Petition**, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

☐ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at (571) 273-8300.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed or printed name of person signing certificate

PTO/SB/61 (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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**PETITION FOR REVIVAL OF AN APPLICATION FOR PATENT ABANDONED  
UNAVOIDABLY UNDER 37 CFR 1.137(a)**

NOTE: The following showing of the cause of unavoidable delay must be signed by all applicants or by any other party who is presenting statements concerning the cause of delay.



Signature

7/18/10

Date

Sam Balaban

Typed or printed name

Registration Number, if applicable

(In the space provided below, please explain in detail the reasons for the delay in filing a proper reply.)

(See attached)

(Please attach additional sheets if additional space is needed.)

**Petition for Revival of an Application for Patent Abandoned Unavoidably Under 37 CFR 1.137(a)**

Title: **System and method for execution delayed trading**  
 Application Number: **10/840,378**  
 Filed on: **05/07/2004**

**Background:**

On November 10, 2009 the PTO issued a Final Rejection on the patent application 10/840,378 .

On January 19, 2010, Applicant had an office interview with the Examiner. In the Interview Summary the Examiner stated:

*"The current after final amendment will not be entered because there is inconsistencies in the language with claims 41 and 42. Applicant will file another after final amendment including correction of the claim language of the claims 41 and 42, and arguments why independent claims 34, 43 and 52, are distinguishable from Fraser."*

On January 26, 2010, Applicant filed an after final amendment in response to the Examiner's instructions. On May 17, 2010 the Examiner called applicant and told applicant that she never received an after final amendment and the cutoff date to receive the amendment was May 10, 2010. Applicant told her that he did submit an after final amendment and then emailed her the after final amendment and proof of the electronic filing (see attached, EFS ID: 6879895). She said that she would take a look at the late (lost by PTO) amendment after final, but the claim language would have to be exact condition for allowance in order for her to issue the patent. She said her hands were tied the 6 month window for the case was closed and she could not work on the case. There was even talk that if the examiner worked on the case after the 6 month window elapsed and the patent was issued it could be deemed invalid at a later date.

The applicant was very upset after hearing about the state of the application, on two fronts, the time delay and the additional expense he would have to be incurred to further prosecute the application. He then requested a telephone conference call with the supervising examiner. This conference call occurred on July 7, 2010. On the call, there was, Primary Examiner Virpi Kanervo, Examiner Hani Kazimi and the Supervising Examiner Alexander Kalinowski. The applicant told the examiners that he was going to stand pat on the case and would rather appeal the case than pursue a continuation of the case. Applicant asked what he should do next. Mr. Kalinowski told him that he should file a petition to revive the application and stated that it was "unavoidable" and to file a notice of appeal. Applicant followed these instructions and filed the petition and notice of appeal.

Regarding filing an unavoidable or unintentional abandonment petition, applicant asked what Mr. Kalinowski if he thought it was unavoidable or unintentional. He said unavoidable.

Also on the call, the applicant was told by Examiner Kazimi that he thought allowable patent claims could be drafted from the specification, but not the claims as they were currently presented. He said once the case was revived, Examiner Kanervo and he would work with the pro se applicant on achieving allowable claims.

The following are arguments that support the Applicant's request to revive the application by petition due to unavoidable abandonment:




**Arguments:**

- A. An amendment after final by applicant was lost by the PTO. No reason or explanation was given to the applicant. It simply was received (EFS ID 6879895) and disappeared. It was never entered into the case until after the six month statutory period after the final office action was mailed elapsed. If the PTO looks at the record on the Internet it will appear that the amendment after final was entered timely on January 26, 2010, but in fact it really was entered sometime in May 2010.
- B. The supervising examiner in the case stated he thought it was unavoidable and not unintentional. The PTO should stand by its staff when they advise pro se applicants on PTO procedure.
- C. The Examiner clearly was waiting for an amendment from the applicant and even stated specific items she wanted to address. This proves that her intent was not to "ignore" the amendment after final. This is also evidenced by the fact that once the amendment after final was entered actually entered sometime in May 2010, the examiner responded with comments.
- D. One of the examiners working on the case stated that there was patentable substance in the application and if the case could be revived, he said he would work with the primary examiner and the applicant to achieve allowable claims.
- E. The PTO's policy that amendments after final must be exact or they simply can be ignored is not accurate by historical precedent. Applicant cites his last patent application 11/821,988 which was ultimately allowed, there were multiple amendments after final and the exact language of the claims in the first amendment after final were not the claims that were eventually allowed.

**Conclusion:**

Any one of these five arguments has enough weight to support the fact that the patent application 10/840,378 was abandoned unavoidably and not unintentionally. Applicant hereby petitions PTO to revive the application due to it being abandoned unavoidably.

Sincerely,

  
Sam Balabon  
Applicant

JUL 27 2010

PAGE 2/7, RCVD AT 2/27/2010 11:47:24 AM [Eastern Daylight Time] \* SVR:USPTO-EF-XRF-5/29 \* DNIS:2738300 \* CSID: \* DURATION (mm:ss):05:54

PTO/SB/31 (07-09)

Approved for use through 07/31/2012. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**NOTICE OF APPEAL FROM THE EXAMINER TO  
THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Docket Number (Optional)

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]  
on July 27, 2010

Signature SR

Typed or printed name Sam Balabon

In re Application of

Sam Balabon

Application Number

101840,378

Filed

05/07/2004

For System and method for execution  
delayed loading

Art Unit

3691

Examiner

Virpi H. Kanervo

Applicant hereby appeals to the Board of Patent Appeals and Interferences from the last decision of the examiner.

The fee for this Notice of Appeal is (37 CFR 41.20(b)(1))

\$ \_\_\_\_\_

☒ Applicant claims small entity status. See 37 CFR 1.27. Therefore, the fee shown above is reduced by half, and the resulting fee is:

\$ 270

☐ A check in the amount of the fee is enclosed.

☒ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☐ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. \_\_\_\_\_

☐ A petition for an extension of time under 37 CFR 1.136(a) (PTO/SB/22) is enclosed.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

I am the

☒ applicant/inventor.

☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☐ attorney or agent of record.  
Registration number \_\_\_\_\_

☐ attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34. \_\_\_\_\_

Signature

Sam Balabon

Typed or printed name

512-372-8001

Telephone number

7/18/10

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 41.31. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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# UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

7590 07/13/2010  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER
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KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
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3691

MAIL DATE	DELIVERY MODE
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07/13/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Interview Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI H. KANERVO	<b>Art Unit</b> 3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI H. KANERVO. (3) ALEXANDER KALINOWSKI.

(2) SAM BALABON. (4) HANI KAZIMI.

Date of Interview: 07 July 2010.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: N/A.

Identification of prior art discussed: N/A.

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant Mr. Balabon, SPE Kalinowski, Primary Examiner Kazimi, and Examiner Kanervo, discussed options to revive the now abandoned application.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

	/Alexander Kalinowski/ Supervisory Patent Examiner, Art Unit 3691
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## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



# UNITED STATES PATENT AND TRADEMARK OFFICE

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P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 07/07/2010  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

07/07/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Notice of Abandonment</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/840,378	BALABON, SAM	
	<b>Examiner</b>	<b>Art Unit</b>	
	VIRPI H. KANERVO	3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on 10 November 2009.
  - (a) ☐ A reply was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply (including a total extension of time of \_\_\_\_\_ month(s)) which expired on \_\_\_\_\_.
  - (b) ☐ A proposed reply was received on \_\_\_\_\_, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.  
(A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
  - (c) ☐ A reply was received on \_\_\_\_\_ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
  - (d) ☒ No reply has been received.
2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
  - (a) ☐ The issue fee and publication fee, if applicable, was received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
  - (b) ☐ The submitted fee of \$\_\_\_\_\_ is insufficient. A balance of \$\_\_\_\_\_ is due.  
The issue fee required by 37 CFR 1.18 is \$\_\_\_\_\_. The publication fee, if required by 37 CFR 1.18(d), is \$\_\_\_\_\_.
  - (c) ☐ The issue fee and publication fee, if applicable, has not been received.
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
  - (a) ☐ Proposed corrected drawings were received on \_\_\_\_\_ (with a Certificate of Mailing or Transmission dated \_\_\_\_\_), which is after the expiration of the period for reply.
  - (b) ☐ No corrected drawings have been received.
4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.
5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.
6. ☐ The decision by the Board of Patent Appeals and Interference rendered on \_\_\_\_\_ and because the period for seeking court review of the decision has expired and there are no allowed claims.
7. ☒ The reason(s) below:

The 6-month statutory response filing deadline expired May 10, 2010. Note that advisory action is not a response that extends the filing deadline.

/Alexander Kalinowski/  
Supervisory Patent Examiner, Art Unit 3691

Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

**WHAT IS CLAIMED IS:**

1-34. (Canceled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged for ~~between~~ the particular interval of time to verify that quotes in other systems have not been effected by the match.

35. (Previously Amended) The method of claim 34, wherein the initial market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the initial market value is based on an ask price.



37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

41. Canceled.

42. Canceled.

43. (Currently Amended) A computer-implemented method for providing financial instruments for trading, comprising:

receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;

determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and

activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify that quotes in other systems have not been effected by the match.

44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

46. (Previously Amended) The method of claim 43, wherein the initial market value is based on a bid price.

47. (Previously Amended) The method of claim 43, wherein the initial market value is based on an ask price.

48. (Original) The method of claim 43, wherein the timing information includes a minimum time limit.

49. (Original) The method of claim 43, wherein the timing information includes a maximum time limit.

50. (Original) The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.

51. (Currently Amended) The method of claim 50, wherein the particular interval ~~amount~~ of time includes a random time period within the minimum time limit and the maximum time limit.

52. (Previously Presented) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.

53. (New) The method of claim 34, wherein the particular interval of time includes a pre-set time period.

54. (New) The method of claim 34, wherein the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 06/16/2010  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

06/16/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/840,378</p>	<p><b>Applicant(s)</b> BALABON, SAM</p>	
	<p><b>Examiner</b> VIRPI H. KANERVO</p>	<p><b>Art Unit</b> 3691</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 26 January 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☒ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
- The status of the claim(s) is (or will be) as follows:
- Claim(s) allowed: \_\_\_\_\_.
- Claim(s) objected to: \_\_\_\_\_.
- Claim(s) rejected: \_\_\_\_\_.
- Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.
12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_
13. ☐ Other: \_\_\_\_\_.

/Alexander Kalinowski/  
Supervisory Patent Examiner, Art Unit 3691

Continuation of 11. does NOT place the application in condition for allowance because: Applicant argues that Frazer (7,392,214 B1) does not disclose "completing the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time." Examiner respectfully disagrees. Frazer specifically taught that "the price retention state determines which price to apply to the hit or lift command based upon the amount of time between the time the price was changed and the subsequent hit of lift command" (Frazer: col. 15, lines 39-42; where "price retention state" is "the determined market value of the financial instrument remains unchanged", and "the amount of time between the time the price was changed and the subsequent command" is "the particular interval of time"), and that "if a participant enters a hit of lift command just subsequent to another participant hitting or lifting a bid or offer, the price retention state signals to the potential aggressor that 'no trade' has been completed" (Frazer: col. 15, lines 48-51; showing completion only if the value remains unchanged for an interval of time). Therefore, Frazer shows "completing the order only if the determined market value of the financial instrument remains unchanged for the particular interval of time".



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

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7590 02/01/2010  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

02/01/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Interview Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI H. KANERVO	<b>Art Unit</b> 3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI H. KANERVO. (3) SAM BALABON.

(2) \_\_\_\_\_. (4) ROBERT MCLAUGHLAN.

Date of Interview: 19 January 2010.

Type: a) ☐ Telephonic b) ☐ Video Conference  
c) ☒ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 34,41-43 and 52.

Identification of prior art discussed: Fraser (7,392,214 B1).

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The current after final amendment will not be entered because there is inconsistencies in the language with claims 41 and 42. Applicant will file another after final amendment including correction of the claim language of claims 41 and 42, and arguments why independent claims 34, 43, and 52, are distinguishable from Fraser.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

	/Alexander Kalinowski/ Supervisory Patent Examiner, Art Unit 3691
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## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

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7590 01/27/2010  
DEEP LIQUIDITY, INC.  
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SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

01/27/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<p><b>Application No.</b> 10/840,378</p>	<p><b>Applicant(s)</b> BALABON, SAM</p>	
	<p><b>Examiner</b> VIRPI H. KANERVO</p>	<p><b>Art Unit</b> 3691</p>	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 11 January 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ They raise the issue of new matter (see NOTE below);
- (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☒ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: \_\_\_\_\_.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.

12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_

13. ☐ Other: \_\_\_\_\_.

/Alexander Kalinowski/  
Supervisory Patent Examiner, Art Unit 3691

# Notice of Non-Compliant Amendment (37 CFR 1.121)

Application No.

10/840,378

Examiner

VIRPI H. KANERVO

Applicant(s)

BALABON, SAM

Art Unit

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

The amendment document filed on 11 January 2010 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
  - ☐ A. Amended paragraph(s) do not include markings.
  - ☐ B. New paragraph(s) should not be underlined.
  - ☐ C. Other \_\_\_\_\_.
- ☐ 2. Abstract:
  - ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
  - ☐ B. Other \_\_\_\_\_.
- ☐ 3. Amendments to the drawings:
  - ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
  - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
  - ☐ C. Other \_\_\_\_\_.
- ☒ 4. Amendments to the claims:
  - ☐ A. A complete listing of all of the claims is not present.
  - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
  - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
  - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
  - ☒ E. Other: See Continuation Sheet.
- ☐ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4):  
\_\_\_\_\_

For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

## TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action. If any of above boxes 1. to 4. are checked, the correction required is only the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121.

**Extensions of time** are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

**Failure to timely respond** to this notice will result in:

**Abandonment** of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or

**Non-entry** of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691

Continuation of 4(e) Other: (1) Applicant has attempted to cure the deficiency of claim 41 noted by Examiner in Office action dated 11/10/2009 by underlining the new words "particular feature," but has left the canceled word "amount" off. Applicant should leave the word "amount" (with strikethrough) in place in order to cancel that word, and underline the words "particular feature." (2) In the instant amendment, Applicant listed the words of claim 42 as: "The method of claim 34, wherein the amount of time includes a period of time during which the determined market value of the financial instrument is verified." However, Applicant on 07/24/2009 had successfully amended claim 42 words as: "The method of claim 34, wherein the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified." (3) Because of the inconsistencies of the claim language of claims 41 and 42, Examiner will not enter the amendment filed on 01/11/2010.

**WHAT IS CLAIMED IS:**

1-34. (Canceled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged for ~~between~~ the particular interval of time to verify that quotes in other systems have not been effected by the match.

35. (Previously Amended) The method of claim 34, wherein the initial market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the initial market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

41. (Currently Amended) The method of claim 34, wherein the particular interval of time includes a pre-set time period.

42. (Previously Amended) The method of claim 34, wherein the amount of time includes a period of time during which the determined market value of the financial instrument is verified.

43. (Currently Amended) A computer-implemented method for providing financial instruments for trading, comprising:



receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;

determining by a computer an an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and

activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify that quotes in other systems have not been effected by the match.

44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

46. (Previously Amended) The method of claim 43, wherein the initial market value is based on a bid price.

47. (Previously Amended) The method of claim 43, wherein the initial market value is based on an ask price.

48. (Original) The method of claim 43, wherein the timing information includes a minimum time limit.

49. (Original) The method of claim 43, wherein the timing information includes a maximum time limit.

50. (Original) The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.

51. (Original) The method of claim 50, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.

52. (Previously Presented) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Sam Balabon  
Serial No.: 10/840,378  
Filing Date: May 7, 2004  
Examiner: Kanervo, Virpi H.  
Group Art Unit: 3691  
Confirmation No. 1030  
Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

Mail Stop: Amendments

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**Certification Under 37 C.F.R. 1.8**

**Date of Mailing or Facsimile Transmission: 1/26/2010**

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/Robert A. McLauchlan, REG. NO. 44,924/

Robert A. McLauchlan

**AMENDMENT**

Dear Sir:

Applicant hereby responds to the Final Office Action mailed November 10, 2009. Thus, the period for response expires on February 10<sup>th</sup> 2010. Applicant also respectfully requests the Examiner reconsider the rejections of the Claims in view of the following amendments to the Claims and comments as set forth below.

**WHAT IS CLAIMED IS:**

1-34. (Canceled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged for ~~between~~ the particular interval of time to verify that quotes in other systems have not been effected by the match.

35. (Previously Amended) The method of claim 34, wherein the initial market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the initial market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

41. Canceled.

42. Canceled.

43. (Currently Amended) A computer-implemented method for providing financial instruments for trading, comprising:

receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;

determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and

activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify that quotes in other systems have not been effected by the match.

44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

46. (Previously Amended) The method of claim 43, wherein the initial market value is based on a bid price.

47. (Previously Amended) The method of claim 43, wherein the initial market value is based on an ask price.

48. (Original) The method of claim 43, wherein the timing information includes a minimum time limit.

49. (Original) The method of claim 43, wherein the timing information includes a maximum time limit.

50. (Original) The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.

51. (Currently Amended) The method of claim 50, wherein the particular interval ~~amount~~ of time includes a random time period within the minimum time limit and the maximum time limit.

52. (Previously Presented) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.



53. (New) The method of claim 34, wherein the particular interval of time includes a pre-set time period.

54. (New) The method of claim 34, wherein the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified.

**REMARKS**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed November 10, 2009. Applicants respectfully request reconsideration and favorable action in this case.

**CLAIM REJECTIONS - 35 USC §112**

Claims 34-52 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. The examiner states:

Applicant has amended independent claims 34 and 43 to recite a limitation "determining by a computer an initial market value of the financial instrument." However, nowhere in the specification is an element "initial market value" described. This element also appears in newly added independent claim 52, and amended dependent claims 35-36 and 46-47. Since dependent claims 37-42, 44-45, and 48-51, depend from independent claims 34 and 43 that contain this element, they are also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

The applicant respectfully submits that the application describes that the order may be executed when the "price remains unchanged for a ... time period" (Paragraph [0161]) in several places throughout the specification. By definition, the time period will have a beginning and an end. The initial market value is the price at the beginning of the time period, where the trade is only executed if the price remains unchanged. Thus, the applicant respectfully submits that the examiner's interpretation of the "initial market value" to mean the "current market value" is incorrect. Rather, the "initial market value" means the price at the beginning of the time period as described within the specification.

**CLAIM REJECTIONS - 35 USC §103**

Claims 34-37, 41-43, 46-48, and 52, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman (6,601,044 B1) in view of Fraser (7,392,214 B1). The examiner states:

As to claim 34, Wallman shows receiving by a computer from a first party an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match. Fraser shows upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Fraser: col. 15, lines 27-46); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

The applicant notes in response that Fraser actually teaches a "price retention state." (Fraser, Col. 15, Line 50). According to Fraser, the Price Retention State provides "the ability of the system to age all bids and offers through system controlled parameters. This provides participants with the ability to recognize and respond to commands that are entered by participants by requiring that the bids and offers are available for at least an aging period and thereby prevent "price noise" (i.e., bids and offers that are entered and then quickly removed) from excessive cancellations. Different currencies will have different parameter settings including the possibility of having zero aging." (Fraser, Col. 16, Lines 48-57)

Price Retention of Fraser requires the price of the individual bid or offer not to be changed or cancelled for a minimum time period after it is entered into the trading system. If the price changes before the minimum time elapses, the price before the change will be granted to the liquidity taker even if the bid or offer price has changed during the time interval. (See Figure 9 and Col. 15, Lines 25-61) This requirement on an individual bid or offer should not be confused with the overall market value which the present invention determines at two distinct points separated in time by a particular interval of time. The present invention then only completes the order only if the determined market value of the financial instrument remains

unchanged for the particular interval of time to verify that quotes in other systems have not been effected by the match.

The purpose of Price Retention in Fraser is to provide “price protection” to liquidity takers. It is not related to “whether or not to grant a trade execution.” The applicant respectfully submits that the claimed invention relates to completing an order only if the market value remains unchanged for a particular time period. Thus, the claimed invention can be distinguished from Fraser in that Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.”

The applicant respectfully submits that Fraser does not teach the step examiner claims. Fraser provides price protection for liquidity takers that hit or lift quotes out of order books. The claimed invention provides a superior execution for liquidity providers that post limit orders in order books. The purpose and goals behind each of the claimed invention and Fraser are not related.

As such, the office action cannot establish a prima facie case of obviousness with respect to Claim 34. Therefore the rejections under 35 USC § 103 should be withdrawn.

As to claim 35, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the initial market value is based on a bid price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to

Claim 35 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 36, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the initial market value is based on an ask price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 36 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 37, Wallman in view of Fraser shows all the elements of claim 34. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 37 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 41, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the particular interval of time includes a pre-set time period (Wallman: col. 8, lines 13-23).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 41 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 42, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified (Wallman: col. 8, lines 29-43).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 43 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 43, Wallman shows receiving by a computer an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show determining by a computer a initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and activating by a computer the order only if the determined market value of the

financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match.

Fraser shows determining by a computer a initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay (Fraser: col. 15, lines 27-46); and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot



establish a prima facie case of obviousness with respect to independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 46, Wallman in view of Fraser shows all the elements of claim 43. Wallman also shows that the initial market value is based on a bid price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 46 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 47, Wallman in view of Fraser shows all the elements of claim 43. Wallman also shows that the initial market value is based on an ask price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 47 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 48, Wallman in view of Fraser shows all the elements of claim 43. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time

limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 48 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 52, Wallman shows receiving by a computer from a first party an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.

Fraser shows upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Fraser: col. 15, lines 27-46); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a

particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55). As discussed above, Fraser fails to teach "completing ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time." As such, the Office Action cannot establish a prima facie case of obviousness with respect to independent Claim 52. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 38 and 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, and further in view of Madoff (2001/0044767 A1). The examiner states:

As to claims 38 and 49, Wallman in view of Fraser shows all the elements of claims 34 and 43. Wallman in view of Fraser does not show that the particular interval of time includes a maximum time limit. Madoff shows that the particular interval of time includes a maximum time limit (Madoff: page 3, If 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Fraser fails to teach “completing[/activating] ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 38 and 49 that depend from independent Claim 34 and 43 respectively. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 39 and 50, Wallman in view of Fraser shows all the elements of claims 34 and 43. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show that the particular interval of time includes a maximum time limit. Madoff shows that the particular interval of time includes a maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Fraser fails to teach “completing[/activating] ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 39 and 50 that depend from independent Claim 34 and 43 respectively. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 40 and 51, Wallman in view of Fraser, and further in view of Madoff, shows all the elements of claims 39 and 50. Wallman in view of Fraser does not show that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit. Madoff shows that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a random time period within the minimum time limit and the maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, U 34).

As discussed above, Fraser fails to teach “completing[/activating] ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 40 and 51 that depend from independent Claim 34 and 43 respectively. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claim 44 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, and further in view of Keith (7,383,220 B1). The examiner states:

As to claim 44, Wallman in view of Fraser shows all the elements of claim 43. Wallman in view of Fraser does not show that activating the order includes posting the order in a manner indicating that the order is available for trading. Keith shows that activating the order includes posting the order in a manner indicating that the order is available for trading (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by activating the order including posting the order in a manner indicating that the

order is available for trading of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 44 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 45 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Keith, and further in view of Official notice. The examiner states:

As to claim 45, Wallman in view of Fraser, and further in view of Keith, shows all the elements of claim 44. Wallman in view of Fraser, and further in view of Keith, does not show that the order is posted on a bulletin board transmitted over a network. Examiner takes Official notice that bulletin boards are old and well known in the art; they have been used on the Internet to disseminate information for over a decade. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Keith, by applying bulletin boards in order to provide a convenient and well-known method of disclosing availability of trade.

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to

Claim 45 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Furthermore, with respect to the examiner's official notice with respect to Claim 45 the applicant respectfully submits that the official notice is "based on facts within the personal knowledge of an employee of the office" (i.e. the examiner). The applicant respectfully requests that this reference this official notice be supported by affidavit of the examiner. Under 37 CFR § 1.104(b)(2).

Applicant respectfully points out that in order to combine references for an obviousness rejection, there must be some teaching, suggestion, or incentives supporting the combination. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989). The mere fact that the prior art could be modified does not make that modification obvious unless the prior art suggests the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, it is well established that Applicant's disclosure cannot be used to reconstruct Applicant's invention from individual pieces found in separate, isolated references. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Applicant respectfully submits that there is no motivation, teaching or suggestion to combine the cited prior art. Therefore, the rejection on a combination of these references is inappropriate.

#### Requirements for a Prima Facie Case of Obviousness

In order to establish a *prima facie* case of obviousness, Section 2143 of the MPEP requires that:

...three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally

available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

### **MOTIVATION TO COMBINE**

Addressing the first criteria, the MPEP prescribes in Section 706.02(j) that:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. “To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections.

In the most recent Action, the Examiner has not pointed out any teaching in the cited references that “expressly or impliedly suggest[s] the claimed invention.” Nor has the Examiner “present[ed] a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” The only teaching of the implementation of a system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time is in the Applicant’s own application. The applicant respectfully submits that the examiner has not provided explicit reasoning as to what would have prompted one of ordinary skill in the art to



combine the cited references to produce the claims of the instant application. Thus, the Examiner's rejection fails to meet the first criteria for a *prima facie* case of obviousness.

### **REASONABLE EXPECTATION OF SUCCESS**

The hypothetical combiner, having combined any combination of the cited prior art would find it impossible to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. As a result, the Examiner's rejection fails to meet the second criteria for a *prima facie* case of obviousness.

### **TEACHING OR SUGGESTION OF ALL CLAIM LIMITATIONS**

The present application teaches, and all the claims of the present application claim, a system, and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. The cited prior art does not teach all the claim limitations of the present application. As described above, the hypothetical combiner will be unable to provide this system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. Thus, the proposed combination of references neither teaches nor suggests all the claim limitations and, as such, the Examiner's rejection fails to meet the third criteria for a *prima facie* case of obviousness.

Applicant respectfully submits that there is no motivation, teaching or suggestion to combine the cited prior art. Therefore, the rejection on a combination of these references is inappropriate. Withdrawal of the rejection allowance of Claims 34-52 is respectfully requested.

CONCLUSION

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 34-52.

It is believed no additional fee is due with this transmission.

The Examiner is invited to contact the undersigned at 512-372-8001 to discuss any matter regarding this application.

Respectfully submitted,

/Sam Balabon, Inventor/

By: \_\_\_\_\_

Sam Balabon

(Inventor)

Dated: January 26, 2010

Sam Balabon

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(512) 372-8001



## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6879895
<b>Application Number:</b>	10840378
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1030
<b>Title of Invention:</b>	System and method for execution delayed trading
<b>First Named Inventor/Applicant Name:</b>	Sam Balabon
<b>Correspondence Address:</b>	DEEP LIQUIDITY, INC. - 6101 W. COURTYARD, BUILDING 1 SUITE110 AUSTIN TX 75730 US -
<b>Filer:</b>	Robert Adalbert McLauchlan III
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	12664-3
<b>Receipt Date:</b>	26-JAN-2010
<b>Filing Date:</b>	07-MAY-2004
<b>Time Stamp:</b>	11:28:17
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment After Final	12664-3ROA20100126.pdf	103648	no	24
			edc3aadaed18cac28a045eff49931d0d0dbf d0a8		

**Warnings:**

**Information:**

<b>Total Files Size (in bytes):</b>	103648
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**New Applications Under 35 U.S.C. 111**

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

**National Stage of an International Application under 35 U.S.C. 371**

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

**New International Application Filed with the USPTO as a Receiving Office**

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6879895
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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment After Final	12664-3ROA20100126.pdf	103648 edc3aadaed18cac28a045eff49931d0d0dbf d0a8	no	24

**Warnings:**

**Information:**

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<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed	
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APPLICATION AS FILED – PART I					OTHER THAN				
(Column 1)		(Column 2)		SMALL ENTITY <input checked="" type="checkbox"/>		OR		SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR		RATE (\$)	FEE (\$)	
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A				N/A		
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A				N/A		
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A				N/A		
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =				X \$ =		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =				X \$ =		
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))			If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
					TOTAL		TOTAL		

\* If the difference in column 1 is less than zero, enter "0" in column 2.

APPLICATION AS AMENDED – PART II					OTHER THAN						
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR		SMALL ENTITY	
<b>AMENDMENT</b>	<b>01/26/2010</b>	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 19	Minus	** 51	= 0	X \$26 =	0			X \$ =	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 7	= 0	X \$110 =	0			X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
					TOTAL ADD'L FEE	0		TOTAL ADD'L FEE			

(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR		SMALL ENTITY	
<b>AMENDMENT</b>		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =				X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =				X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
					TOTAL ADD'L FEE			TOTAL ADD'L FEE			

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:  
/SONYA HILLIARD/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Sam Balabon

Serial No.: 10/840,378

Filing Date: May 7, 2004

Examiner: Kanervo, Virpi H.

Group Art Unit: 3691

Confirmation No. 1030

Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

Mail Stop: Amendments

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**Certification Under 37 C.F.R. 1.8**

**Date of Mailing or Facsimile Transmission: 1/11/2010**

I hereby certify that this correspondence is being deposited with the United States Postal Service via First Class Mail with sufficient postage for mailing under 37 CFR § 1.8 on the date indicated above and addressed to the Mail Stop: Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office at 571-273-8300 under 37 CFR § 1.8 on the date indicated.

/ROBERT A. McLauchlan, REG. NO. 44,924/

Robert A. McLauchlan

**AMENDMENT**

Dear Sir:

Applicant hereby responds to the Final Office Action mailed November 10, 2009. Thus, the period for response expires on February 10<sup>th</sup> 2010 and the period for response with an advisory action expires January 11<sup>th</sup> 2010 as January 10<sup>th</sup> is a Sunday. Applicant also respectfully requests the Examiner reconsider the rejections of the Claims in view of the following amendments to the Claims and comments as set forth below.

**WHAT IS CLAIMED IS:**

1-34. (Canceled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged for ~~between~~ the particular interval of time to verify that quotes in other systems have not been effected by the match.

35. (Previously Amended) The method of claim 34, wherein the initial market value is based on a bid price.

36. (Previously Amended) The method of claim 34, wherein the initial market value is based on an ask price.

37. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a minimum time limit.

38. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a maximum time limit.

39. (Previously Amended) The method of claim 34, wherein the particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Previously Amended) The method of claim 39, wherein the particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

41. (Currently Amended) The method of claim 34, wherein the particular interval of time includes a pre-set time period.

42. (Previously Amended) The method of claim 34, wherein the amount of time includes a period of time during which the determined market value of the financial instrument is verified.

43. (Currently Amended) A computer-implemented method for providing financial instruments for trading, comprising:

receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;

determining by a computer an an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and

activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify that quotes in other systems have not been effected by the match.

44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

46. (Previously Amended) The method of claim 43, wherein the initial market value is based on a bid price.

47. (Previously Amended) The method of claim 43, wherein the initial market value is based on an ask price.

48. (Original) The method of claim 43, wherein the timing information includes a minimum time limit.

49. (Original) The method of claim 43, wherein the timing information includes a maximum time limit.

50. (Original) The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.

51. (Original) The method of claim 50, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.

52. (Previously Presented) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.

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**REMARKS**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed November 10, 2009. Applicants respectfully request reconsideration and favorable action in this case.

**CLAIM REJECTIONS - 35 USC §112**

Claims 34-52 stand rejected under 35 U.S.C. § 112 as failing to comply with the written description requirement. The examiner states:

Applicant has amended independent claims 34 and 43 to recite a limitation "determining by a computer an initial market value of the financial instrument." However, nowhere in the specification is an element "initial market value" described. This element also appears in newly added independent claim 52, and amended dependent claims 35-36 and 46-47. Since dependent claims 37-42, 44-45, and 48-51, depend from independent claims 34 and 43 that contain this element, they are also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.

The applicant respectfully submits that the application describes that the order may be executed when the "price remains unchanged for a ... time period" (Paragraph [0161]) in several places throughout the specification. By definition, the time period will have a beginning and an end. The initial market value is the price at the beginning of the time period, where the trade is only executed if the price remains unchanged. Thus, the applicant respectfully submits that the examiner's interpretation of the "initial market value" to mean the "current market value" is incorrect. Rather, the "initial market value" means the price at the beginning of the time period as described within the specification.

**CLAIM REJECTIONS - 35 USC §103**

Claims 34-37, 41-43, 46-48, and 52, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman (6,601,044 B1) in view of Fraser (7,392,214 B1). The examiner states:

As to claim 34, Wallman shows receiving by a computer from a first party an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match. Fraser shows upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Fraser: col. 15, lines 27-46); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).



It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

The applicant notes in response that Fraser actually teaches a “price retention state.” (Fraser, Col. 15, Line 50). According to Fraser, the Price Retention State provides “the ability of the system to age all bids and offers through system controlled parameters. This provides participants with the ability to recognize and respond to commands that are entered by participants by requiring that the bids and offers are available for at least an aging period and thereby prevent “price noise” (i.e., bids and offers that are entered and then quickly removed) from excessive cancellations. Different currencies will have different parameter settings including the possibility of having zero aging.” (Fraser, Col. 16, Lines 48-57)

Price Retention of Fraser requires the price of the quote not to be changed or cancelled for a minimum time period after it is entered into the trading system. If the price changes before the minimum time elapses, the price before the change will be granted to the liquidity taker even if the bid or offer price has changed during the time interval. (See Figure 9 and Col. 15, Lines 25-61)

The purpose of Price Retention in Fraser is to provide “price protection” to liquidity takers. It is not related to “whether or not to grant a trade execution.” The applicant respectfully submits that the claimed invention relates to completing an order only if the market value

remains unchanged for a particular time period. Thus, the claimed invention can be distinguished from Fraser in that Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.”

The applicant respectfully submits that Fraser does not teach the step examiner claims. Fraser provides price protection for liquidity takers that hit or lift quotes out of order books. The claimed invention provides a superior execution for liquidity providers that post limit orders in order books. The purpose and goals behind each of the claimed invention and Fraser are not related.

As such, the office action cannot establish a prima facie case of obviousness with respect to Claim 34. Therefore the rejections under 35 USC § 103 should be withdrawn.

As to claim 35, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the initial market value is based on a bid price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 35 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 36, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the initial market value is based on an ask price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 36 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 37, Wallman in view of Fraser shows all the elements of claim 34. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 37 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 41, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the particular interval of time includes a pre-set time period (Wallman: col. 8, lines 13-23).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 41 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 42, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified (Wallman: col. 8, lines 29-43).

As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 43 that depends from independent Claim 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 43, Wallman shows receiving by a computer an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show determining by a computer a initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match.

Fraser shows determining by a computer a initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay (Fraser: col. 15, lines 27-46); and activating by a computer the order only if the determined market value of the financial instrument remains

unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 46, Wallman in view of Fraser shows all the elements of claim 43. Wallman also shows that the initial market value is based on a bid price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 46 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 47, Wallman in view of Fraser shows all the elements of claim 43. Wallman also shows that the initial market value is based on an ask price (Wallman: col. 9, lines 43-60).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 47 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 48, Wallman in view of Fraser shows all the elements of claim 43. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 48 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 52, Wallman shows receiving by a computer from a first party an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.

Fraser shows upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Fraser: col. 15, lines 27-46); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market

value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55). As discussed above, Fraser fails to teach “completing ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to independent Claim 52. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 38 and 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, and further in view of Madoff (2001/0044767 A1). The examiner states:

As to claims 38 and 49, Wallman in view of Fraser shows all the elements of claims 34 and 43. Wallman in view of Fraser does not show that the particular interval of time includes a maximum time limit. Madoff shows that the particular interval of time includes a maximum time limit (Madoff: page 3, If 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Fraser fails to teach “completing[/activating] ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 38 and 49 that depend from independent Claim 34 and 43 respectively. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 39 and 50, Wallman in view of Fraser shows all the elements of claims 34 and 43. Wallman does not show that the particular



interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show that the particular interval of time includes a maximum time limit. Madoff shows that the particular interval of time includes a maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Fraser fails to teach “completing[/activating] ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 39 and 50 that depend from independent Claim 34 and 43 respectively. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 40 and 51, Wallman in view of Fraser, and further in view of Madoff, shows all the elements of claims 39 and 50. Wallman in view of Fraser does not show that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit. Madoff shows that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval

of time including a random time period within the minimum time limit and the maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, U 34).

As discussed above, Fraser fails to teach “completing[/activating] ... the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 40 and 51 that depend from independent Claim 34 and 43 respectively. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claim 44 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, and further in view of Keith (7,383,220 B1). The examiner states:

As to claim 44, Wallman in view of Fraser shows all the elements of claim 43. Wallman in view of Fraser does not show that activating the order includes posting the order in a manner indicating that the order is available for trading. Keith shows that activating the order includes posting the order in a manner indicating that the order is available for trading (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by activating the order including posting the order in a manner indicating that the order is available for trading of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 44 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 45 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Keith, and further in view of Official notice. The examiner states:

As to claim 45, Wallman in view of Fraser, and further in view of Keith, shows all the elements of claim 44. Wallman in view of Fraser, and further in view of Keith, does not show that the order is posted on a bulletin board transmitted over a network. Examiner takes Official notice that bulletin boards are old and well known in the art; they have been used on the Internet to disseminate information for over a decade. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Keith, by applying bulletin boards in order to provide a convenient and well-known method of disclosing availability of trade.

As discussed above, Fraser fails to teach “activating ... the order only if the determined market value of the financial instrument remains unchanged the particular interval of time.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 45 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Furthermore, with respect to the examiner’s official notice with respect to Claim 45 the applicant respectfully submits that the official notice is “based on facts within the personal knowledge of an employee of the office” (i.e. the examiner). The applicant respectfully requests

that this reference this official notice be supported by affidavit of the examiner. Under 37 CFR § 1.104(b)(2).

Applicant respectfully points out that in order to combine references for an obviousness rejection, there must be some teaching, suggestion, or incentives supporting the combination. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989). The mere fact that the prior art could be modified does not make that modification obvious unless the prior art suggests the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, it is well established that Applicant's disclosure cannot be used to reconstruct Applicant's invention from individual pieces found in separate, isolated references. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Applicant respectfully submits that there is no motivation, teaching or suggestion to combine the cited prior art. Therefore, the rejection on a combination of these references is inappropriate.

#### Requirements for a Prima Facie Case of Obviousness

In order to establish a *prima facie* case of obviousness, Section 2143 of the MPEP requires that:

...three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

#### MOTIVATION TO COMBINE

Addressing the first criteria, the MPEP prescribes in Section 706.02(j) that:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. “To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections.

In the most recent Action, the Examiner has not pointed out any teaching in the cited references that “expressly or impliedly suggest[s] the claimed invention.” Nor has the Examiner “present[ed] a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” The only teaching of the implementation of a system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time is in the Applicant’s own application. The applicant respectfully submits that the examiner has not provided explicit reasoning as to what would have prompted one of ordinary skill in the art to combine the cited references to produce the claims of the instant application. Thus, the Examiner’s rejection fails to meet the first criteria for a *prima facie* case of obviousness.

### **REASONABLE EXPECTATION OF SUCCESS**

The hypothetical combiner, having combined any combination of the cited prior art would find it impossible to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. As a result, the Examiner’s rejection fails to meet the second criteria for a *prima facie* case of obviousness.

### **TEACHING OR SUGGESTION OF ALL CLAIM LIMITATIONS**

The present application teaches, and all the claims of the present application claim, a system, and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. The cited prior art does not teach all the claim limitations of the present application. As described above, the hypothetical combiner will be unable to provide this system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. Thus, the proposed combination of references neither teaches nor suggests all the claim limitations and, as such, the Examiner's rejection fails to meet the third criteria for a *prima facie* case of obviousness.

Applicant respectfully submits that there is no motivation, teaching or suggestion to combine the cited prior art. Therefore, the rejection on a combination of these references is inappropriate. Withdrawal of the rejection allowance of Claims 34-52 is respectfully requested.

### **CONCLUSION**

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 34-52.

It is believed no additional fee is due with this transmission.

The Examiner is invited to contact the undersigned at 512-372-8001 to discuss any matter regarding this application.

Respectfully submitted,

/Sam Balabon, Inventor/

By: \_\_\_\_\_

Sam Balabon

(Inventor)

Dated: January 11, 2010

Sam Balabon

Deep Liquidity, Inc.

6101 W. Courtyard, Bldg. 1, Suite 120

Austin, Texas 78730

(512) 372-8001

## Electronic Acknowledgement Receipt

<b>EFS ID:</b>	6788864
<b>Application Number:</b>	10840378
<b>International Application Number:</b>	
<b>Confirmation Number:</b>	1030
<b>Title of Invention:</b>	System and method for execution delayed trading
<b>First Named Inventor/Applicant Name:</b>	Sam Balabon
<b>Correspondence Address:</b>	DEEP LIQUIDITY, INC. - 6101 W. COURTYARD, BUILDING 1 SUITE110 AUSTIN TX 75730 US - -
<b>Filer:</b>	Robert Adalbert McLauchlan III
<b>Filer Authorized By:</b>	
<b>Attorney Docket Number:</b>	12664-3
<b>Receipt Date:</b>	11-JAN-2010
<b>Filing Date:</b>	07-MAY-2004
<b>Time Stamp:</b>	18:18:34
<b>Application Type:</b>	Utility under 35 USC 111(a)

### Payment information:

Submitted with Payment	no
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### File Listing:



Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment After Final	12664-3ROA20100111.pdf	104897 d860734b4a92e28ae93581a3e954462514bb216	no	23

**Warnings:**

**Information:**

<b>Total Files Size (in bytes):</b>	104897
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**This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.**

**New Applications Under 35 U.S.C. 111**

**If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.**

**National Stage of an International Application under 35 U.S.C. 371**

**If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.**

**New International Application Filed with the USPTO as a Receiving Office**

**If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed			
<b>APPLICATION AS FILED – PART I</b>												
(Column 1)			(Column 2)		SMALL ENTITY <input checked="" type="checkbox"/> OR			OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)		
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A			N/A			
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A			N/A			
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A			N/A			
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$	=		X \$	=		X \$	=		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=		X \$	=		
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).											
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))												
* If the difference in column 1 is less than zero, enter "0" in column 2.												
<b>APPLICATION AS AMENDED – PART II</b>												
(Column 1)			(Column 2)		(Column 3)			SMALL ENTITY OR			OTHER THAN SMALL ENTITY	
<b>AMENDMENT</b>	<b>01/11/2010</b>	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 19	Minus	** 51	= 0	X \$26 =	0		X \$	=		
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 7	= 0	X \$110 =	0		X \$	=		
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
						TOTAL ADD'L FEE	0		TOTAL ADD'L FEE			
(Column 1)			(Column 2)		(Column 3)			SMALL ENTITY OR			OTHER THAN SMALL ENTITY	
<b>AMENDMENT</b>	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$	=		X \$	=		
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$	=		X \$	=		
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))											
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))											
						TOTAL ADD'L FEE			TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.												

Legal Instrument Examiner:  
/MARY A. HOLMES/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 11/10/2009  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

11/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI H. KANERVO	<b>Art Unit</b> 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 34-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 34-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 34-52 are presented for examination. Applicant filed an amendment on 07/24/2009 amending the claims 34-43 and 46-47; and adding a new claim 52. In light of Applicant's amendments, Examiner withdraws the rejection of the claims 34-51. However, new grounds of rejections, necessitated by Applicant's amendment of the claims and adding of a new claim, are established in the instant Office action for the claims 34-52. Since the new grounds of rejections were necessitated by Applicant's amendment of the claims and adding of a new claim, the rejection of the claims 1-14, 16, and 18, is a FINAL rejection of the claims.

### ***Response to Arguments***

2. Examiner has carefully considered Applicant's arguments with respect to claims 34-52, but they are moot in view of new grounds of rejections necessitated by Applicant's amendment of the claims and adding of a new claim.

3. Applicant requested examiner to supply proof for the Official notice Examiner took with respect to claim 45: "Examiner takes Official notice that bulletin boards are old and well-known in the art; they have been used on the Internet to disseminate information for over a decade." As a proof, Examiner directs Applicant to US Patent 5,819,238 to Fernholtz; Date of Patent: October 6, 1998. Fernholtz specifically discloses: "Trading orders can also be posted by computer to various electronic bulletin boards which are regularly downloaded by financial institutions to solicit their interest and bid in any of these orders" (Fernholtz: col. 3, lines 64-67).

#### ***Claim Objections***

4. Claims 34, 41, 43, and 52, are objected to because of the following informalities:

Claim 34 recites a limitation: "completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match." However, the language of this limitation could be changed to the following recitation to make the language of the claim more understandable: "completing by a computer the order only if the determined market value of the

financial instrument remains unchanged for the particular interval of time to verify that quotes in other systems have not been effected by the match.”

Claim 41 is amended with a new feature “particular interval.” However, markings (e.g., underlining) to indicate that this is a new limitation are missing.

Claim 43 recites a limitation: “determining by a computer a initial market value of the financial instrument.” The correct wording of this limitation should be: “determining by a computer an initial market value of the financial instrument.”

Claim 43 also recites a limitation: “activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match.” However, the language of this limitation could be changed to the following recitation to make the language of the claim more understandable: “activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify that quotes in other systems have not been effected by the match.”

Claim 52 is a newly added claim, as identified by its status identifier: (New). However, the claim language contains underlined features. Since claim 52 is newly added, its claim language should not contain underlined features.

Claim 52 also recites a limitation: “completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value the particular interval of time to verify quotes in other systems have not been effected by the match.” However, the language of this limitation could be changed to the following recitation to make the language of the claim more understandable: “completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for the particular interval of time to verify that quotes in other systems have not been effected by the match.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.



6. Claims 34-52 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. Applicant has amended independent claims 34 and 43 to recite a limitation “determining by a computer an initial market value of the financial instrument.” However, nowhere in the specification is an element “initial market value” described. This element also appears in newly added independent claim 52, and amended dependent claims 35-36 and 46-47. Since dependent claims 37-42, 44-45, and 48-51, depend from independent claims 34 and 43 that contain this element, they are also rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement.
7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
8. Claims 34-52 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant amended claims 34-36, 43, 46-47, and 52, with a limitation “initial market value.” However, Applicant has not

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described clearly and distinctly what “initial market value” is here. Examiner will interpret this limitation to mean “current market value” for the purpose of the further examination of the application.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 34-37, 41-43, 46-48, and 52, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman (6,601,044 B1) in view of Fraser (7,392,214 B1).

As to claim 34, Wallman shows receiving by a computer from a first party an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken

at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match. Fraser shows upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Fraser: col. 15, lines 27-46); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged the particular interval of time to verify quotes in other systems have not been effected by the

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match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As to claim 35, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the initial market value is based on a bid price (Wallman: col. 9, lines 43-60).

As to claim 36, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the initial market value is based on an ask price (Wallman: col. 9, lines 43-60).

As to claim 37, Wallman in view of Fraser shows all the elements of claim 34. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As to claim 41, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the particular interval of time includes a pre-set time period (Wallman: col. 8, lines 13-23).

As to claim 42, Wallman in view of Fraser shows all the elements of claim 34. Wallman also shows that the particular interval of time includes a period of time during which the determined market value of the financial instrument is verified (Wallman: col. 8, lines 29-43).

As to claim 43, Wallman shows receiving by a computer an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show determining by a computer a initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match.

Fraser shows determining by a computer a initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer

an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay (Fraser: col. 15, lines 27-46); and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As to claim 46, Wallman in view of Fraser shows all the elements of claim 43. Wallman also shows that the initial market value is based on a bid price (Wallman: col. 9, lines 43-60).

As to claim 47, Wallman in view of Fraser shows all the elements of claim 43. Wallman also shows that the initial market value is based on an ask price (Wallman: col. 9, lines 43-60).

As to claim 48, Wallman in view of Fraser shows all the elements of claim 43. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As to claim 52, Wallman shows receiving by a computer from a first party an order to trade a financial instrument (Wallman: col. 8, lines 13-23; and col. 12, lines 35-54).

Wallman does not show upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.

Fraser shows upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument (Fraser: col. 15, lines 27-46); determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time (Fraser: col. 15, lines 27-46); and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match (Fraser: col. 15, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by upon matching the order with a contra order of a second party, determining by a computer an initial



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market value of the financial instrument; determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

11. Claims 38 and 49 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, and further in view of Madoff (2001/0044767 A1).

As to claims 38 and 49, Wallman in view of Fraser shows all the elements of claims 34 and 43. Wallman in view of Fraser does not show that the particular interval of time includes a maximum time limit. Madoff shows that the particular interval of time includes a maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claims 39 and 50, Wallman in view of Fraser shows all the elements of claims 34 and 43. Wallman does not show that the particular interval of time includes a minimum time limit. Fraser shows that the particular interval of time includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman by the particular interval of time including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show that the particular interval of time includes a maximum time limit. Madoff shows that the particular interval of time includes a maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claims 40 and 51, Wallman in view of Fraser, and further in view of Madoff, shows all the elements of claims 39 and 50. Wallman in view of Fraser does not show that the particular interval of time includes a random time period within the minimum time limit and the maximum time limit. Madoff shows that the particular interval of time includes a random time period within the minimum time limit and

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the maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by the particular interval of time including a random time period within the minimum time limit and the maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

12. Claim 44 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, and further in view of Keith (7,383,220 B1).

As to claim 44, Wallman in view of Fraser shows all the elements of claim 43. Wallman in view of Fraser does not show that activating the order includes posting the order in a manner indicating that the order is available for trading. Keith shows that activating the order includes posting the order in a manner indicating that the order is available for trading (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser by activating the order including posting the order in a manner indicating that the order is available for trading of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

13. Claims 45 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Keith, and further in view of Official notice.

As to claim 45, Wallman in view of Fraser, and further in view of Keith, shows all the elements of claim 44. Wallman in view of Fraser, and further in view of Keith, does not show that the order is posted on a bulletin board transmitted over a network. Examiner takes Official notice that bulletin boards are old and well-known in the art; they have been used on the Internet to disseminate information for over a decade. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Keith, by applying bulletin boards in order to provide a convenient and well-known method of disclosing availability of trade.

### ***Conclusion***

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the

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THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is 571-272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virpi H. Kanervo

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691

<b>Notice of References Cited</b>	Application/Control No. 10/840,378		Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI H. KANERVO		Art Unit 3691	Page 1 of 1

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,601,044 B1	07-2003	Wallman, Steven M. H.	705/36R
*	B	US-7,392,214 B1	06-2008	Fraser et al.	705/37
*	C	US-2001/0044767 A1	11-2001	MADOFF et al.	705/37
*	D	US-7,383,220 B1	06-2008	Keith, Christopher	705/37
*	E	US-5,819,238	10-1998	Fernholz, Erhard Robert	705/36R
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			


#### FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

#### NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b>Search Notes</b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H. KANERVO	<b>Art Unit</b>  3691

SEARCHED			
Class	Subclass	Date	Examiner
705	35-40 (text only)	02/26/2009	vhk
705	35-40 (text only)	11/03/2009	vhk

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search	7/16/2008	/JJC/
East text search	7/16/2008	/JJC/
EAST search. See enclosed search history.	02/26/2009	vhk
EAST search. See enclosed search history.	11/03/2009	vhk

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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**EAST Search History****EAST Search History (Prior Art)**

<b>Ref #</b>	<b>Hits</b>	<b>Search Query</b>	<b>DBs</b>	<b>Default Operator</b>	<b>Plurals</b>	<b>Time Stamp</b>
S78	119	initial near5 market near5 value	US-PGPUB; USPAT	OR	ON	2009/11/03 18:52
S79	14163	705/35,36,37,38,39,40.ccls.	US-PGPUB; USPAT	OR	ON	2009/11/03 18:53
S80	67	S78 and S79	US-PGPUB; USPAT	OR	ON	2009/11/03 18:53
S81	1716	bid same ask same price	US-PGPUB; USPAT	OR	ON	2009/11/03 18:54
S82	0	S78 same S81	US-PGPUB; USPAT	OR	ON	2009/11/03 18:54
S83	2242	bid same ask	US-PGPUB; USPAT	OR	ON	2009/11/03 18:54
S84	0	S78 same S83	US-PGPUB; USPAT	OR	ON	2009/11/03 18:54
S85	6413	financial near5 instrument	US-PGPUB; USPAT	OR	ON	2009/11/03 18:55
S86	0	S78 same S85	US-PGPUB; USPAT	OR	ON	2009/11/03 18:55
S87	31	S78 and S85	US-PGPUB; USPAT	OR	ON	2009/11/03 18:55
S88	1	S78 same instrument	US-PGPUB; USPAT	OR	ON	2009/11/03 18:56
S89	0	initial near5 market near5 value near5 instrument	US-PGPUB; USPAT	OR	ON	2009/11/03 18:56
S90	11477	bulletin near5 board	US-PGPUB; USPAT	OR	ON	2009/11/03 20:03
S91	132	order near5 bulletin near5 board	US-PGPUB; USPAT	OR	ON	2009/11/03 20:03

S92	28	S91 same network	US- PGPUB; USPAT	OR	ON	2009/11/03 20:04
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**EAST Search History (Interference)**

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# UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

7590 07/31/2009  
DEEP LIQUIDITY, INC.  
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EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

07/31/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Interview Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI H. KANERVO	<b>Art Unit</b> 3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI H. KANERVO. (3) SAM BALABON.

(2) HANI KAZIMI. (4) ROBERT MCLAUGHLAN.

Date of Interview: 21 July 2009.

Type: a) ☐ Telephonic b) ☐ Video Conference  
c) ☒ Personal [copy given to: 1) ☒ applicant 2) ☒ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 34.

Identification of prior art discussed: Cutler (2005/0075965 A1).

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Examiners, Applicant, and Applicant's representative discussed the proposed amendments and how to distinguish over Cutler reference. The concept of pre-determined time delay was considered in distinguishing over Cutler. Examiner reserves the right to conduct a new search and consideration upon receipt of the amendment.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

	/Alexander Kalinowski/ Supervisory Patent Examiner, Art Unit 3691
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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Sam Balabon  
Serial No.: 10/840,378  
Filing Date: May 7, 2004  
Examiner: Kanervo, Virpi H.  
Group Art Unit: 3691  
Confirmation No. 1030  
Title: **SYSTEM AND METHOD FOR EXECUTION  
DELAYED TRADING**

Mail Stop: Amendments  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**Certification Under 37 C.F.R. 1.8****Date of Mailing or Facsimile Transmission: 7/24/2009**

I hereby certify that this correspondence is being deposited with the United States Postal Service via First Class Mail with sufficient postage for mailing under 37 CFR § 1.8 on the date indicated above and addressed to the Mail Stop: Amendments, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 or facsimile transmitted to the U.S. Patent and Trademark Office at 571-273-8300 under 37 CFR § 1.8 on the date indicated.

\_\_\_\_\_  
Robert A. McLauchlan

**AMENDMENT**

Dear Sir:

Applicant hereby responds to the Office Action mailed March 5, 2009. This Response is made with a request for a two (2) month extension of time and the appropriate fee. Thus, the period for response expires on August 5<sup>th</sup> 2009. Applicant also respectfully requests the Examiner reconsider the rejections of the Claims in view of the following amendments to the Claims and comments as set forth below.

**WHAT IS CLAIMED IS:**

1-34. (Canceled)

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;  
upon matching the order with a contra order of a second party, determining by a computer ~~a current~~ an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged ~~for an amount of time~~ the particular interval of time to verify quotes in other systems have not been effected by the match.

.

35. (Currently Amended) The method of claim 34, wherein the ~~current~~ initial market value is based on a bid price.

36. (Currently Amended) The method of claim 34, wherein the ~~current~~ initial market value is based on an ask price.

37. (Currently Amended) The method of claim 34, wherein the ~~amount~~-particular interval of time includes a minimum time limit.

38. (Currently Amended) The method of claim 34, wherein the ~~amount~~-particular interval of time includes a maximum time limit.

39. (Currently Amended) The method of claim 34, wherein the ~~amount~~-particular interval of time includes a time period between a minimum time limit and a maximum time limit.

40. (Currently Amended) The method of claim 39, wherein the ~~amount~~-particular interval of time includes a random time period within the minimum time limit and the maximum time limit.

41. (Currently Amended) The method of claim 34, wherein the ~~amount~~-particular interval of time includes a pre-set time period.

42. (Currently Amended) The method of claim 34, wherein the ~~amount~~-particular interval of time includes a period of time during which the determined market value of the financial instrument is verified.

43. (Currently Amended) A computer-implemented method for providing financial instruments for trading, comprising:

receiving by a computer an order to trade a financial instrument, ~~the order specifying timing information for delaying activation of the order;~~

determining by a computer a ~~current~~ initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a specified time delay; and

activating by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value for a particular interval of time to verify quotes in other systems have not been effected by the match ~~an amount of time based on the timing information specified in the order.~~

44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

46. (Currently Amended) The method of claim 43, wherein the ~~current~~ initial market value is based on a bid price.

47. (Currently Amended) The method of claim 43, wherein the ~~current~~ initial market value is based on an ask price.

48. (Original) The method of claim 43, wherein the timing information includes a minimum time limit.

49. (Original) The method of claim 43, wherein the timing information includes a maximum time limit.

50. (Original) The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.

51. (Original) The method of claim 50, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.

52. (New) A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer an initial market value of the financial instrument;

determining by the computer an updated value of the financial instrument, wherein the initial market value and updated market value are taken at two distinct points separated in time by a particular interval of time; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged between the initial market value and updated market value a particular interval of time to verify quotes in other systems have not been effected by the match.



**REMARKS**

Applicant appreciates the time and effort by the Examiner in reviewing this application. This application has been carefully reviewed in light of the Official Action mailed March 5, 2009 and the examiner interview dated July 21, 2009. Applicants respectfully request reconsideration and favorable action in this case.

**CLAIM REJECTIONS - 35 USC §103**

Claims 1-2, 6-14, 16-17, 24, 30-37, and 41-42, stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman (6,601,044 B1) in view of Fraser (7,392,214 B1), and further in view of Cutler (2005/0075965 A1) The examiner states:

As to claims 1 and 30-34, Wallman shows receiving by a computer from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order (Wallman: col. 8, lines 13-23; and col. 12, lines 33-54). Wallman does not show that upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument. Fraser shows that upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument (Fraser: col. 15, lines 27-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Wallman by upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order. Cutler shows completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order (Cutler: page 16,

Para. 141). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and system of Wallman in view of Fraser by completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order of Cutler in order to establish a stable price (Cutler: page 16, Para. 141).

The applicant notes in response that what Cutler at page 16, paragraph 141 in fact discloses:

The count mode is intended to display to the user, on a real time or near real time basis, the number of new intra-session highs and/or new intra-session lows for each displayed security once an opening balance period has elapsed. Since each individual may have a different opinion as to how much time is needed for the market to establish a stable opening balance price range, the opening balance period during which new intra-session highs and new intra-session lows will be disregarded by the securities tracking system 10 can be defined by the user. The time period during which the securities tracking system 10 will disregard new intra-session highs and lows will be referred to herein as a count delay interval. Some common count delay intervals can include, for example, zero minutes (i.e., the high count and low count are calculated from the start of the trading session), fifteen minutes, thirty minutes, forty-five minutes, and sixty minutes.

The applicant respectfully submits that the examiner is improperly relying on Cutler to teach “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” The applicant submits that Cutler, as cited, merely reads the market to determine intercession highs and lows for individual securities. This can be distinguished from the claimed invention where a determination of the financial instrument’s value is made at two distinct points or snapshots in time, and whether the financial instrument’s value at these points is unchanged. These determinations are made as conditions to completing the order.

Cutler provides an indicator that may be used to initiate buy and sell orders based on changes in a financial instrument’s movements in price. Thus the applicant respectfully submits that Cutler does not disclose the claim limitation of “completing by the computer the order only

if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order” as claimed in the present application. As such, the office action cannot establish a prima facie case of obviousness with respect to Claim 1 and Claim 34. Therefore the rejections under 35 USC § 103 should be withdrawn.

As to claims 2 and 37, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman in view of Cutler does not show that the timing information includes a minimum time limit. Fraser shows that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 2 and 37 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 6 and 41, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows the amount of time includes a pre-set time period (Wallman: col. 8, lines 13-23).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 6 and 41 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 7 and 42, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows that the amount of time includes a period of time during which the determined market value of the financial instrument is verified (Wallman: col. 8, lines 29-43).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 7 and 42 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 8, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the order is received from the first party over a network (Wallman: col. 13, lines 39-60).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 8 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 9, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the order to trade is a buy order (Wallman: col. 11, lines 46-58).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 9 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 10, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the order to trade is a sell order (Wallman: col. 11, lines 46-58).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 10 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 11, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the financial instrument is one of a stock, bond, fund, contract, option, future, commodity and currency (Wallman: col. 1, lines 30-36).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 11 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 12 and 35, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows that the current market value is based on a bid price (Wallman: col. 9, lines 43-60).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 12 and 35 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 13 and 36, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows that the current market value is based on an ask price (Wallman: col. 9, lines 43-60).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 13 and 36 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 14, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the current market value is based on the midpoint of a bid and ask price (Wallman: col. 9, lines 43-60).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 14 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 16, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that completing the order includes executing the order (Wallman: col. 8, lines 13-23).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 16 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 17, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that completing the order

includes submitting the order to a third party system for execution (Wallman: col. 11, lines 61-65).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 17 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 24, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the current market value is determined based on a software program that scans market data (Wallman: col. 13, lines 19-38).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 24 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 3-5, 25, 27-29, and 38-40, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, and further in view of Mad off (2001/0044767 A1). The examiner states:

As to claims 3 and 38, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman in view of Fraser, and further in view of Cutler, does not show that the timing information includes a maximum time limit. Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 3 and 38 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 4 and 39, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman in view of Cutler does not show that the timing information includes a minimum time limit. Fraser shows that that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser, and further in view of Cutler, does not show the timing information includes a maximum time limit. Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 3 and 38 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.



As to claims 5 and 40, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claims 4 and 39. Wallman in view of Fraser, and further in view of Cutler, does not show that the amount of time includes a random time period within the maximum time limit. Madoff shows that the amount of time includes a random time period within the maximum time limit (Madoff: page 3, If 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 5 and 40 that depend from independent Claims 1 and 34. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 25, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman in view of Fraser, and further in view of Cutler, does not show that the order further specifies a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade. Madoff shows that the order further specifies a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade (Madoff: page 3, lines 29-34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the order further specifying a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade of Madoff in order to end the auction for an order (Madoff: page 3, U 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot

establish a prima facie case of obviousness with respect to Claim 25 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 27, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, and further in view of Cutler, does not show that the predetermined distance is a dollar amount. Madoff shows that the predetermined distance is a dollar amount (Madoff: page 3, lines 29-34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the predetermined distance being a dollar amount of Madoff in order to end the auction for an order (Madoff: page 3, H 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 27 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 28, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, and further in view of Cutler, does not show that the predetermined direction is below the market value of the financial instrument. Madoff shows that the predetermined direction is below the market value of the financial instrument (Madoff: page 4, ^ 37; and page 6, lines 56-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the predetermined direction being below the market value of the financial instrument of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot

establish a prima facie case of obviousness with respect to Claim 28 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 29, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, and further in view of Cutler, does not show that the predetermined direction is above the market value of the financial instrument. Madoff shows that the predetermined direction is above the market value of the financial instrument (Madoff: page 4, If 37; and page 6, lines 56-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the predetermined direction being above the market value of the financial instrument of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 29 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, further in view of Madoff, and further in view of Official notice.

As to claim 26, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, does not show that the predetermined distance is a percentage. Examiner takes Official notice that using percentages as a way of measuring distance away from a price is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of

Madoff, by using percentages as a way of measuring distance away from a price is old and well known in the art in order to decrease unpredictability in the order by setting particular bounds in a manner that is recognizable to the user.

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 26 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Furthermore with respect to the examiner’s official notice with respect to Claim 26 the applicant respectfully submits that the official notice is “based on facts within the personal knowledge of an employee of the office”(i.e. the examiner). The applicant respectfully requests that this reference this official notice be supported by affidavit of the examiner under 37 CFR § 1.104(b)(2).

Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, and further in view of Neff (2003/0014351 A1). The examiner states:

As to claim 15, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman in view of Fraser, and further in view of Cutler, does not show that the current market value is based on a last trade price. Neff shows that the current market value is based on a last trade price (Neff: page 18, U 243). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the current market value being based on a last trade price of Neff in order to allow a trader to specify how aggressively or passively to respond (Neff: page 18, If 243).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot

establish a prima facie case of obviousness with respect to Claim 15 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 18-20, 23, and 43-51, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, and further in view of Keith (7,383,220 B1). The examiner states:

As to claim 18, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman in view of Fraser, and further in view of Cutler, does not show that the order further specifies at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied. Keith shows that the order further specifies at least one activation condition, and further comprises delaying activation of the order until the at least one activation condition is satisfied (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the order further specifying at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 18 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 19, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 18. Wallman in view of Fraser, and further in view of Keith, does not show that the at least one

activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time. Cutler shows that the at least one activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time (Cutler: page 16, Para. 141). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and system of Wallman in view of Fraser, and further in view of Keith, by the at least one activation condition including activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time of Cutler in order to establish a stable price (Cutler: page 16, Para. 141).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 19 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 43, Wallman shows receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order (Wallman: col. 8, lines 13-23; and col. 12, lines 33-54).

Wallman does not show determining by a computer a current market value of the financial instrument. Fraser shows determining by a computer a current market value of the financial instrument (Fraser: col. 15, lines 27-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Wallman by determining by a computer a current market value of the financial instrument of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show that the order further specifies at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied. Keith shows that the order further specifies at least one activation condition, and further comprises delaying activation of the order until the at least one activation condition is satisfied (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the order further specifying at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

Wallman in view of Fraser, and further in view of Keith, does not show activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order. Cutler shows activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order (Cutler: page 16, Para. 141). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and system of Wallman in view of Fraser by activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order of Cutler in order to establish a stable price (Cutler: page 16, If 141).

As discussed above, Cutler did not disclose, “activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claims 20 and 44, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claims 18 and 43. Wallman in view of Fraser, and further in view of Cutler, does not show that the activation of the order includes posting the order in a manner indicating that the order is available for trading. Keith shows that the activation of the order includes posting the order in a manner indicating that the order is available for trading (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the activation of the order including posting the order in a manner indicating that the order is available for trading of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claims 20 and 44 that depend from independent Claims 1 and 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 23, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 20. Wallman also shows that the manner indicating that the order is available for trading includes an association of the posted order with a particular color (Wallman: col. 14, lines 24-36).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 23 that depends from independent Claim 1. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.



As to claim 46, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman also shows that the current market value is based on a bid price (Wallman: col. 9, lines 43-60).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 46 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 47, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman also shows that the current market value is based on an ask price (Wallman: col. 9, lines 43-60).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 47 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

As to claim 48, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman in view of Cutler, and further in view of Keith, does not show that the timing information includes a minimum time limit. Fraser shows that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler, and further in view of Keith, by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 48 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 49-51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Madoff. The examiner states:

As to claim 49, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, does not show that the timing information includes a maximum time limit. Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, U 34).

As to claim 50, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman in view of Cutler, and further in view of Keith, does not show that the timing information includes a minimum time limit. Fraser shows that that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler by the timing information

including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, does not show the timing information includes a maximum time limit.

Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As to claim 51, Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Madoff, shows all the elements of claim 50. Wallman in view of Fraser, and further in view of Cutler, and further in view of Keith, does not show that the amount of time includes a random time period within the maximum time limit. Madoff shows that the amount of time includes a random time period within the maximum time limit (Madoff: page 3, U 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, and further in view of Keith, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, If 34).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot establish a prima facie case of obviousness with respect to Claim 49-51 that depends from independent Claim 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Claims 21-22 and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Official notice. The examiner states:

As to claims 21 and 45, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claims 20 and 43. Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, does not show that the order is posted on a bulletin board transmitted over a network. Examiner takes Official notice that bulletin boards are old and well known in the art; they have been used on the Internet to disseminate information for over a decade. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, by applying bulletin boards in order to provide a convenient and well-known method of disclosing availability of trade.

As to claim 22, Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Official notice shows all the elements of claim 21. Wallman in view of Fraser, and further in view of Cutler, does not show that the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price. Keith shows that the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the side of the order being not posted if the current market value is based on the midpoint of a bid and ask price of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As discussed above, Cutler did not disclose, “completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” As such, the Office Action cannot

establish a *prima facie* case of obviousness with respect to Claims 21-22 and 45 that depend from independent Claims 1 and 43. Therefore the objections under 35 U.S.C. § 103 should be withdrawn.

Furthermore, with respect to the examiner's official notice with respect to Claim 26 the applicant respectfully submits that the official notice is "based on facts within the personal knowledge of an employee of the office" (i.e. the examiner). The applicant respectfully requests that this reference this official notice be supported by affidavit of the examiner. Under 37 CFR § 1.104(b)(2).

Applicant respectfully points out that in order to combine references for an obviousness rejection, there must be some teaching, suggestion, or incentives supporting the combination. *In re Laskowski*, 871 F.2d 115, 117, 10 U.S.P.Q. 2d 1397, 1399 (Fed. Cir. 1989). The mere fact that the prior art could be modified does not make that modification obvious unless the prior art suggests the desirability of the modification. *In re Gordon*, 733 F.2d 900, 902, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, it is well established that Applicant's disclosure cannot be used to reconstruct Applicant's invention from individual pieces found in separate, isolated references. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). Applicant respectfully submits that there is no motivation, teaching or suggestion to combine the cited prior art. Therefore, the rejection on a combination of these references is inappropriate.

#### Requirements for a Prima Facie Case of Obviousness

In order to establish a *prima facie* case of obviousness, Section 2143 of the MPEP requires that:

...three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

#### **MOTIVATION TO COMBINE**

Addressing the first criteria, the MPEP prescribes in Section 706.02(j) that:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. “To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). See MPEP § 2144 - § 2144.09 for examples of reasoning supporting obviousness rejections.

In the most recent Action, the Examiner has not pointed out any teaching in the cited references that “expressly or impliedly suggest[s] the claimed invention.” Nor has the Examiner “present[ed] a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” The only teaching of the implementation of a system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time is in the Applicant’s own application. The applicant respectfully submits that the examiner has not provided explicit reasoning as to what would have prompted one of ordinary skill in the art to combine the cited references to produce the claims of the instant application. Thus, the Examiner’s rejection fails to meet the first criteria for a *prima facie* case of obviousness.

### **REASONABLE EXPECTATION OF SUCCESS**

The hypothetical combiner, having combined any combination of the cited prior art would find it impossible to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. As a result, the Examiner’s rejection fails to meet the second criteria for a *prima facie* case of obviousness.

### **TEACHING OR SUGGESTION OF ALL CLAIM LIMITATIONS**

The present application teaches, and all the claims of the present application claim, a system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. The cited prior art does not teach all the claim limitations of the present application. As described above, the hypothetical combiner will be unable to provide this system and method to activate or complete an order only if the determined market value of the financial instrument remains unchanged for an amount of time. Thus, the proposed combination of references neither teaches nor suggests all the claim limitations and, as such, the Examiner's rejection fails to meet the third criteria for a *prima facie* case of obviousness.

Applicant respectfully submits that there is no motivation, teaching or suggestion to combine the cited prior art. Therefore, the rejection on a combination of these references is inappropriate. Withdrawal of the rejection allowance of Claims 1-51 is respectfully requested.

### **CONCLUSION**

Applicants have now made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request full allowance of Claims 1-51.

Please find included with this response payment for the two (2) month small-entity extension of time fee. It is believed no additional fee is due with this transmission.

The Examiner is invited to contact the undersigned at 512-372-8001 to discuss any matter regarding this application.

Respectfully submitted,  
/Sam Balabon, Inventor/

By: \_\_\_\_\_  
Sam Balabon  
(Inventor)

Dated: July 24, 2009  
Sam Balabon  
Deep Liquidity, Inc.  
6101 W. Courtyard, Bldg. 1, Suite 120  
Austin, Texas 78730  
(512) 372-8001



## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10840378			
<b>Filing Date:</b>	07-May-2004			
<b>Title of Invention:</b>	System and method for execution delayed trading			
<b>First Named Inventor/Applicant Name:</b>	Sam Balabon			
<b>Filer:</b>	Robert Adalbert McLauchlan III			
<b>Attorney Docket Number:</b>	12664-3			
Filed as Small Entity				
<b>Utility under 35 USC 111(a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 2 months with \$0 paid	2252	1	245	245

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				245

## Electronic Patent Application Fee Transmittal

<b>Application Number:</b>	10840378			
<b>Filing Date:</b>	07-May-2004			
<b>Title of Invention:</b>	System and method for execution delayed trading			
<b>First Named Inventor/Applicant Name:</b>	Sam Balabon			
<b>Filer:</b>	Robert Adalbert McLauchlan III			
<b>Attorney Docket Number:</b>	12664-3			
Filed as Small Entity				
<b>Utility under 35 USC 111(a) Filing Fees</b>				
<b>Description</b>	<b>Fee Code</b>	<b>Quantity</b>	<b>Amount</b>	<b>Sub-Total in USD(\$)</b>
<b>Basic Filing:</b>				
<b>Pages:</b>				
<b>Claims:</b>				
<b>Miscellaneous-Filing:</b>				
<b>Petition:</b>				
<b>Patent-Appeals-and-Interference:</b>				
<b>Post-Allowance-and-Post-Issuance:</b>				
<b>Extension-of-Time:</b>				
Extension - 2 months with \$0 paid	2252	1	245	245

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				245

Electronic Acknowledgement Receipt	
EFS ID:	5767199
Application Number:	10840378
International Application Number:	
Confirmation Number:	1030
Title of Invention:	System and method for execution delayed trading
First Named Inventor/Applicant Name:	Sam Balabon
Correspondence Address:	DEEP LIQUIDITY, INC. - 6101 W. COURTYARD, BUILDING 1 SUITE110 AUSTIN TX 75730 US - -
Filer:	Robert Adalbert McLauchlan III
Filer Authorized By:	
Attorney Docket Number:	12664-3
Receipt Date:	24-JUL-2009
Filing Date:	07-MAY-2004
Time Stamp:	16:38:25
Application Type:	Utility under 35 USC 111(a)

Payment information:	
Submitted with Payment	yes
Payment Type	Electronic Funds Transfer
Payment was successfully received in RAM	\$ 245

RAM confirmation Number		2846			
Deposit Account					
Authorized User					
<b>File Listing:</b>					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Amendment/Req. Reconsideration-After Non-Final Reject	12664-3_ROA_20090724.pdf	132951	no	28
			cacc191f660e112ddf9d15c2c58262bcb6f3031		
<b>Warnings:</b>					
<b>Information:</b>					
2	Fee Worksheet (PTO-875)	fee-info.pdf	29900	no	2
			3beec729e954b6fd4e0ff04dc7930dab3b4bfa47		
<b>Warnings:</b>					
<b>Information:</b>					
Total Files Size (in bytes):			162851		
<p><b>This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.</b></p> <p><b><u>New Applications Under 35 U.S.C. 111</u></b>  <b>If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.</b></p> <p><b><u>National Stage of an International Application under 35 U.S.C. 371</u></b>  <b>If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.</b></p> <p><b><u>New International Application Filed with the USPTO as a Receiving Office</u></b>  <b>If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.</b></p>					

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed	
<b>APPLICATION AS FILED – PART I</b>										
(Column 1)			(Column 2)		SMALL ENTITY <input checked="" type="checkbox"/> OR			OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
<input type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$	=		X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=			
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL				
<b>APPLICATION AS AMENDED – PART II</b>										
(Column 1)			(Column 2)		SMALL ENTITY OR			OTHER THAN SMALL ENTITY		
AMENDMENT	07/24/2009	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	* 19	Minus	** 51	=	0		X \$	=	
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 7	=	0		X \$	=	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
					TOTAL ADD'L FEE	0		TOTAL ADD'L FEE		
(Column 1)			(Column 2)		SMALL ENTITY OR			OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=			X \$	=	
	Independent (37 CFR 1.16(h))	*	Minus	***	=			X \$	=	
<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
					TOTAL ADD'L FEE			TOTAL ADD'L FEE		
<p>* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.</p> <p>** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".</p> <p>*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".</p> <p>The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.</p>										

Legal Instrument Examiner:  
/JOY DOBBS/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/840,378	05/07/2004	Sam Balabon	12664-3	1030

7590 03/05/2009  
DEEP LIQUIDITY, INC.  
6101 W. COURTYARD, BUILDING 1  
SUITE110  
AUSTIN, TX 75730

EXAMINER
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KANERVO, VIRPI H

ART UNIT	PAPER NUMBER
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3691

MAIL DATE	DELIVERY MODE
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03/05/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



<b>Office Action Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI H. KANERVO	<b>Art Unit</b> 3691	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11/20/2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

1. Claims 1-51 are presented for examination. Applicant filed an amendment on 11/20/2008 amending claims 1, 30-34, and 43. In light of Applicant's amendments, Examiner withdraws the § 101 rejection of claims 1-29 and 32-51. Further, in light of Applicant's arguments, Examiner withdraws the grounds of § 103 rejection for claims 1-51. However, new grounds of § 103 rejection are established in the instant Office action for claims 1-51.

### ***Response to Arguments***

2. In light of Applicant's amendments, Examiner withdraws the § 101 rejection of claims 1-29 and 32-51.
3. In light of Applicant's arguments, Examiner withdraws the grounds of § 103 rejection for claims 1-51. However, new grounds of § 103 rejection are established in the instant Office action for claims 1-51.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-2, 6-14, 16-17, 24, 30-37, and 41-42, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman (6,601,044 B1) in view of Fraser (7,392,214 B1), and further in view of Cutler (2005/0075965 A1).

As to claims 1 and 30-34, Wallman shows receiving by a computer from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order (Wallman: col. 8, lines 13-23; and col. 12, lines 33-54).

Wallman does not show that upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument. Fraser shows that upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument (Fraser: col. 15, lines 27-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the

method and the system of Wallman by upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order. Cutler shows completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order (Cutler: page 16, ¶ 141). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and system of Wallman in view of Fraser by completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order of Cutler in order to establish a stable price (Cutler: page 16, ¶ 141).

As to claims 2 and 37, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman in view of Cutler does not show that the timing information includes a minimum time limit. Fraser shows that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the

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invention to have modified the method of Wallman in view of Cutler by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

As to claims 6 and 41, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows the amount of time includes a pre-set time period (Wallman: col. 8, lines 13-23).

As to claims 7 and 42, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows that the amount of time includes a period of time during which the determined market value of the financial instrument is verified (Wallman: col. 8, lines 29-43).

As to claim 8, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the order is received from the first party over a network (Wallman: col. 13, lines 39-60).

As to claim 9, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the order to trade is a buy order (Wallman: col. 11, lines 46-58).

As to claim 10, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the order to trade is a sell order (Wallman: col. 11, lines 46-58).

As to claim 11, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the financial instrument is one of a stock, bond, fund, contract, option, future, commodity and currency (Wallman: col. 1, lines 30-36).

As to claims 12 and 35, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows that the current market value is based on a bid price (Wallman: col. 9, lines 43-60).

As to claims 13 and 36, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman also shows that the current market value is based on an ask price (Wallman: col. 9, lines 43-60).

As to claim 14, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the current market value is based on the midpoint of a bid and ask price (Wallman: col. 9, lines 43-60).

As to claim 16, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that completing the order includes executing the order (Wallman: col. 8, lines 13-23).

As to claim 17, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that completing the order includes submitting the order to a third party system for execution (Wallman: col. 11, lines 61-65).

As to claim 24, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman also shows that the current market value is determined based on a software program that scans market data (Wallman: col. 13, lines 19-38).

6. Claims 3-5, 25, 27-29, and 38-40, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff (2001/0044767 A1).

As to claims 3 and 38, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman in view of Fraser, and further in view of Cutler, does not show that the timing information includes a maximum

time limit. Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claims 4 and 39, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claims 1 and 34. Wallman in view of Cutler does not show that the timing information includes a minimum time limit. Fraser shows that that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser, and further in view of Cutler, does not show the timing information includes a maximum time limit. Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler,



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by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claims 5 and 40, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claims 4 and 39. Wallman in view of Fraser, and further in view of Cutler, does not show that the amount of time includes a random time period within the maximum time limit. Madoff shows that the amount of time includes a random time period within the maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claim 25, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman in view of Fraser, and further in view of Cutler, does not show that the order further specifies a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade. Madoff shows that the order further specifies a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade (Madoff: page 3, ¶¶ 29-34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have

modified the method of Wallman in view of Fraser, and further in view of Cutler, by the order further specifying a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claim 27, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, and further in view of Cutler, does not show that the predetermined distance is a dollar amount. Madoff shows that the predetermined distance is a dollar amount (Madoff: page 3, ¶¶ 29-34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the predetermined distance being a dollar amount of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claim 28, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, and further in view of Cutler, does not show that the predetermined direction is below the market value of the financial instrument. Madoff shows that the predetermined direction is below the market value of the financial instrument (Madoff: page 4, ¶ 37; and page 6, ¶¶ 56-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method

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of Wallman in view of Fraser, and further in view of Cutler, by the predetermined direction being below the market value of the financial instrument of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claim 29, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, and further in view of Cutler, does not show that the predetermined direction is above the market value of the financial instrument. Madoff shows that the predetermined direction is above the market value of the financial instrument (Madoff: page 4, ¶ 37; and page 6, ¶¶ 56-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the predetermined direction being above the market value of the financial instrument of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

7. Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, further in view of Madoff, and further in view of Official notice.

As to claim 26, Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, shows all the elements of claim 25. Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, does not show that the

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predetermined distance is a percentage. Examiner takes Official notice that using percentages as a way of measuring distance away from a price is old and well known in the art. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Madoff, by using percentages as a way of measuring distance away from a price is old and well known in the art in order to decrease unpredictability in the order by setting particular bounds in a manner that is recognizable to the user.

8. Claim 15 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, and further in view of Neff (2003/0014351 A1).

As to claim 15, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman in view of Fraser, and further in view of Cutler, does not show that the current market value is based on a last trade price. Neff shows that the current market value is based on a last trade price (Neff: page 18, ¶ 243). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the current market value being based on a last trade price of Neff in order to allow a trader to specify how aggressively or passively to respond (Neff: page 18, ¶ 243).

9. Claims 18-20, 23, and 43-51, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, and further in view of Keith (7,383,220 B1).

As to claim 18, Wallman in view of Fraser, and further in view of Cutler, shows all the elements of claim 1. Wallman in view of Fraser, and further in view of Cutler, does not show that the order further specifies at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied. Keith shows that the order further specifies at least one activation condition, and further comprises delaying activation of the order until the at least one activation condition is satisfied (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the order further specifying at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As to claim 19, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 18. Wallman in view of Fraser, and further in view of Keith, does not show that the at least one activation condition

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includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time. Cutler shows that the at least one activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time (Cutler: page 16, ¶ 141). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and system of Wallman in view of Fraser, and further in view of Keith, by the at least one activation condition including activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time of Cutler in order to establish a stable price (Cutler: page 16, ¶ 141).

As to claim 43, Wallman shows receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order (Wallman: col. 8, lines 13-23; and col. 12, lines 33-54).

Wallman does not show determining by a computer a current market value of the financial instrument. Fraser shows determining by a computer a current market value of the financial instrument (Fraser: col. 15, lines 27-46). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and the system of Wallman by determining by a computer a current market value of the financial instrument of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser does not show that the order further specifies at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied. Keith shows that the order further specifies at least one activation condition, and further comprises delaying activation of the order until the at least one activation condition is satisfied (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the order further specifying at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

Wallman in view of Fraser, and further in view of Keith, does not show activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order. Cutler shows activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order (Cutler: page 16, ¶ 141). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method and system of Wallman in view of Fraser by activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an

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amount of time based on the timing information specified in the order of Cutler in order to establish a stable price (Cutler: page 16, ¶ 141).

As to claims 20 and 44, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claims 18 and 43. Wallman in view of Fraser, and further in view of Cutler, does not show that the activation of the order includes posting the order in a manner indicating that the order is available for trading. Keith shows that the activation of the order includes posting the order in a manner indicating that the order is available for trading (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the activation of the order including posting the order in a manner indicating that the order is available for trading of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

As to claim 23, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 20. Wallman also shows that the manner indicating that the order is available for trading includes an association of the posted order with a particular color (Wallman: col. 14, lines 24-36).



As to claim 46, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman also shows that the current market value is based on a bid price (Wallman: col. 9, lines 43-60).

As to claim 47, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman also shows that the current market value is based on an ask price (Wallman: col. 9, lines 43-60).

As to claim 48, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman in view of Cutler, and further in view of Keith, does not show that the timing information includes a minimum time limit. Fraser shows that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler, and further in view of Keith, by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

10. Claims 49-51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Madoff

As to claim 49, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, does not show that the timing information includes a maximum time limit. Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claim 50, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claim 43. Wallman in view of Cutler, and further in view of Keith, does not show that the timing information includes a minimum time limit. Fraser shows that that the timing information includes a minimum time limit (Fraser: col. 16, lines 47-57). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Cutler by the timing information including a minimum time limit of Fraser in order to control the flow of orders and trades in cost-efficient and error-free manner (Fraser: col. 2, lines 54-55).

Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, does not show the timing information includes a maximum time limit.

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Madoff shows that the timing information includes a maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

As to claim 51, Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Madoff, shows all the elements of claim 50. Wallman in view of Fraser, and further in view of Cutler, and further in view of Keith, does not show that the amount of time includes a random time period within the maximum time limit. Madoff shows that the amount of time includes a random time period within the maximum time limit (Madoff: page 3, ¶ 34). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, and further in view of Keith, by the timing information including a maximum time limit of Madoff in order to end the auction for an order (Madoff: page 3, ¶ 34).

11. Claims 21-22 and 45 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Official notice.

As to claims 21 and 45, Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, shows all the elements of claims 20 and 43. Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, does not show that the order is posted on a bulletin board transmitted over a network. Examiner takes Official notice that bulletin boards are old and well-known in the art; they have been used on the Internet to disseminate information for over a decade. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, further in view of Cutler, and further in view of Keith, by applying bulletin boards in order to provide a convenient and well-known method of disclosing availability of trade.

As to claim 22, Wallman in view of Fraser, further in view of Cutler, further in view of Keith, and further in view of Official notice shows all the elements of claim 21. Wallman in view of Fraser, and further in view of Cutler, does not show that the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price. Keith shows that the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price (Keith: col. 7, lines 16-44). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Wallman in view of Fraser, and further in view of Cutler, by the side of the order being not

posted if the current market value is based on the midpoint of a bid and ask price of Keith in order to provide a platform for processes that can flexibly configured to interact (Keith: col. 1, lines 12-14).

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kemp (2003/0200167 A1) discloses method and system for performing automatic spread trading.

Lange (2004/0249712 A1) discloses system, method, and computer program product for presenting, redeeming, and managing incentives.

Feik (7,225,153 B2) discloses digital options having demand-based, adjustable returns, and trading exchange.

Samukawa (2002/0023043 A1) discloses system and method for odd lot trading.

Takahashi (2002/0049645 A1) discloses system and method for determining selling price.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is 571-272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virpi H. Kanervo

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691

<b>Notice of References Cited</b>	Application/Control No. 10/840,378		Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner VIRPI H. KANERVO		Art Unit 3691	Page 1 of 1

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,601,044 B1	07-2003	Wallman, Steven M. H.	705/36R
*	B	US-7,392,214 B1	06-2008	Fraser et al.	705/37
*	C	US-2005/0075965 A1	04-2005	Cutler, Stephen	705/037
*	D	US-2001/0044767 A1	11-2001	MADOFF et al.	705/37
*	E	US-2003/0014351 A1	01-2003	Neff et al.	705/37
*	F	US-7,383,220 B1	06-2008	Keith, Christopher	705/37
*	G	US-2003/0200167 A1	10-2003	Kemp et al.	705/37
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*	I	US-2002/0023043 A1	02-2002	Samukawa et al.	705/37
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	L	US-			
	M	US-			

#### FOREIGN PATENT DOCUMENTS


*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

#### NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.



<b>Search Notes</b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  VIRPI H. KANERVO	<b>Art Unit</b>  3691

SEARCHED			
Class	Subclass	Date	Examiner
705	35-40 (text only)	02/26/2009	vhk

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search	7/16/2008	/JJC/
East text search	7/16/2008	/JJC/
EAST search. See enclosed search history.	02/26/2009	vhk

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner

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## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	3	"10840378"	US-PGPUB; USPAT	OR	ON	2008/11/18 10:43
S2	1	"6601044".pn.	US-PGPUB; USPAT	OR	ON	2008/11/18 10:45
S3	1	"7392214".pn.	US-PGPUB; USPAT	OR	ON	2008/11/18 10:55
S4	1	"20030014351"	US-PGPUB; USPAT	OR	ON	2008/11/18 10:59
S6	1	"7383220".pn.	US-PGPUB; USPAT	OR	ON	2008/11/18 11:05
S7	2819373	value or price	US-PGPUB; USPAT	OR	ON	2009/02/24 19:28
S10	226979	buy\$ or bid\$	US-PGPUB; USPAT	OR	ON	2009/02/24 19:29
S11	812122	sell\$ or offer\$	US-PGPUB; USPAT	OR	ON	2009/02/24 19:29
S12	5023	S7 same S10 same S11 same market	US-PGPUB; USPAT	OR	ON	2009/02/24 19:30
S13	3067959	remain\$ or stay\$	US-PGPUB; USPAT	OR	ON	2009/02/24 19:30
S14	107201	S13 near5 unchanged	US-PGPUB; USPAT	OR	ON	2009/02/24 19:30
S15	5472	S7 near5 S13 near5 unchanged	US-PGPUB; USPAT	OR	ON	2009/02/24 19:31
S16	21	S10 same S11 same S15	US-PGPUB; USPAT	OR	ON	2009/02/24 19:31
S17	5600	S7 near5 S14	US-PGPUB; USPAT	OR	ON	2009/02/24 19:35
S18	21	S10 same S11 same S17	US-PGPUB; USPAT	OR	ON	2009/02/24 19:36

S19	47	S17 same trad\$	US-PGPUB; USPAT	OR	ON	2009/02/24 19:37
S20	31	S19 not S18	US-PGPUB; USPAT	OR	ON	2009/02/24 19:37
S21	5366	financial near3 instrument	US-PGPUB; USPAT	OR	ON	2009/02/24 19:45
S22	1259	S7 near5 S21	US-PGPUB; USPAT	OR	ON	2009/02/24 19:45
S23	3	S22 near5 S14	US-PGPUB; USPAT	OR	ON	2009/02/24 19:46
S24	3	S22 same S14	US-PGPUB; USPAT	OR	ON	2009/02/24 19:46
S25	561756	S21 or stock or security	US-PGPUB; USPAT	OR	ON	2009/02/24 19:47
S26	23242	S7 near5 S25	US-PGPUB; USPAT	OR	ON	2009/02/24 19:47
S27	57	S26 same S14	US-PGPUB; USPAT	OR	ON	2009/02/24 19:47
S28	418	delay near5 complet\$ near5 order	US-PGPUB; USPAT	OR	ON	2009/02/24 20:13
S29	0	S27 and S28	US-PGPUB; USPAT	OR	ON	2009/02/24 20:14
S30	0	S17 and S28	US-PGPUB; USPAT	OR	ON	2009/02/24 20:15
S31	0	S17 same S28	US-PGPUB; USPAT	OR	ON	2009/02/24 20:16
S32	356	S7 same S25 same unchang\$	US-PGPUB; USPAT	OR	ON	2009/02/24 20:17
S33	0	S28 same S32	US-PGPUB; USPAT	OR	ON	2009/02/24 20:17
S34	0	S28 and S32	US-PGPUB; USPAT	OR	ON	2009/02/24 20:18
S35	66894	"705"/\$.ccls.	US-PGPUB; USPAT	OR	ON	2009/02/24 20:18

S36	50	S28 and S35	US-PGPUB; USPAT	OR	ON	2009/02/24 20:18
S37	90	S32 and S35	US-PGPUB; USPAT	OR	ON	2009/02/24 20:19
S38	0	S36 and S37	US-PGPUB; USPAT	OR	ON	2009/02/24 20:19
S40	12795	delay same complet\$ same order	US-PGPUB; USPAT	OR	ON	2009/02/24 20:36
S41	517	S35 and S40	US-PGPUB; USPAT	OR	ON	2009/02/24 20:37
S42	1	S32 same S40	US-PGPUB; USPAT	OR	ON	2009/02/24 20:38
S43	5	S32 and S40	US-PGPUB; USPAT	OR	ON	2009/02/24 20:38
S44	19593	order same timing same information	US-PGPUB; USPAT	OR	ON	2009/02/24 21:04
S45	310	S25 same S44	US-PGPUB; USPAT	OR	ON	2009/02/24 21:05
S46	77	S35 and S45	US-PGPUB; USPAT	OR	ON	2009/02/24 21:06
S47	275	order same price same timing same information	US-PGPUB; USPAT	OR	ON	2009/02/24 21:35
S48	136	S35 and S47	US-PGPUB; USPAT	OR	ON	2009/02/24 21:35
S49	2	"20030200167"	US-PGPUB; USPAT	OR	ON	2009/02/25 15:45
S50	149	delay\$ near5 completion near5 order	US-PGPUB; USPAT	OR	ON	2009/02/26 14:03
S51	7	S50.ab.	US-PGPUB; USPAT	OR	ON	2009/02/26 14:04
S52	2	delay\$ near5 completion near5 trade	US-PGPUB; USPAT	OR	ON	2009/02/26 14:06
S53	25	delay\$ near5 completion near5 exchange	US-PGPUB; USPAT	OR	ON	2009/02/26 14:06

S54	302853	trade or trading	US-PGPUB; USPAT	OR	ON	2009/02/26 14:07
S55	2011	S54 same match\$ same order	US-PGPUB; USPAT	OR	ON	2009/02/26 14:08
S56	1	S50 and S55	US-PGPUB; USPAT	OR	ON	2009/02/26 14:08
S57	117	S54 same match\$ same contra	US-PGPUB; USPAT	OR	ON	2009/02/26 14:08
S58	1	S50 and S57	US-PGPUB; USPAT	OR	ON	2009/02/26 14:08
S59	4648516	timing or time	US-PGPUB; USPAT	OR	ON	2009/02/26 14:09
S60	361165	S59 near5 information	US-PGPUB; USPAT	OR	ON	2009/02/26 14:10
S61	3	S50 same S60	US-PGPUB; USPAT	OR	ON	2009/02/26 14:10
S62	845538	unchanged or retained	US-PGPUB; USPAT	OR	ON	2009/02/26 14:12
S63	4184	S60 same S62	US-PGPUB; USPAT	OR	ON	2009/02/26 14:13
S64	1	S50 and S63	US-PGPUB; USPAT	OR	ON	2009/02/26 14:13
S66	3038	delay\$ same completion same order	US-PGPUB; USPAT	OR	ON	2009/02/26 14:14
S67	2	S63 same S66	US-PGPUB; USPAT	OR	ON	2009/02/26 14:14
S68	11123	completion near5 order	US-PGPUB; USPAT	OR	ON	2009/02/26 14:15
S69	1	S63 same S68	US-PGPUB; USPAT	OR	ON	2009/02/26 14:15
S70	8	market near5 value near5 remain near5 unchanged	US-PGPUB; USPAT	OR	ON	2009/02/26 14:17
S71	8	market near5 value near5 remain near5 unchanged	US-PGPUB; USPAT	OR	ON	2009/02/26 14:25

S72	52	market same value same remain same unchanged	US- PGPUB; USPAT	OR	ON	2009/02/26 14:26
S73	2822946	price or value	US- PGPUB; USPAT	OR	ON	2009/02/26 14:36
S74	87	market near5 S73 near5 stabl\$	US- PGPUB; USPAT	OR	ON	2009/02/26 14:38
S75	12514	705/35,36,37,38,39,40.ccls.	US- PGPUB; USPAT	OR	ON	2009/02/26 14:38
S76	46	S74 and S75	US- PGPUB; USPAT	OR	ON	2009/02/26 14:39
S77	1	"20010044767"	US- PGPUB; USPAT	OR	ON	2009/02/26 16:47

2/ 26/ 2009 8:27:22 PM

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

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23838 7590 11/25/2008

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EXAMINER

KANERVO, VIRPI H

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

11/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Interview Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> VIRPI H. KANERVO	<b>Art Unit</b> 3691	

All participants (applicant, applicant's representative, PTO personnel):

(1) VIRPI H. KANERVO. (3) SAM BALABON.

(2) \_\_\_\_\_. (4) \_\_\_\_\_.

Date of Interview: 19 November 2008.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☒ No.  
If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1.

Identification of prior art discussed: Frazer (7,392,214 B1).

Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☒ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant explained how Frazer reference is distinguishable from the instant application.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

	/Alexander Kalinowski/ Supervisory Patent Examiner, Art Unit 3691
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11-21-08

1FW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Balabon, Sam	§	
	§	Group Art Unit: 3691
Serial No.: 10/840,378	§	
	§	Examiner: Kanervo, Virpi H.
Filing Date: May 7, 2004	§	
	§	Confirmation No.: 1030
Title: System and Method for Execution	§	
Delayed Trading	§	Mail Date: 07/21/2008

**Mail Stop: Amendment**  
Honorable Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO OFFICE ACTION DATED JULY 21, 2008**

Dear Sir:

This is a Response to the Office Action dated July 21, 2008 (hereafter 'the Office Action'). Claims 1-51 remain in the case. Applicant presents the following amendment and remarks demonstrating that the case is in condition for allowance.

**There are no amendments to the Specification in this paper.**

**There are no amendments to the Drawings in this paper.**

**Amendments to the Claims begin on page 2 of this paper.**

**Remarks begin on page 10 of this paper.**

11/21/2008 WASFAW1 00000031 10840378

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## AMENDMENT

### To the claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

1. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:  
  
receiving by a computer from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order;  
  
upon matching the order with a contra order of a second party, determining by the computer a current market value of the financial instrument; and  
  
completing by the computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.
2. (Original) The method of claim 1, wherein the timing information includes a minimum time limit.
3. (Original) The method of claim 1, wherein the timing information includes a maximum time limit.
4. (Original) The method of claim 1, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.
5. (Original) The method of claim 4, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.

6. (Original) The method of claim 1, wherein the amount of time includes a pre-set time period.
7. (Original) The method of claim 1, wherein the amount of time includes a period of time during which the determined market value of the financial instrument is verified.
8. (Original) The method of claim 1, wherein the order is received from the first party over a network.
9. (Original) The method of claim 1, wherein the order to trade is a buy order.
10. (Original) The method of claim 1, wherein the order to trade is a sell order.
11. (Original) The method of claim 1, wherein the financial instrument is one of a stock, bond, fund, contract, option, future, commodity and currency.
12. (Original) The method of claim 1, wherein the current market value is based on a bid price.
13. (Original) The method of claim 1, wherein the current market value is based on an ask price.
14. (Original) The method of claim 1, wherein the current market value is based on the midpoint of a bid and ask price.
15. (Original) The method of claim 1, wherein the current market value is based on a last trade price.
16. (Original) The method of claim 1, wherein completing the order includes executing the order.

17. (Original) The method of claim 1, wherein completing the order includes submitting the order to a third party system for execution.
18. (Original) The method of claim 1, wherein the order further specifies at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied.
19. (Original) The method of claim 18, wherein the at least one activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time.
20. (Original) The method of claim 18, wherein the activation of the order includes posting the order in a manner indicating that the order is available for trading.
21. (Original) The method of claim 20, wherein the order is posted on a bulletin board transmitted over a network.
22. (Original) The method of claim 21, wherein the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price.
23. (Original) The method of claim 20, wherein the manner indicating that the order is available for trading includes an association of the posted order with a particular color.
24. (Original) The method of claim 1, wherein the current market value is determined based on a software program that scans market data.
25. (Original) The method of claim 1, wherein the order further specifies a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade.

26. (Original) The method of claim 25, wherein the predetermined distance is a percentage.
27. (Original) The method of claim 25, wherein the predetermined distance is a dollar amount.
28. (Original) The method of claim 25, wherein the predetermined direction is below the market value of the financial instrument.
29. (Original) The method of claim 25, wherein the predetermined direction is above the market value of the financial instrument.
30. (Original) An apparatus for trading financial instruments, comprising: a processor; and a memory storing instructions adapted to be executed by said processor to:
- receive from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order,
- upon matching the order with a contra order of a second party, determine a current market value of the financial instrument, and
- complete the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.
31. (Original) A system for trading financial instruments, comprising:
- means for receiving from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order;

means for determining a current market value of the financial instrument upon matching the order with a contra order of a second party; and

means for completing the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.

32. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

displaying by a computer through a user interface an order entry field soliciting timing information for delaying completion of an order to trade a financial instrument;

upon receipt of the solicited timing information, determining by a computer a current market value of the financial instrument; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the solicited timing information.

33. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:

displaying by a computer through a user interface an order listing specifying timing information for delaying completion of an order to trade a financial instrument; and

completing by a computer the order only if a current market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.

34. (Currently Amended) A computer-implemented method for trading financial instruments, comprising:
- receiving by a computer from a first party an order to trade a financial instrument;
- upon matching the order with a contra order of a second party, determining by a computer a current market value of the financial instrument; and
- completing by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time.
35. (Original) The method of claim 34, wherein the current market value is based on a bid price.
36. (Original) The method of claim 34, wherein the current market value is based on an ask price.
37. (Original) The method of claim 34, wherein the amount of time includes a minimum time limit.
38. (Original) The method of claim 34, wherein the amount of time includes a maximum time limit.
39. (Original) The method of claim 34, wherein the amount of time includes a time period between a minimum time limit and a maximum time limit.
40. (Original) The method of claim 39, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.
41. (Original) The method of claim 34, wherein the amount of time includes a pre-set time period.

42. (Original) The method of claim 34, wherein the amount of time includes a period of time during which the determined market value of the financial instrument is verified.
43. (Currently Amended) A computer-implemented method for providing financial instruments for trading, comprising:
- receiving by a computer an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;
- determining by a computer a current market value of the financial instrument; and
- activating by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.
44. (Original) The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.
45. (Original) The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.
46. (Original) The method of claim 43, wherein the current market value is based on a bid price.
47. (Original) The method of claim 43, wherein the current market value is based on an ask price.
48. (Original) The method of claim 43, wherein the timing information includes a minimum time limit.



49. (Original) The method of claim 43, wherein the timing information includes a maximum time limit.
50. (Original) The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.
51. (Original) The method of claim 50, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.

## **REMARKS**

### **Claim Rejections – 35 U.S.C. § 101**

The Office Action at page 2 rejects claims 1-29 and 32-51 under 35 U.S.C. § 101 as directed to non-statutory subject matter. In rejecting these claims, the Office Action states that “a positive recitation of use of a computer in the listed method steps or a positive recitation that the steps themselves are carried on a computer would rectify the deficiencies in [the claims].” Applicant notes in response that independent claims 1, 32, 33, 34, and 43, all computer-implemented methods, have all been amended to recite that their steps are performed “by a computer.” Support for this amendment can be found in Applicant’s Original Specification at paragraphs 0060-0067 and Figures 2-3. Applicants submit that the amendment introduces no new matter into the application, and that the claims as amended are directed towards statutory subject matter under 35 U.S.C. § 101.

### **Claim Rejections – 35 U.S.C. § 103 Over Wallman And Fraser**

The Office Action rejects claims 1-2, 6-14, 16-17, 24, 30-37, and 41-42 under 35 U.S.C. § 103 as being unpatentable over Wallman (U.S. Patent 6,601,044) in view of Fraser, *et al.* (U.S. Patent 7,392,214). Applicant respectfully submits that the Office Action, however, does not establish a prima facie case of obviousness with respect to any of claims 1-2, 6-14, 16-17, 24, 30-37, and 41-42.

When determining whether a claim is obvious, the Examiner must make "a searching comparison of the claimed invention - including all its limitations - with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)).

### **The Proposed Combination Of Wallman And Fraser Does Not Teach Or Suggest Each And Every Limitation Of Claim 34**

As amended, independent claim 34 recites:

34. A computer-implemented method for trading financial instruments, comprising:

receiving by a computer from a first party an order to trade a financial instrument;

upon matching the order with a contra order of a second party, determining by a computer a current market value of the financial instrument; and

completing by a computer the order only if the determined market value of the financial instrument remains unchanged for an amount of time.

**Fraser Neither Teaches Nor Suggests Completing By A Computer An Order Only If The Determined Market Value Of The Financial Instrument Remains Unchanged For An Amount Of Time**

Independent claim 34 recites, in part, “completing...the order only if the determined market value of the financial instrument remains unchanged for an amount of time.” The Office Action cites Fraser at column 15, lines 37-51 as disclosing this limitation. Applicant respectfully notes in response that what Fraser at column 15, lines 37-51 in fact discloses is:

A Price Retention State in the present invention addresses this problem. If a passive side price is decreased or increased just prior to a hit or lift command, the price retention state determines which price to apply to the hit or lift command based upon the amount of time between the time the price was changed and the subsequent hit or lift command. For example, if the price for an on offer increases three-quarters of a second prior to an aggressor lifting the offer, the price retention state will apply the pre-increase price to the lift rather than the post-increase price. Similarly, if a bid or offer is canceled just prior to a hit or lift of that bid or offer, or if a participant enters a hit or lift command just subsequent to another participant hitting or lifting a bid or offer, the price retention state signals to the potential aggressor that “no trade” has been completed.

That is, Fraser at column 15, lines 37-51 discloses a Price Retention State that protects aggressors from changes in price due to transaction latencies inherent in Fraser's system of market access. To protect aggressors, Fraser's Price Retention State does one of two things. It either grants an exclusive option or it rejects the trade. Fraser's Price Retention State grants an exclusive option when a price changes within three-quarters of a second (*see*, Fraser quoted above) from what it was when a market order (a market order is when an aggressor decides to buy or sell at the best price available in the market at he enters his order into the market, as there is no predetermined and agreed upon price by the aggressor) was entered. If the price on a trade changes adverse to the aggressor just prior to the aggressor's trade being executed, Fraser's Price Retention State gives the aggressor a prioritized option to either execute the trade at the new price, or cancel the trade and lose priority. By granting such an option, Fraser is actually teaching directly away from the present application, because Fraser is allowing a trade to be completed, if the aggressor chooses to do so, even though the price has just changed. In stark contrast, the present application completes an order *only if* the determined market value *remains unchanged* for an amount of time. As such, Fraser's Price Retention State's price guarantee does not disclose the claim limitation.

Furthermore, when Fraser's Price Retention State decides to reject a trade, it does so not based on price changes, but rather based on either the cancellation of a bid/offer or on the actions of another market participant. Therefore, Fraser's "no trade" policies are not based on price being unchanged for an amount of time. As such, Fraser's Price Retention State's "no trade" policies do not disclose the claim limitation.

For the foregoing reasons, Fraser at the cited reference points does not disclose the claim limitation: completing the order only if the determined market value of the financial instrument remains unchanged for an amount of time as claimed in the present application. As such the Office Action cannot establish a *prima facie* case of obviousness with respect to claim 34, and the rejections under 35 U.S.C. § 103 should be withdrawn.

#### **The Proposed Combination Of Wallman And Fraser**

### **Does Not Teach Or Suggest Each And Every Limitation Of Claim 33**

Independent claim 33 recites, in part, “completing...the order only if a current market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.” The Office Action cites Fraser at column 15, lines 37-51 as disclosing this limitation. As discussed above, this section of Fraser discloses Fraser’s Price Retention State. Furthermore, as discussed above, Fraser’s Price Retention State does not disclose completing an order only if the determined market value of a financial instrument remains unchanged for an amount of time. Similarly, Fraser’ Price Retention State does not disclose completing an order only if the current market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order. As such the Office Action cannot establish a prima facie case of obviousness with respect to claim 32, and the rejections under 35 U.S.C. § 103 should be withdrawn.

### **The Proposed Combination Of Wallman And Fraser Does Not Teach Or Suggest Each And Every Limitation Of Claim 32**

As amended, independent claim 32 recites:

32. A computer-implemented method for trading financial instruments,  
comprising:

displaying by a computer through a user interface an order entry field  
soliciting timing information for delaying completion of an order to trade  
a financial instrument;

upon receipt of the solicited timing information, determining by a  
computer a current market value of the financial instrument; and

completing by a computer the order only if the determined market value of  
the financial instrument remains unchanged for an amount of time based  
on the solicited timing information.

**Fraser Neither Teaches Nor Suggests Completing By A  
Computer An Order Only If The Determined Market Value  
Of The Financial Instrument Remains Unchanged For  
An Amount Of Time Based On The Solicited Timing Information**

Independent claim 32 recites, in part, “completing...the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the solicited timing information.” The Office Action cites Fraser at column 15, lines 37-51 as disclosing this limitation. As discussed above, this section of Fraser discloses Fraser’s Price Retention State. Furthermore, as discussed above, Fraser’s Price Retention State does not disclose completing an order only if the determined market value of a financial instrument remains unchanged for an amount of time. Fraser at the cited reference point therefore cannot possibly disclose completing an order only if the determined market value of a financial instrument remains unchanged for an amount of time based on solicited timing information. As such the Office Action cannot establish a prima facie case of obviousness with respect to claim 32, and the rejections under 35 U.S.C. § 103 should be withdrawn.

**Relation Between Claims**

Independent claim 1 claims a computer-implemented method for trading financial instruments similar to independent claim 34. Claim 1 includes all of the limitations of claim 34 and further adds the limitations “the order specifying timing information for delaying completion of the order,” and an amount of time “based on the timing information specified in the order.” Because the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to broader independent claim 34, the proposed combination of Wallman and Fraser also does not establish a prima facie case of obviousness with respect to narrower independent claim 1. The rejection of claim 1 should therefore be withdrawn.

Independent claims 30 and 31 recite an apparatus and system for trading financial instruments corresponding to the computer-implemented method for trading financial instruments of independent claim 1 and include all of the limitations of independent

claim 1. Because the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to claim 1, the proposed combination of Wallman and Fraser also does not establish a prima facie case of obviousness with respect to independent claims 30 and 31. The rejections of claims 30 and 31 should also therefore be withdrawn.

Dependent claims 2, 6-14, 16-17, 24, 35-37, and 41-42 all depend from independent claims 1 or 34 and include all the limitations of the independent claim from which they depend. Because the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to independent claims 1 and 34, the proposed combination of Wallman and Fraser also does not establish a prima facie case of obviousness with respect to claims 2, 6-14, 16-17, 24, 35-37, and 41-42. The rejections of claims 2, 6-14, 16-17, 24, 35-37, and 41-42 should also therefore be withdrawn.

#### **Claim Rejections – 35 U.S.C. § 103 Over Wallman, Fraser, & Madoff**

The Office Action rejects claims 3-5, 25-29, and 38-40 under 35 U.S.C. § 103 as being unpatentable over Wallman in view of Fraser and further in view of Madoff, *et al.* (U.S. Pub. No. 2001/0044767). Applicant respectfully submits that the Office Action, however, does not establish a prima facie case of obviousness with respect to any of claims 3-5, 25-29, and 38-40.

When determining whether a claim is obvious, the Examiner must make "a searching comparison of the claimed invention - including all its limitations - with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). In rejecting dependent claims 3-5, 25-29, and 38-40 as unpatentable over the proposed combination of Wallman, Fraser, and Madoff, the Office Action relies on the proposed combination of Wallman and Fraser as teaching or suggesting each and

every limitation of independent claims 1 and 34, from which claims 3-5, 25-29, and 38-40 depend. However, as discussed above, the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to independent claims 1 and 34. As such, the proposed combination of Wallman, Fraser, and Madoff cannot possibly establish a prima facie case of obviousness with respect to claims 3-5, 25-29, and 38-40. The rejections of claims 3-5, 25-29, and 38-40 should therefore be withdrawn.

**Claim Rejections – 35 U.S.C. § 103  
Over Wallman, Fraser, & Neff**

The Office Action rejects claim 15 under 35 U.S.C. § 103 as being unpatentable over Wallman in view of Fraser and further in view of Neff, *et al.* (U.S. Pub. No. 2003/0014351). Applicant respectfully submits that the Office Action, however, does not establish a prima facie case of obviousness with respect to claim 15.

When determining whether a claim is obvious, the Examiner must make "a searching comparison of the claimed invention - including all its limitations - with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). In rejecting dependent claim 15 as unpatentable over the proposed combination of Wallman, Fraser, and Neff, the Office Action relies on the proposed combination of Wallman and Fraser as teaching or suggesting each and every limitation of independent claim 1, from which claim 15 depends. However, as discussed above, the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to independent claims 1. As such, the proposed combination of Wallman, Fraser, and Neff cannot possibly establish a prima facie case of obviousness with respect to claim 15. The rejections of claim 15 should therefore be withdrawn.

**Claim Rejections – 35 U.S.C. § 103  
Over Wallman, Fraser, & Keith**



The Office Action rejects claims 18-23 and 43-51 under 35 U.S.C. § 103 as being unpatentable over Wallman in view of Fraser and further in view of Keith (U.S. Patent 7,383,220). Applicant respectfully submits that the Office Action, however, does not establish a prima facie case of obviousness with respect to any of claims 18-23 and 43-51.

When determining whether a claim is obvious, the Examiner must make "a searching comparison of the claimed invention - including all its limitations - with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (emphasis added). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)). In rejecting independent claim 43, the Office Action relies on its rejection of independent claim 1 under Wallman and Fraser. Specifically, the Office Action states "As to claim 43, see rejection for claims 1 and 18." However, as discussed above, the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to claim 1. As such, the proposed combination of Wallman, Fraser, and Keith cannot establish a prima facie case of obviousness with respect to claim 43. The rejection of claim 43 should therefore be withdrawn.

In rejecting dependent claims 18-23 and 44-51 as unpatentable over the proposed combination of Wallman, Fraser, and Keith, the Office Action relies on the proposed combination of Wallman and Fraser as teaching or suggesting each and every limitation of independent claim 1 and 43, from which claims 18-23 and 44-51 depend. However, as discussed above, the proposed combination of Wallman and Fraser does not establish a prima facie case of obviousness with respect to independent claims 1 and 43. As such, the proposed combination of Wallman, Fraser, and Keith cannot possibly establish a prima facie case of obviousness with respect to claims 18-23 and 44-51. The rejections of claims 18-23 should therefore be withdrawn.

### **Conclusion**

Claims 1-29 and 32-51 stand rejected under 35 U.S.C. § 101 as directed to non-statutory subject matter. Applicants have amended the claims to overcome the rejection.

Applicants respectfully request reconsideration of claims 1-29 and 32-51.

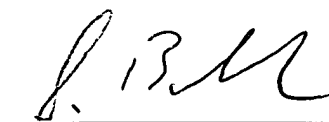
Claims 1-51 stand rejected under 35 U.S.C. § 103 as unpatentable over Wallman and Fraser, either alone or further in view of Madoff, Neff, or Keith. However, the proposed combination of references does not establish a prima facie case of obviousness with respect to the claims. Applicants respectfully request reconsideration of claims 1-51.

It is respectfully submitted that, in view of the foregoing amendments and remarks, the application is in clear condition for allowance. Issuance of a Notice of Allowance is earnestly solicited.

Please find included with this response payment for the one-month small-entity extension of time fee of \$65.

The Examiner is invited to contact the undersigned at 512-372-8001 to discuss any matter regarding this application.

Respectfully Submitted

A handwritten signature in black ink, appearing to read 'S. Balabon', written over a horizontal line.

Sam Balabon  
(Inventor)



**POWER OF ATTORNEY  
OR  
REVOCATION OF POWER OF ATTORNEY  
WITH A NEW POWER OF ATTORNEY  
AND  
CHANGE OF CORRESPONDENCE ADDRESS**

Application Number	10/840,378
Filing Date	MAY 7, 2004
First Named Inventor	SAM BALABON
Title	SYSTEM & METHOD FOR EXECUTION
Art Unit	3691
Examiner Name	KANERVO, VIRPI H.
Attorney Docket Number	

DELAYED  
TRADING

I hereby revoke all previous powers of attorney given in the above-identified application.

- ☐ A Power of Attorney is submitted herewith.
- OR
- ☐ I hereby appoint Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:
- OR
- ☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified application to:

- ☐ The address associated with the above-mentioned Customer Number.
- OR
- ☐ The address associated with Customer Number.
- OR

<input checked="" type="checkbox"/> Firm or Individual Name	DEEP LIQUIDITY, INC.				
Address	6101 W. COURTYARD, BLDG. 1, SUITE 210				
City	AUSTIN	State	TX	Zip	78730
Country	USA				
Telephone	(512) 372-8001	Email	SAM@DEEPLIQUIDITY.COM		

I am the:

- ☒ Applicant/Inventor.
- OR
- ☐ Assignee of record of the entire interest. See 37 CFR 3.71.  
Statement under 37 CFR 3.73(b) (Form PTO/SB/98) submitted herewith or filed on \_\_\_\_\_

**SIGNATURE of Applicant or Assignee of Record**

Signature	<i>Sam Balabon</i>	Date	Nov. 14, 2008
Name	SAM BALABON	Telephone	(512) 372-8001
Title and Company			

**NOTE:** Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below.

- ☐ Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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<b>PATENT APPLICATION FEE DETERMINATION RECORD</b> Substitute for Form PTO-875					Application or Docket Number <b>10/840,378</b>		Filing Date <b>05/07/2004</b>		<input type="checkbox"/> To be Mailed	
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APPLICATION AS FILED – PART I					OTHER THAN				
(Column 1)		(Column 2)		SMALL ENTITY <input checked="" type="checkbox"/>		OR		SMALL ENTITY	
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR		RATE (\$)	FEE (\$)	
<input checked="" type="checkbox"/> BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A				N/A		
<input type="checkbox"/> SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A				N/A		
<input type="checkbox"/> EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A				N/A		
TOTAL CLAIMS (37 CFR 1.16(i))	51 minus 20 =	*	X \$ =				X \$ =		
INDEPENDENT CLAIMS (37 CFR 1.16(h))	7 minus 3 =	*	X \$ =				X \$ =		
<input type="checkbox"/> APPLICATION SIZE FEE (37 CFR 1.16(s))			If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))									
					TOTAL		TOTAL		

\* If the difference in column 1 is less than zero, enter "0" in column 2.

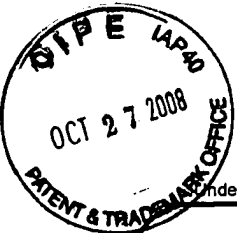
APPLICATION AS AMENDED – PART II					OTHER THAN						
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR		SMALL ENTITY	
AMENDMENT	<b>11/20/2008</b>	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 51	Minus	** 51	=	X \$ =				X \$ =	
	Independent (37 CFR 1.16(h))	* 7	Minus	*** 7	=	X \$ =				X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
						TOTAL ADD'L FEE				TOTAL ADD'L FEE	
(Column 1)		(Column 2)		(Column 3)							
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR		RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =				X \$ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =				X \$ =	
	<input type="checkbox"/> Application Size Fee (37 CFR 1.16(s))										
	<input type="checkbox"/> FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
						TOTAL ADD'L FEE				TOTAL ADD'L FEE	

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.  
 \*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".  
 \*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".  
 The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

Legal Instrument Examiner:  
/JESSICA GAYNOR/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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**CHANGE OF  
CORRESPONDENCE ADDRESS**  
*Application*

Address to:  
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P.O. Box 1450  
Alexandria, VA 22313-1450

Application Number	16840378
Filing Date	05-07-2004
First Named Inventor	SAM BALABON
Art Unit	
Examiner Name	
Attorney Docket Number	

Please change the Correspondence Address for the above-identified patent application to:

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OR

☒ Firm or Individual Name DEEP LIQUIDITY, INC.

Address 6101, W. COURTYARD, BLDG 1, SUITE 110

City AUSTIN State TEXAS Zip 78730

Country USA

Telephone 512 372 8001 Email SAM@DEEPLIQUIDITY.COM

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I am the:

- ☐ Applicant/Inventor
- ☒ Assignee of record of the entire interest.  
Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).
- ☐ Attorney or agent of record. Registration Number \_\_\_\_\_
- ☐ Registered practitioner named in the application transmittal letter in an application without an executed oath or declaration. See 37 CFR 1.33(a)(1). Registration Number \_\_\_\_\_

Signature *S. Balabon*

Typed or Printed Name Sam Balabon CEO Deep Liquidity Inc

Date 10/22/08 Telephone 512 372 8001

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of \_\_\_\_\_ forms are submitted.

This collection of information is required by 37 CFR 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/840,378

05/07/2004

Sam Balabon

12664-3

1030

23838 7590 07/21/2008

KENYON & KENYON LLP  
1500 K STREET N.W.  
SUITE 700  
WASHINGTON, DC 20005

EXAMINER

CHUNG, JULIUS J

ART UNIT

PAPER NUMBER

3691

MAIL DATE

DELIVERY MODE

07/21/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/840,378	<b>Applicant(s)</b> BALABON, SAM	
	<b>Examiner</b> JULIUS J. CHUNG	<b>Art Unit</b> 3691	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 11/16/2004 has been received and placed of record on file.
2. The information disclosure statement (IDS) submitted on 2/16/2007 has been received and placed of record on file.
3. The information disclosure statement (IDS) submitted on 5/18/2007 has been received and placed of record on file.

### ***Drawings***

4. The drawings were received on 5/7/2004. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-29, 32-51 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
7. Claims 1-29 recite a process comprising the steps of receiving, determining, and completing. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588



n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Although it is recited that method itself is computer-implemented, none of the listed steps is recited as having been performed on a computer and may therefore be considered simply “mental steps”. A positive recitation of use of a computer in the listed method steps or a positive recitation that the steps themselves are carried on a computer would rectify the deficiencies in this claim.

8. Claim 32 recites a process comprising the steps of displaying, determining, and completing. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or

positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Although it is recited that method itself is computer-implemented, none of the listed steps is recited as having been performed on a computer and may therefore be considered simply “mental steps”. A positive recitation of use of a computer in the listed method steps or a positive recitation that the steps themselves are carried on a computer would rectify the deficiencies in this claim.

9. Claim 33 recites a process comprising the steps of displaying and completing. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Although it is recited that method itself is computer-implemented, none of the listed steps is recited as having been performed on a computer and may therefore be considered simply “mental steps”. A positive recitation of use of a computer in the listed

Art Unit: 3691

method steps or a positive recitation that the steps themselves are carried on a computer would rectify the deficiencies in this claim.

10. Claims 34-42 recite a process comprising the steps of receiving, determining, and completing. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Although it is recited that method itself is computer-implemented, none of the listed steps is recited as having been performed on a computer and may therefore be considered simply “mental steps”. A positive recitation of use of a computer in the listed method steps or a positive recitation that the steps themselves are carried on a computer would rectify the deficiencies in this claim.

11. Claims 43-51 recite a process comprising the steps of receiving, determining, and activating. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588

n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Although it is recited that method itself is computer-implemented, none of the listed steps is recited as having been performed on a computer and may therefore be considered simply “mental steps”. A positive recitation of use of a computer in the listed method steps or a positive recitation that the steps themselves are carried on a computer would rectify the deficiencies in this claim.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art at the time the invention was made to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. **Claims 1-2, 6-14, 16-17, 24, 30-37, and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman (US 6,601,044) in view of Fraser et al. (US 7,392,214).**

**As to claim 1**, Wallman et al. discloses: A computer-implemented method for trading financial instruments, comprising: receiving from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order **(see at least col.8 lines 13-23 and col. 12 lines 33-54)**.

What Wallman et al. fails to disclose: upon matching the order with a contra order of a second party, determining a current market value of the financial instrument; and completing the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.

Fraser et al. discloses: upon matching the order with a contra order of a second party **(see at least col. 15 lines 27-36)**, determining a current market value of the financial instrument **(see at least col. 15 lines 37-46)**; and completing the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order **(see at least col. 15 lines 37-51 trade is only completed if previous trade is available)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made to apply price retention as disclosed in Fraser et al. to the trading method in Wallman et al. to ensure that even after the delay period there will be no unexpected changes in the market value realized.

**As to claim 2**, Wallman et al. discloses the invention substantially as claimed, however Wallman et al. fails to disclose: the timing information includes a minimum time limit.

Fraser et al. discloses: the timing information includes a minimum time limit **(see at least col. 16 lines 47-57)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made to apply a minimum time limit as disclosed in Fraser et al. to the trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to allow enough time to observe the price movement behavior.

**As to claim 6**, Wallman et al. discloses: the amount of time includes a pre-set time period **(see at least col.8 lines 13-23)**.

**As to claim 7**, Wallman et al. discloses: the amount of time includes a period of time during which the determined market value of the financial instrument is verified **(see at least col.8 lines 29-43)**.

**As to claim 8**, Wallman et al. discloses: the order is received from the first party over a network **(see at least col. 13 lines 39-60)**.

**As to claim 9**, Wallman et al. discloses: the order to trade is a buy order **(see at least col.11 lines 46-58)**.

**As to claim 10**, Wallman et al. discloses: the order to trade is a sell order **(see at least col.11 lines 46-58)**.

**As to claim 11**, Wallman et al. discloses: the financial instrument is one of a stock, bond, fund, contract, option, future, commodity and currency **(see at least col. 1 lines 30-36)**.

**As to claim 12**, Wallman et al. discloses: the current market value is based on a bid price **(see at least col. 9 lines 43-60 It is noted that the language "is based on" is very broad)**.

**As to claim 13**, Wallman et al. discloses: the current market value is based on an ask price **(see at least col. 9 lines 43-60 It is noted that the language "is based on" is very broad)**.

**As to claim 14**, Wallman et al. discloses: the current market value is based on the midpoint of a bid and ask price **(see at least col. 9 lines 43-60 It is noted that the language "is based on" is very broad)**.

**As to claim 16**, Wallman et al. discloses: completing the order includes executing the order **(see at least col.8 lines 13-23)**.

**As to claim 17**, Wallman et al. discloses: completing the order includes submitting the order to a third party system for execution **(see at least col. 11 lines 61-65)**.

**As to claim 24**, Wallman et al. discloses the invention substantially as claimed. Wallman et al. discusses programs that scan market data **(see at least col. 13 lines 19-38)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply a market data scanner to the trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to provide a convenient and well-known method of following price movement.

**As to claim 32**, Wallman discloses: A computer-implemented method for trading financial instruments, comprising: displaying through a user interface an order entry field soliciting timing information for delaying completion of an order to trade a financial instrument; upon receipt of the solicited timing information **(see at least col.8 lines 13-23 and col. 12 lines 33-54)**.



What Wallman fails to disclose is: determining a current market value of the financial instrument; and completing the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the solicited timing information.

Fraser et al. discloses: determining a current market value of the financial instrument **(see at least col. 15 lines 37-46)**; and completing the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the solicited timing information **(see at least col. 15 lines 37-51 trade is only completed if previous trade is available)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply price retention as disclosed in Fraser et al. to the trading method in Wallman to achieve the claimed invention. The motivation for the combination would be to ensure that even after the delay period there will be no unexpected changes in the market value realized.

**As to claim 33**, Wallman discloses: A computer-implemented method for trading financial instruments, comprising: displaying through a user interface an order listing specifying timing information for delaying completion of an order to trade a financial instrument **(see at least col.8 lines 13-23 and col. 12 lines 33-54)**.

What Wallman fails to disclose is: completing the order only if a current market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.

Fraser et al. discloses: completing the order only if a current market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order **(see at least col. 15 lines 37-51 trade is only completed if previous trade is available)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply price retention as disclosed in Fraser et al. to the trading method in Wallman to achieve the claimed invention. The motivation for the combination would be to ensure that even after the delay period there will be no unexpected changes in the market value realized.

**As to claims 30-31 and 34**, see rejection for claim 1.

**As to claims 35-36**, see rejection for claims 12-13.

**As to claims 37 and 41-42**, see rejection for claims 2 and 6-7.

**14. Claims 3-5, 25-29, and 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman et al. (US 6,601,044) and Fraser et al. (US 7,392,214), as applied to claims 1 and 34 above, and in further view of Madoff et al. (US 2001/0044767).**

**As to claim 3**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed, however Wallman et al. fails to disclose: the timing information includes a maximum time limit.

Madoff et al. discloses: the timing information includes a maximum time limit **(see at least Para [0034])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made to apply a maximum time limit as disclosed in Madoff et al. to the trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to ensure that the order will be filled within some degree of timeliness.

**As to claim 4**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed, however Wallman et al. fails to disclose: the timing information includes a minimum time limit and a maximum time limit.

Fraser et al. discloses: the timing information includes a minimum time limit **(see at least col. 16 lines 47-57)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made to apply a minimum time limit as disclosed in Fraser et al. to the trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to allow enough time to observe the price movement behavior.

Madoff et al. discloses: the timing information includes a maximum time limit **(see at least Para [0034])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made to apply a maximum time limit as disclosed in Madoff et al. to the

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trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to ensure that the order will be filled within some degree of timeliness.

**As to claim 5**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed, however Wallman et al. fails to disclose: a random time period.

Madoff et al. discloses: a random time period within a maximum time limit **(see at least Para [0034])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made to apply a random time period within a maximum time limit as disclosed in Madoff et al. to the trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to allow the price determination to close at any period during the time interval.

**As to claim 25**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed; however neither Wallman et al. nor Fraser et al. discloses: the order further specifies a predetermined distance and direction away from a market value of the financial instrument at which to trade.

Madoff et al. discloses: the order further specifies a predetermined distance and direction away from a market value of the financial instrument at which to trade **(see at least Para [0029]-[0034])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply relative pricing as disclosed in Madoff et al. to the trade system in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to decrease unpredictability in the order by setting particular bounds.

**As to claim 26**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed, however Wallman et al. fails to disclose: the predetermined distance is a percentage.

Examiner takes official notice that percentages as a way of measuring distance away from a price is old and well-known in the art. Many reporting sources such as even the Wall Street Journal regularly report the percentage change of a price relative the previous days market value.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply percentages to the trade system in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to decrease unpredictability in the order by setting particular bounds in a manner that is recognizable to the user.

**As to claim 27**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed, however Wallman et al. fails to disclose: the predetermined distance is a dollar amount.

Madoff et al. discloses: the predetermined distance is a dollar amount **(see at least Para [0029]-[0034])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply relative pricing in dollar amounts as disclosed in Madoff et al. to the trade system in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to decrease unpredictability in the order by setting particular bounds in a manner that is recognizable to the user.

**As to claim 28**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed, however Wallman et al. fails to disclose: the predetermined direction is below the market value of the financial instrument.

Madoff et al. discloses: the predetermined direction is below the market value of the financial instrument **(see at least Para [0037] and Para [0056]-[0061])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply trading at below the market value as disclosed in Madoff et al. to the trade system in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to increase value for the buyer of the financial instrument.

**As to claim 29**, Wallman et al. and Fraser et al. disclose discloses the invention substantially as claimed, however Wallman et al. fails to disclose: the predetermined direction is above the market value of the financial instrument.

Madoff et al. discloses: the predetermined direction is above the market value of the financial instrument **(see at least [0037])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply trading at above the market value as disclosed in Madoff et al. to the trade system in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to increase value for the seller of the financial instrument.

**As to claims 38-40**, see claims 3-5.

**15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman et al. (US 6,601,044) in view of Fraser et al. (US 7,392,214) and further in view of Neff et al. (US 2003/0014351).**

**As to claim 15**, Wallman et al. discloses the invention substantially as claimed however Wallman et al. and Fraser et al. do not disclose: current market value is based on a last trade price.

Neff et al. discloses: current market value is based on a last trade price **(see at least Para [0243])**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply this market value determination of Neff et al. to the trading method in Wallman et al. to achieve the claimed invention. The motivation for the combination would be to provide a concrete way to determine market value.

**16. Claims 18-23, and 43-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wallman et al. (US 6,601,044) and Fraser et al. (US 7,392,214) as applied to claim 1 above and in further view of Keith (US 7,383,220).**

**As to claim 18**, Wallman et al. and Fraser et al. disclose the invention substantially as disclosed, however Wallman et al. fails to disclose: the order further specifies at least one activation condition, and further comprising delaying activation of the order until the at least one activation condition is satisfied.

Keith discloses: activating the order for trade after a particular event **(see at least col.7 lines 16-44)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply order activation disclosed in Keith et al. to the trading method in Wallman et al. to ensure market values before revealing a trade.



**As to claim 19**, Wallman et al. and Fraser et al. disclose the invention substantially as disclosed, however Wallman et al. fails to disclose: the at least one activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time.

Fraser et al. discloses: the at least one activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular interval of time **(see at least col. 15 lines 37-51 trade is only able to be completed if the matching order had stood for a certain amount of time without changing value)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply price retention as disclosed in Fraser et al. to the trading method in Wallman et al. to ensure that even after the delay period there will be no unexpected changes in the market value realized.

**As to claim 20**, Wallman et al. and Fraser et al. disclose the invention substantially as disclosed, however Wallman et al. fails to disclose: the activation of the order includes posting the order in a manner indicating that the order is available for trading.

Keith discloses: the activation of the order includes posting the order in a manner indicating that the order is available for trading **(see at least col.7 lines 16-44)**.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply order posting as

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disclosed in Keith et al. to the trading method in Wallman et al. to ensure market values before revealing a trade.

**As to claim 21**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed however Wallman et al. fails to disclose: the order is posted on a bulletin board transmitted over a network.

Examiner takes official notice that bulletin boards are old and well-known in the art. They have been used on the internet to disseminate information for over a decade.

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply bulletin boards to provide a convenient and well-known method of disclosing availability of a trade.

**As to claim 22**, Wallman et al. and Fraser et al. disclose the invention substantially as disclosed, however Wallman et al. fails to disclose: the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price.

Keith discloses: not revealing all information about a trade during posting (**see at least col.7 lines 16-44**).

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply nondisclosure in Keith et al. to the trading method in Wallman et al. to keep information unnecessary to execution at the time confidential.

**As to claim 23**, Wallman et al. and Fraser et al. disclose the invention substantially as claimed. Wallman et al. discusses color indication (**see at least col. 14 lines 24-36**).

It would have thus been obvious to one of ordinary skill in the art at the time the invention was made at the time the invention was made to apply color indication to the availability of trading in the trading method of Wallman et al. to provide a convenient and well-known method of revealing status.

**As to claim 43**, see rejection for claims 1 and 18.

**As to claims 44-45**, see rejection for claims 20-21.

**As to claims 46-47**, see rejection for claims 12-13.

**As to claim 48**, see rejection for claim 2.

**As to claims 49-51**, see claims 3-5.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIUS J. CHUNG whose telephone number is (571)270-1530. The examiner can normally be reached on 8:00 AM-6:30 PM Mon-Thu. Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on (571)272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/  
Supervisory Patent Examiner, Art  
Unit 3691

/Julius J Chung/  
Examiner, Art Unit 3691  
July 3, 2008

<b>Notice of References Cited</b>	Application/Control No. 10/840,378		Applicant(s)/Patent Under Reexamination BALABON, SAM	
	Examiner JULIUS J. CHUNG		Art Unit 3691	Page 1 of 1

#### U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2001/0044767 A1	11-2001	MADOFF et al.	705/37
*	B	US-2003/0014351 A1	01-2003	Neff et al.	705/37
*	C	US-6,601,044 B1	07-2003	Wallman, Steven M. H.	705/36R
*	D	US-7,383,220 B1	06-2008	Keith, Christopher	705/37
*	E	US-7,392,214 B1	06-2008	Fraser et al.	705/37
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			


#### FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

#### NON-PATENT DOCUMENTS


*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<b><i>Index of Claims</i></b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  JULIUS J CHUNG	<b>Art Unit</b>  3691


✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

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CLAIM		DATE									
Final	Original	07/03/2008									
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<p align="center"><b><i>Index of Claims</i></b></p> 	<b>Application/Control No.</b> 10840378	<b>Applicant(s)/Patent Under Reexamination</b> BALABON, SAM
	<b>Examiner</b> JULIUS J CHUNG	<b>Art Unit</b> 3691

✓	<b>Rejected</b>	-	<b>Cancelled</b>	N	<b>Non-Elected</b>	A	<b>Appeal</b>
=	<b>Allowed</b>	÷	<b>Restricted</b>	I	<b>Interference</b>	O	<b>Objected</b>

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	46	✓								
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	48	✓								
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	51	✓								

<b>Search Notes</b>  	<b>Application/Control No.</b>  10840378	<b>Applicant(s)/Patent Under Reexamination</b>  BALABON, SAM
	<b>Examiner</b>  JULIUS J CHUNG	<b>Art Unit</b>  3691

SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Inventor name search	7/16/2008	/JJC/
East text search	7/16/2008	/JJC/

INTERFERENCE SEARCH			
Class	Subclass	Date	Examiner



## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5	(US-20010044767-\$ or US-20030014351-\$).did. or (US-7392214-\$ or US-6601044-\$ or US-7383220-\$).did.	US-PGPUB; USPAT	OR	OFF	2008/07/16 08:27
L2	9	sam near balabon.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/16 08:32
S3	263284	(order or bid or ask or command or hit or take) near (tim\$4 or period or delay\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:15
S4	152451	(value or price) near (time or period or interval)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:16
S5	21025	S3 and S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:16
S6	2138	S3 same S4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:16
S7	11	(value or price) near (time or period or interval) near (unchang\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:17
S8	4	S7 and S3	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:17
S9	7668	S3 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:18
S10	5613	S4 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:18
S11	1470	S5 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:18

S12	230	S6 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:18
S13	150	S12 and trading	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 06:18
S14	30	("20010044767"   "20020161693"   "20030216938"   "20040030632"   "20040059666"   "20040143538"   "20040177024"   "20040224689"   "5689652"   "6405180"   "6408282"   "6594643"   "6618707"   "6850907"   "7035819").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/06/24 08:16
S15	3	"20020169704"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/06/24 08:52
S16	15309	(order or bid or ask or command or hit or take) near (delay\$4)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 09:17
S17	295	S16 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 09:17
S18	74	S17 and trading	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/06/24 09:17
S19	3	"20050075963"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/06/24 14:49
S20	2409	distance same direction same trade	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/06/30 09:53
S21	9	S20 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/06/30 09:53
S22	24	"6618707"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/06/30 10:02

S23	1	("6618707").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/06/30 10:02
S24	12	value near unchang\$4 near time	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/02 15:03
S25	0	price near unchang\$4 near time	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/02 15:04
S26	3172	price near time	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/02 15:04
S27	89	price near time near chang \$4	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/02 15:04
S28	1	("20010044767").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/03 08:07
S29	9	705/36r and trad\$5 same time near (delay\$3 specif \$8 limit\$5) same execut\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/03 14:53
S30	9	sam near balabon.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/03 14:56
S31	1	("6601044").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/07/03 15:05
S32	9	705/36r and trad\$5 same time near (delay\$3 specif \$8 limit\$5) same execut\$5	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/03 15:05
S33	0	("2007/0055607").URPN.	USPAT	OR	OFF	2008/07/08 09:47
S34	573	((minimum or maximum) near time) same trade	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/09 08:04
S35	17	((minimum or maximum) near time near (limit or interval)) same trade	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/09 08:05
S36	36	S34 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/09 08:06

S37	1599	(time near (limit or interval)) same trade	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/12 08:25
S38	303	S37 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/12 08:25
S39	289	S38 and market	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/12 08:25
S40	65	(time near (limit or interval)) near2 trade	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/12 08:26
S41	121	last adj trade adj price	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/15 08:20
S42	11	S41 and midpoint	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/15 08:20
S43	9	S42 and ask	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/15 08:20
S44	9	S43 and bid	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/15 08:20
S45	66	mid\$point same bid same ask	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/15 08:23
S46	6	S41 and S45	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2008/07/15 08:24
S47	58	order near post\$3 and side near order	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/15 13:52
S48	115237	S47 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/15 13:54
S49	32	S47 and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/15 14:13

S50	0	order near post\$3 near2 condition and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/15 15:25
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S52	11	order near post\$3 near3 (condition or requir\$5 or if) and "705".clas.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2008/07/15 15:28

7/16/2008 8:32:37 AM

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\20050075963.wsp



## UNITED STATES PATENT AND TRADEMARK OFFICE

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 Alexandria, Virginia 22313-1450  
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## BIB DATA SHEET

CONFIRMATION NO. 1030

<b>SERIAL NUMBER</b> 10/840,378	<b>FILING or 371(c) DATE</b> 05/07/2004 <b>RULE</b>	<b>CLASS</b> 705	<b>GROUP ART UNIT</b> 3691	<b>ATTORNEY DOCKET NO.</b> 12664-3		
<b>APPLICANTS</b> Sam Balabon, Houston, TX; <b>** CONTINUING DATA *****</b> This application is a CIP of 10/730,360 12/09/2003 PAT 7,076,461 which claims benefit of 60/431,913 12/09/2002 <b>** FOREIGN APPLICATIONS *****</b> <b>** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY **</b> 10/17/2004						
Foreign Priority claimed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No 35 USC 119(a-d) conditions met <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Verified and Acknowledged <u>/JULIUS J CHUNG/</u> Examiner's Signature		<input type="checkbox"/> Met after Allowance Initials	<b>STATE OR COUNTRY</b> TX	<b>SHEETS DRAWINGS</b> 14	<b>TOTAL CLAIMS</b> 51	<b>INDEPENDENT CLAIMS</b> 7
<b>ADDRESS</b> KENYON & KENYON LLP 1500 K STREET N.W. SUITE 700 WASHINGTON, DC 20005 UNITED STATES						
<b>TITLE</b> System and method for execution delayed trading						
<b>FILING FEE RECEIVED</b> 901	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time) <input type="checkbox"/> 1.18 Fees (Issue) <input type="checkbox"/> Other _____ <input type="checkbox"/> Credit			

PATENT APPLICATIONIN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of Sam BALABON

Group Art Unit : 3624

Application No. : 10/840,378

Examiner : (Unassigned)

Filed : 07 May 2004

Docket No. : 12664/3

For : **SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING**

INFORMATION DISCLOSURE STATEMENT

COMMISSIONER FOR PATENTS  
Customer Service Window  
Randolph Bldg.  
401 Dulany Street  
Alexandria, VA 22314

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). The paragraphs marked below are applicable. It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

☒ 1. This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office Action on the merits in the present application, OR (d) before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action

on the merits, but before the mailing date of a final action, Notice of Allowance, or any action that otherwise closes prosecution.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ c. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. 37 CFR §1.97(c)(2).

☐ 3. This Information Disclosure Statement is being filed after the mailing date of a final action, Notice of Allowance or an action that otherwise closes prosecution, but before payment of the Issue Fee. Applicant(s) hereby request(s) that the Information Disclosure Statement be considered. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in any counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ 4. Relevance of the non-English language reference(s) is discussed in the present specification.

☐ 5. The reference(s) was/were cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.

☐ 6. A concise explanation of the relevance of certain non-English language reference(s) appears in the Appendix attached hereto.

☐ 7. The Examiner's attention is directed to co-pending U.S. Patent Application No. \_\_\_\_\_, filed, which is directed to related technical subject



matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination of the present application.

☐ 8. This application is one of a series of related applications, identified in the attached Appendix, which are directed to related technical subject matter. The identification of those U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during the examination.

☐ 9. The reference(s) was/were cited by or submitted to the Office in parent application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. §120. Thus, copies of these references are not attached. 37 CFR §1.98(d).

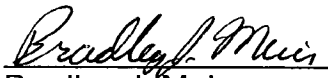
☐ 10. English-language Abstracts of the non-English language references are attached hereto.

☒ 11. Copies of U.S. references are not required.

☒ 12. Other: The references were cited in the International Search Report, a copy of which is enclosed.

Respectfully submitted,

Date: 16 February 2007

  
Bradley J. Meier  
(Reg. No. 44,236)

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Telephone: (202) 220-4200  
Facsimile: (202) 220-4201

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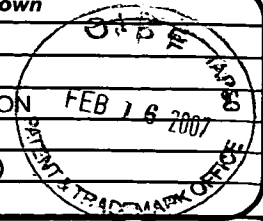
## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet	1	of	2
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**Complete if Known**

<b>Application Number</b>	10/840,378
<b>Filing Date</b>	07 May 2004
<b>First Named Inventor</b>	Sam BALABON
<b>Art Unit</b>	3624
<b>Examiner Name</b>	(Unassigned)
<b>Attorney Docket Number</b>	12664/3



## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	US-2004/0143538 A1	07/22/04	KORHAMMER et al.	
	2	US-2004/0024689 A1	02/05/04	ZHOU et al.	
	3	US-7,035,819 B1	04/25/06	GIANAKOUROS et al.	

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

/Julius Chung/ (06/24/2008)

Date Considered

06/24/2008

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C./



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: BALABON, Sam

Appl'n No.: 10/840,378

Filing Date: 07 May 2004

For: SYSTEM AND METHOD FOR  
EXECUTION DELAYED TRADING

Group Art Unit: n/a

Examiner: n/a

**Mail Stop AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. § 1.97 & § 1.98**

Sir:

Under the provisions of 37 C.F.R. § 1.97(b)(1), and in accordance with the Applicant's duty of disclosure under 37 C.F.R. § 1.56, Applicant would like to call to the Examiner's attention the references listed on the attached form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

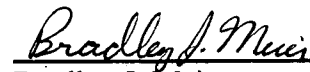
As this statement is being filed before the mailing of a first Office action on the merits pursuant to 37 C.F.R. § 1.97(b), no fee is believed due. However, the Office is hereby authorized to charge any additional fees required under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayments to Deposit Account No. 11-0600.

The filing of this Information Disclosure Statement and the enclosed substitute form PTO-1449 shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b).

The Examiner is invited to contact the undersigned at 202-220-4200 to discuss any matter regarding this application.

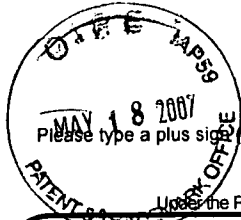
Respectfully submitted,

Dated: May 18, 2007

  
Bradley J. Meier  
(Reg. No. 44,236)

KENYON & KENYON LLP  
1500 K Street, N.W., Suite 700  
Washington, D.C. 20005  
(202) 220 - 4200 (telephone)  
(202) 220 - 4201 (facsimile)





10840378 - GAU: 3691

PTO/SB/08A (08-00)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet

2

of

2

**Complete if Known**

Application Number	10/840,378
Filing Date	07 May 2004
First Named Inventor	BALABON, Sam
Group Art Unit	TBD
Examiner Name	TBD
Attorney Docket Number	12664-3

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		PhD dissertation of Patrick Conroy entitled, "Limit Orders Versus Market Orders: Theory and Evidence," published in vol. 59/02-A of Dissertation Abstracts International, 1997, p. 572.	
		Trade Throughs for Simpletons? (Trends), Traders Magazine, Jun. 1, 2004.	
		Chapman, Peter, Pooling Fragmented Market Liquidity: Vendor's Buyside and Sellside Approach (Lava Trading markets technology that consolidates every limit order and quote found in Nasdaq montage onto single screen), Trader Magazine, Jul. 2001.	
		Securities and Exchange Commission (Release No. 34-52418), Self-Regulatory Organizations; International Securities Exchange, Inc.; Order Approving a Proposed Rule Change to Amend the Exchange's Trade-Through and Locked Markets Rules, Sep. 13, 2005.	
		BENVENISTE et al., <i>What's special about the specialist?</i> , Journal of Financial Economics, 1992, pp. 61-86.	
		MOBILEPRO CORP., <i>Annual Report Under Section 13 or 15(d) of the Securities Exchange Act of 1934</i> , Commission File Number 002-97869-D, U.S. SECURITY AND EXCHANGE COMMISSION, available at << <a href="http://www.sec.gov/Archives/edgar/data/769592/000114420404009233/v04223_10-ksb.htm">http://www.sec.gov/Archives/edgar/data/769592/000114420404009233/v04223_10-ksb.htm</a> >>	

Examiner  
Signature

/Julius Chung/ (06/24/2008)

Date  
Considered

06/24/2008

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /J.C./



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: BALABON, Sam

Appl'n No.: 10/840,378

Filing Date: 07 May 2004

For: SYSTEM AND METHOD FOR  
EXECUTION DELAYED TRADING

Group Art Unit: 3624

Examiner: ALPERT, James M.  
(anticipated)

**MS Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. § 1.97 & § 1.98**

Sir:

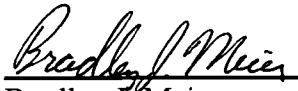
Under the provisions of 37 C.F.R. § 1.97(b)(1), and in accordance with the Applicant's duty of disclosure under 37 C.F.R. § 1.56, Applicant would like to call to the Examiner's attention the references listed on the attached form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

As this statement is being filed before the mailing of a first Office action on the merits pursuant to 37 C.F.R. § 1.97(b), no fee is believed due. However, the Office is hereby authorized to charge any additional fees required under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayments to Deposit Account No. 11-0600.

The Examiner is invited to contact the undersigned at 202-220-4200 to discuss any matter regarding this application.

Respectfully submitted,

Dated: November 16, 2004

  
Bradley J. Meier  
(Reg. No. 44,236)

KENYON & KENYON  
1500 K Street, N.W., Suite 700  
Washington, D.C. 20005  
(202) 220 - 4200 (telephone)  
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 1

**Complete if Known**

Application Number	10/840,378
Filing Date	07 May 2004
First Named Inventor	BALABON, Sam
Group Art Unit	3624
Examiner Name	Alpert, James. M. (anticipated)
Attorney Docket Number	12664-3

**U.S. PATENT DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		5,689,652		LUPIEN et al.	11-18-1997	

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>3</sup>
		"Researchers Study the Cost of Conducting Trades in Financial Markets", Stanford Business School, March 1995, <a href="http://www.gsb.stanford.edu/research/faculty/news_releases/peter.reiss/werner.htm">http://www.gsb.stanford.edu/research/faculty/news_releases/peter.reiss/werner.htm</a> (printed Nov. 3, 2003)	
		Ljungqvist, Alexander P. et al., "Hot Markets, Investor Sentiment, and IPO Pricing", November 6, 2003, AFA 2004 San Diego Meetings; Twelfth Annual Utah Winter Finance Conference; Texas Finance Festival; posted November 2, 2003 at <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=282293">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=282293</a>	
		Brown, David P. et al., "Adjustable Limit Orders", March 15, 2002, posted June 1, 2000 at <a href="http://www.kelley.iu.edu/Finance/wp3.htm">http://www.kelley.iu.edu/Finance/wp3.htm</a>	
		Web Pages for "Order Types Available on RealTick®" at <a href="http://www.terranoaonline.com/TNO_Forms/PDF_Forms/RT_OrderTypes.pdf">http://www.terranoaonline.com/TNO_Forms/PDF_Forms/RT_OrderTypes.pdf</a>	
		Schmerken, Ivy, "New Kids on the Block", March 26, 2004, Wall Street & Technology Online, available at <a href="http://www.wallstreetandtech.com/showArticle.jhtml?articleID=18402829">http://www.wallstreetandtech.com/showArticle.jhtml?articleID=18402829</a>	

Examiner Signature	/Julius Chung/ (06/24/2008)	Date Considered	06/24/2008
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IFW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: BALABON, Sam

Appl'n No.: 10/840,378

Filing Date: 07 May 2004

For: SYSTEM AND METHOD FOR  
EXECUTION DELAYED TRADING

Group Art Unit: n/a

Examiner: n/a

**Mail Stop AMENDMENT**

Commissioner for Patents  
P.O. Box 1450  
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**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. § 1.97 & § 1.98**

Sir:

Under the provisions of 37 C.F.R. § 1.97(b)(1), and in accordance with the Applicant's duty of disclosure under 37 C.F.R. § 1.56, Applicant would like to call to the Examiner's attention the references listed on the attached form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.


As this statement is being filed before the mailing of a first Office action on the merits pursuant to 37 C.F.R. § 1.97(b), no fee is believed due. However, the Office is hereby authorized to charge any additional fees required under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayments to Deposit Account No. 11-0600.

The filing of this Information Disclosure Statement and the enclosed substitute form PTO-1449 shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b).

The Examiner is invited to contact the undersigned at 202-220-4200 to discuss any matter regarding this application.

Respectfully submitted,

Dated: May 18, 2007

  
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of

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**Complete if Known**

Application Number

10/840,378

Filing Date

07 May 2004

First Named Inventor

BALABON, Sam

Group Art Unit

TBD

Examiner Name

TBD

Attorney Docket Number

12664-3

## U.S. PATENT DOCUMENTS

[illegible]

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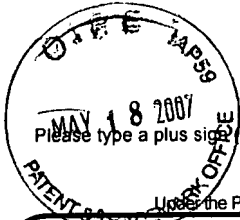
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Application Number	10/840,378
Filing Date	07 May 2004
First Named Inventor	BALABON, Sam
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### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
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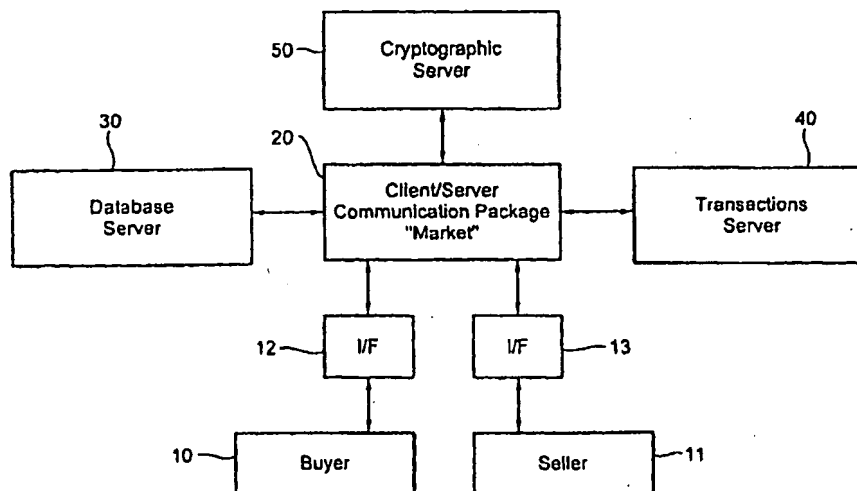
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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>7</sup> : <b>G06F 17/60</b>		A1	(11) International Publication Number: <b>WO 00/70520</b> (43) International Publication Date: <b>23 November 2000 (23.11.00)</b>
(21) International Application Number: <b>PCT/US00/13408</b> (22) International Filing Date: <b>17 May 2000 (17.05.00)</b> (30) Priority Data: <b>60/134,491 17 May 1999 (17.05.99) US</b> (71)(72) Applicants and Inventors: <b>NORMANN, Parker, Monroe [US/US]; 5539 Hecate Court, Fairfax, VA 22032 (US). POULSEN, John, Loren [US/US]; 6413 Carolyn Drive, Falls Church, VA 22044 (US).</b> (74) Agents: <b>CASTELLANO, John, A. et al.; Birch, Stewart, Kolasch &amp; Birch, LLP, P.O. Box 747, Falls Church, VA 22040-0747 (US).</b>			(81) Designated States: <b>AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</b>  <b>Published</b> <i>With international search report.</i>

(54) Title: METHOD FOR FACILITATING A CONTINUOUS MARKET AUCTION SYSTEM



(57) Abstract

A method for facilitating a continuous market auction to determine a true market price for a time-dependent consumer good (TDCG) or consumer collectible good (CCG) is presented in a cost-effective manner. An owner of TDCGs or CCGs registers (30, 40) the goods at a market nexus (20) where buyers (10) and sellers (11) can interact, preferably at an on-line website. The goods are auctioned at a starting market price, which continue to be available until a buyer demands physical possession of the goods or until a specified final closing date. Potential buyers and sellers having accounts at the market nexus can exchange the TDCGs or CCGs indefinitely, effecting "a continuous auction" (40) without a buyer taking physical possession of the TDCGs or CCG. Each buy/sell transaction reflects the current and constantly updated market price, and is disseminated to all participating parties.

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## METHOD FOR FACILITATING A CONTINUOUS MARKET AUCTION SYSTEM

### BACKGROUND OF THE INVENTION

#### Field of the Invention

The present invention relates to a market auction system for goods, more particularly to a  
5 method for facilitating a continuous market auction system to determine a true and accurate market price for time-dependent and consumer collectible goods.

#### Description of the Related Art

In a stock exchange or similar auction market, purchase orders must be matched with orders to sell in order to arrive at a price at which a sale may be completed. For example, in the  
10 New York Stock Exchange (NYSE), the ultimate determination of price for a given transaction is typically effectuated by a specialist, who deals in a particular stock and maintains a running "book" of offers to sell and orders to purchase that stock. The specialist completes transactions by matching sell and purchase orders with respect to price. However, the specialist, based on his judgment, may at times purchase or sell the stock he or she specializes  
15 in to prevent violent fluctuations in price in order to maintain the market (or market price). These functions must be carried out in all auction-based markets for the marketing of fungible goods, including commodities such as wheat, corn, soybeans, etc., as well as for stocks and bonds.

Until the 1970s, the aforementioned specialist only performed these functions, since  
20 there was apparently no adequate substitute for human judgment in setting or determining market price. However, with increasing complexities in the business structure on which the market was based (for example, due in part to the explosion of available securities as well as the marked increase in market participants) there was a need to automate price determinations in an auction market to maintain an orderly market, while reducing the necessity to exercise  
25 human judgment.

An early computation system for establishing market prices for fungible goods by an auction format is described in U.S. Patent No. 3,581,072 to Nymeyer. The Nymeyer system provides a means for recording a series of buy and sell orders for a given period of time, a

means for arranging the buy/sell orders in a particular order so that they can be compared against a closing price (last selling price) of a particular good; and a comparing mechanism for comparing the buy and sell orders to determine the lowest compatible pair of buy and sell orders to set the new selling (market) price for the goods. Thus, the lowest matching bid/ask price is used as the market price at which all transactions are executed.

Today, in an effort to keep up with the requirements imposed by the longest period of economic expansion in the history of the United States, the modern business marketplace has become computerized. To serve the growing masses of individual investors, buyers, wholesalers, distributors and consumers, business have created on-line interactive electronic marketplace systems. U.S. Patent No. 4,799,156 to Shavit et al., describes a typical on-line interactive market system. Shavit et al. provide an interactive market nexus for buyers and sellers, which controls and updates orders, inventories, bids and news for each user who communicates with the system. Although no market price is set for a particular good, the Shavit et al. system increases efficiency of the marketplace by optimizing procurement processes, reducing inventory costs and permitting the completion of previously-thought-impossible business transactions or arrangements.

Moreover, various types of auction systems have been adapted to the Internet in an effort to expand the marketplace into the homes of every consumer. Conventional auction techniques such as an English auction (highest price bid is the price paid and every bidder knows the bids paid by others), Dutch auction (seller offers lower and lower prices until buyer(s) claim item at last offered price), first-price sealed bid auction (fixed bids submitted and highest accepted), and second-price sealed bid auction (same as the former, but highest bidder pays the amount bid by second-highest bidder) have now been embodied in computer programs of websites which can be accessed by anyone having a computer and modem. One example of a computer-based system utilizing a second-price sealed bid auction technique for allocating resources is found in U.S. Patent 5,640,569 to Miller et al. Other well-know companies that perform one-way auctions on the Internet include EBay™, Priceline™ and Amazon™, for example. Each of these companies has extensive goods and services available

to consumers at their respective websites so consumers may compete for certain marketable goods.

However, certain kinds of marketable goods pose problems for businesses and the market, particularly regarding the determination of a market price. One example is a good that  
5 applies to a specific action or event at a set date and time, i.e., a time dependent consumer good (hereinafter "TDCG"). Examples of TDCGs include, but are not limited to tickets to sporting or entertainment events, transportation tickets and hotel reservations. The current market for TDCGs is characterized by instability--one of frequent shortages (asking price falls below potential market price) and frequent surpluses (asking price too high).

10 Due to shortages, other methods of allocation such as black marketing (scalpers) and long queues have arisen, costing business untold millions in potential revenue, while shutting out consumers from potential events or tickets for which they would have been willing to pay the market price. Due to surpluses, overbooking by businesses has been practiced as an alternative, with little success. This imprecise strategy often results in major consumer  
15 inconvenience, either costing consumers millions in income by requiring them to pay an above-market price, or causing businesses to lose countless sales. The reason for this "market failure" with respect to TDCGs is the time dependent nature of the good—at some point in time the TDCG no longer has value. Businesses must set the price for the TDCG well in advance of the date of the event, and face difficulties in adjusting the price of the TDCG as the  
20 event date draws closer. Currently, massive efforts by the business industry to find a market-clearing price for TDCGs have proven unsuccessful.

Another type of good essentially lacks a market altogether—the consumer collectible good (CCG), which is a good not consumed, but saved for investment or sentimental reasons. CCGs include, for example, collectibles such as baseball cards, coins, stamps, antiques and  
25 Beanie Babies™. Although there are a ready supply of interested collectors and a wide number of businesses and shows dedicated to the buying and selling of CCGs, there is no efficient national or global market. Instead of having a national market price (such as is the case for commodities, stocks and bonds, etc.) prices for these goods are often only locally or

geographically variable. Further, buyers frequently have trouble finding a particular CCG, and sellers often face of shortage of interested buyers due to a lack of efficient dissemination of information concerning the CCG, since information for determining an accurate market price (and hence value of the CCG) is sparse.

5 Recently, developments in on-line auction technology (as briefly discussed above) have expanded the market for exchanging CCGs. However, currently available on-line auction websites are limited in that market price is determined by one-way bidding only. Further, physical transfer of ownership (delivery of the CCG) is required after each completed transaction. Thus, the limited market for CCGs prevent timely market price evaluations for the  
10 goods, forcing potential buyers and sellers to seek reported prices in publications, at trade shows, or by searching for the inefficient market of an on-line auction.

Therefore, what is needed is a method for determining a true and accurate market price for TDCGs and CCGs in a cost-effective way, whereby information regarding the market price for a particular TDCG or CCG can be efficiently disseminated to all interested parties. Finding  
15 a true market price for these goods would be of immense value to consumers, businesses and the aggregate economy.

#### SUMMARY OF THE INVENTION

The present invention overcomes the current problems regarding the determination of a market price for TDCGs and CCGs by providing a method for facilitating a continuous market  
20 auction. In a preferred embodiment, an owner of TDCGs or CCGs registers the goods at a market nexus or central location where buyers and sellers can interact in a cost-effective way to conduct business transactions, preferably at an on-line website. At a specified date and time, the TDCGs or CCGs are auctioned at a minimum or starting market price, which continues until a buyer demands physical possession of the TDCGs or CCGs, and/or until a specified final closing date. Potential  
25 buyers and sellers having accounts at the nexus exchange the TDCGs or CCGs an indefinite number of times at their discretion on-line, thus "a continuous auction" is effected without a buyer actually having to take physical possession of the TDCGs or CCGs.

Specifically, after each transaction, the seller's account is credited with revenue and debited



ownership, whereas the buyer's account is credited with ownership and debited revenue. Trading activity (each buy/sell transaction) reflects the current and constantly updated market price for the TDCGs or CCGs, which is disseminated to all participating parties. At any time up to and until the closing date, each buyer has the option of executing his or her physical possession, whereupon the TDCGs or CCGs are delivered in an efficient manner. Alternatively, and as a seller, the "buyer" may sell his or her right of ownership to another prospective buyer in the time remaining for trading the TDCG or CCG, the sale price indicating the updated market price for the TDCGs or CCGs.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become more fully understood from the detailed description given hereinbelow and the accompanying drawings, wherein like elements are represented by like reference numerals, which are given by way of illustration only and thus are not limitative of the present invention and wherein:

Fig. 1 illustrates a basic overview of an exemplary continuous market auction in accordance with the present invention;

Fig. 2 illustrates an exemplary hardware implementation of an electronic trading system as related to Fig. 1;

Fig. 3 illustrates an exemplary method of how to get to making a trade;

Fig. 4 illustrates an exemplary method of how to post a TDCG or CCG on the electronic trading system;

Fig. 5 illustrates exemplary information available for an exemplary sub-category of the market;

Fig. 6 illustrates exemplary account data available to a user;

Fig. 7 is a bid flow diagram illustrating the functionality of an exemplary continuous market auction in accordance with the present invention; and

Figs. 8A-8E illustrate an exemplary method of continuously determining and updating market price for a TDCG/CCG with the electronic trading system 500 of the present invention.

### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The preferred embodiment of the present invention provides a method for facilitating a continuous market auction in a web-based, electronic trading system to determine a true and accurate market price for TDCGs and CCGs. The continuous updating of market price in a cost-effective manner will prevent shortages and surpluses in the supply of TDCGs and CCGs. Regarding TDCGs, businesses will be able to sell out an event without having to allocate vast resources and time searching for an accurate market price; and consumer will be able to purchase TDCGs without waiting in long lines. Regarding CCGs, a centralized market nexus means that buyers and sellers will always find an available supply and demand at the market price. Moreover, the preferred embodiment allows continuous trading of the TDCGs and/or CCGs, with the option of executing physical delivery of the good or executing mere right in ownership of the good within a specified time period to promote an accurate market price.

Fig. 1 illustrates a basic overview of the preferred embodiment. The preferred embodiment provides a web-based continuous electronic trading system which provides an on-line market nexus for buyers and sellers to determine a true market price for commodities such as TDCG's and CCG's. A user 100 (a prospective buyer and/or seller) can access the on-line electronic trading system 500, which is built on the client/server WWW Model. For example, the electronic trading system 500 may be accessed via a web browser on the client machine to connect to the system's main trading software residing on the client server, which will be explained in more detail below. Within electronic trading system 500, the user has access to account data 300. Account data 300 includes all account data for the user such as the user's portfolio of TDCG/CCGs, account balance, and account history, for example. The user can also research a particular TDCG or CCG in community/research 400. To conduct the buying and selling of TDCGs and CCGs on the electronic trading system 500, the user will access a market nexus 200. Market nexus 200 is part of a central communication package on the client server and will handle and control all user interfaces needed to participate in a continuous market auction.

Fig. 2 illustrates an exemplary hardware implementation of the electronic trading system

500 as related to Fig. 1. In Fig. 2, there is a database server 30, transactions server 40 and cryptographic server 50, all in communication with a central client server (hereinafter market server 20) to receive/transmit information between a buyer 10 and/or seller 11. Referring to Fig. 2, market server 20 handles all user interfaces from the buyer 10 and/or seller 11, and controls the flow of information between the various servers comprising the web-based electronic trading system 500. Market server 20 may include all programming and logic for enabling processing circuitry to assimilate, organize and direct market data of consumer goods for trading on the electronic trading system 500, so as to inform all parties of a determined and continuously updated market price, upon completed transactions between buyers and sellers. Market server 20 may be a central client communication module or package on a server which communicates with the database server 30 to store and access a variety of information that is input by the buyer and/or seller, and contains embedded stored data that is accessed for various transactions to be performed. For example, database server 30 contains a database for registering TDCG/CCGs for bids, as well as all personal and financial information of the buyers and sellers.

15       The transaction server 40 handles all transactions involved in the continuous market auction. Transaction server 40 includes all the logic and processing circuitry needed to perform the following; including but not limited to: providing the actual (specific) or market bid for potential buyers and sellers, maintaining the queue order of highest and lowest bids, the execution of matching up bids and asks between potential buyers and sellers to determine a transaction price and hence the market price, the volume calculated by the number of items transacted, as well as all the information which will be displayed on the website for the user including the most recent transaction (which is the listed price), a listing of the bids and asks within the queue and the current volume displayed.

25       The cryptographic server 50 serves to secure all personal and financial information of registered buyers and sellers. The communication package for market server 20 can be proprietary software or standard client-server web configurations such as Apache® Web Server or Microsoft® Internet Information Server on the server side and a Microsoft® Internet Explorer/Netscape® Navigator on the client side, for example. The buyer 10 and/or seller 11 accesses the market server

20 through an interface 12 or 13, which can be a telephone, dial-up modem, ISDN, DSL/ADSL, satellite broadband, wireless and/or fiber-optic cable to connect the user to the market server 20. In an alternative embodiment, market server 20 could be used to implement some of the security functions of the cryptic cryptographic server 50, so as to establish a firewall to protect the trading system 500 from outside security breaches. Any additional functionality required could be added  
5 utilizing JAVA programs compiled with a JAVA compiler such as Semantic<sup>®</sup> VisualCafe or Microsoft<sup>®</sup> J++.

The database server 30 and transactional server 40 can be relational database management systems, as is well known in the art, such examples being a Microsoft<sup>®</sup> SQL Server and an Oracle<sup>®</sup>  
10 SQL Server. These servers can service the back end of data processing, registering all bids, processing payments and ownership information as well as recording all data for historical purposes, for example. Cryptographic server 50 can contain all public key information necessary to secure the personal and financial information of registered buyers and sellers. In an exemplary configuration it could handle all physical information in encrypted form.

15 Fig. 3 illustrates a flow diagram on how to make a trade in accordance with the present invention. Initially, the user establishes a connection (not shown) between their location and the electronic trading system 500, i.e., such as connecting to the Internet via their respective web browser and accessing the website of the electronic trading system 500. At login (201) the user will be required to enter a password, which will be verified by the electronic trading system 500. If this  
20 is the user's first time at the website, they will be prompted and asked whether they wish to register, whereupon they will select a password to use for subsequent visits. Once the password has been verified, the user is directed to a screen which enables them to view market categories 210. Particularly, these are market categories of the various TDCGs and CCGs available for trading utilizing a continuous market auction in accordance with the present invention.

25 Additionally on the screen, the user has the ability to perform a search 211, browse 212 or can enter a symbol 213 for a particular market category via an input device such as a mouse for example. The search 211 function enables the user to investigate a sub-category or sub-market for a particular TDCG or CCG. The browse 212 function allows a user to input a desired TDCG or

CCG, and the enter symbols 213 function allows the user to enter a particular symbol of the TDCG or CCG to get to a sub-category 215.

For example, a category might be baseball tickets. If a user wants to specify the exact team and location or grouping of tickets he/she wants; then they would select a category of "baseball tickets" and then hierarchical sub-categories of "Chicago Cubs<sup>®</sup> baseball tickets" and, to request a specific location, such as "4 tickets behind the plate", a further embedded sub-category which specifies location of seating. Alternatively, if a user wanted a Mark McGwire rookie card, for example, they would first enter a "baseball cards" category and then select a displayed sub-category for "rookie cards". Once the user utilizes the sub-category 215 to select the desired TDCG and/or CCG in which the user wishes to bid/ask, the user can then make a trade using the make trade function 216.

Fig. 4 illustrates how to post a good such as TDCG or CCG in accordance with the present invention. Initially after accessing market server 20 so as to enter the website, a user can initiate a market lookup function 220 if they desire to post a TDCG or CCG for sale. Operation of market lookup function 220 may enable the user to either add a tradable using an add tradable function 225, and/or request a new symbol for a particular TDCG or CCG by clicking a requested new symbol 230 function on the screen of the user's display.

Initiation of either the add tradeable 225 function or request new symbol 230 function prompts a view tradeable screen 235, which lists the symbol 236 and name 237 of the TDCG/CCG and a brief description 238 of the desired TDCG/CCG which is to be posted. Once the user visually confirms that the information is correct and actuates a confirmation operation (not shown) the user (in this case the user is a seller) may then enter the quantity 240 of the TDCG/CCG which they wish to post for trading within a continuous market auction.

Alternatively, a block of goods may be commoditized at the outset prior to trading of the TDCG/CCG on the electronic trading system 500. This can be done by contractual arrangements or agreements between the business entity (seller) and the website corporation or company who is running the electronic trading system 500 (hereinafter Company). In this scenario, the Company would list and place the block of goods (such as rock concert tickets) on the view tradable screen

235 under a suitable heading, to be traded upon announcement of the initial public sale (IPS) of the block of goods at a specified date, determined either by the Company or by the business entity (seller) via contractual arrangement/agreement.

Fig. 5 illustrates the information available to the user when they actuate the view sub-  
5 category 215 function shown initially in Fig. 3. Referring to Fig. 5, once the user has entered the desired market category and has selected a desired sub-category, the user is then provided with a variety of transactional information in which they can base an informed decision. This information includes a description 250 of the TDCG/CCG being auctioned, the queues of the bid/ask prices 255, which are stored from the highest to the lowest within transaction server 40, but which are  
10 displayed in time order, and aligned along a similar price/limit for each respective bid/ask.

Specifically, two sets of queues are displayed, one for the buyers and one for the sellers of the TDCGs/CCGs. For the buyer queue, bids of potential buyers are prioritized first by bid price (highest to lowest). If two or more bids are equal, then these equal bids are prioritized by time of bid, the earlier bid price prioritized above the later bid price (assuming equal bids). For the seller  
15 queue, asks are first prioritized by lowest ask to highest ask. Similarly to the buyer queue, two or more equal ask prices are prioritized by time entered into the auction, the earlier ask price prioritized above the later submitted ask price.

Additionally, the current market price 260 of the TDCG/CCG is displayed, along with the volume of the number of items (TDCG or CCG) being transacted, and historical data 270 for the  
20 TDCG/CCG being transacted. Further, the screen provides avenues for the user to browse sub-markets with a browse sub-market function 275, as well as a browse-like tradables function 280, in the event the user wishes to browse other markets or look for similar TDCGs/CCGs. The browse sub-market function 275 is similar to the sub-category function 215 discussed earlier with respect to Fig. 3.

25 It is noted that on the electronic trading system 500, all TDCG/CCGs will be commoditized or grouped according to like characteristics, and according to the detail required by the user. Such detail can be originally determined by the Company, and then periodically updated based on user feedback, for example. As an example, "Babe Ruth rookie cards-mint condition" will have a

grouping of all Babe Ruth rookie cards which are submitted by the sellers to be in mint condition. Further, each category or sub-category of TDCG/CCG may have an associated symbol (as noted above) or code attached to it, for identification purposes. Such a coding system could be similar to the SIC (Standardized Industrial Classification) system currently used in commerce today to classify groups of like goods. This will enable a capital market or mini market nexus to be created for each category of goods offered on the electronic trading system 500, and will provide a quality assurance aspect to all goods traded thereon.

Fig. 6 illustrates the account data available to users when they have connected to the electronic trading system 500. After connection and login at 301, the user initiates a view account data operation 310 with an input device such as a mouse. Upon operation, a screen appears which provides a plurality of account information for the user. For example, the user can view their account/transfer data by manipulating view account transfer function 311; they can view the portfolio by actuating a view portfolio function 312, can view their account history 313, tax information 314, user information 315, system messages from other clients and/or participants 316 or may log out/change the user at 317. When selecting the view account/ transfer function 311, the user will be able to see the actual amount of money remaining in their account if they are a buyer, or the transfer amount that has been transferred to their account if they are a seller. When viewing a portfolio 312, the buyer/seller can view the list of TDCGs/CCGs which they have either bought or posted on-line. By actuating the view account history function 313, the user can access a time, organize account history which includes bid/ask transactions performed within a past time frame selected by the user, so as to give him/her an idea of what prices people have been posting/paying for a particular TDCG/CCG. By selecting the view tax information function 314, the user can determine the tax required on a particular TDCG/CCG.

If the user selects the view user information function 315, the user will have access to all personal and financial information that they have entered into the electronic trading system 500. This function provides the opportunity to make changes/additions to their user information, which will then be updated into by the database server 30. If the user desires to view electronic trading system messages that have been posted within a period of hours to a period of days, the user can

operate view system messages 316 function. Regarding the view portfolio function 312, selection of this function allows the user to register TDCG/CCGs so as to post them on the on-line continuous market auction of the electronic trading system 500 for trading.

All TDCGs/CCGs must be warehoused prior to the IPS, and are only moved once a buyer  
5 has asked for physical delivery of the TDCG/CCG, and/or the time period set for the sale of particular TDCG/CCGs has expired. First, it is noted that the seller (individual or business entity) who posts the TDCG/CCG for the IPS also warehouses the goods. Also, if the TDCG/CCG is traded several times over in the continuous market auction, the original seller who posted the good receives a "warehouse fee" or commission to be set by the Company, which can be based on a  
10 number of variables. For example, a warehouse fee can be paid for each time the TDCG/CCG is traded, or the warehouse fee can be paid based on the goods remaining in the original seller's warehouse (if they are selling blocks of a TDCG/CCG at one time). This source of these commissions is the escrow money paid into escrow accounts

Further, if multiple TDCGs/CCGs are being posted by multiple original sellers (and  
15 therefore multiple warehouseurs) at a single IPS, then a pro rata share or commission based on the market is determined and paid out as the warehouse fee. Specifically, the eventual shipper would be the warehouse closest to that buyer (who can ship with lowest cost as determined by the Company) who makes the "final" buy (elects to take physical possession of the goods). For example, assume there are two sellers A and B having a stock of 50 Beanie Babies™ each that are  
20 to be sold at an IPS. Initially in this exemplary scenario, the commissions are split 50/50. However, assume one of the buyers elects to take physical possession, thus either seller A or seller B must ship the good to the buyer. Seller A, who is geographically closer and who can ship the CCG with lower cost, is designated by the Company as the shipper. Thereafter, the commissions will be re-allocated such that seller A will receive only 49% of each future commission (since now seller A has  
25 a smaller stock) and seller B will receive 51% of each future commission. This re-allocation of the warehouse fee will be updated after each transference of a good in the "multiple warehouseurs" scenario, hence a pro-rate share is paid out based on the market supply. Moreover, the electronic trading system 500 provides an incentive for sellers to store or warehouse the goods that are posted



at an IPS. However, this incentive does not apply to those buyers who elect only to take right in ownership (such as a re-seller of tickets who simply buys a block of tickets in the hopes of making a profit reselling before expiration of the IPS (i.e., the date of the event)).

The Company may have a no-return policy on TDCG/CCGs bought and sold. All buyers  
5 and sellers may agree that the goods posted are in the condition stated by the seller, and that any good which is of unacceptable quality may be replaced by a similar TDCG/CCG. Any disagreements which cannot be rectified between buyer and seller may then be subject to a third party arbitration process. Further, the Company may also reserve the right to hold funds in escrow for both the buyer and/or seller—so as to prevent the incentive to deceive on the part of the seller,  
10 and/or to prevent the buyer from backing out of a completed transaction. Moreover, an unhappy buyer may have the opportunity to re-post the TDCG/CCG at a later date, in the event they are unsatisfied with their purchase.

As previously discussed, and prior to an IPS, items are grouped or classified according to like characteristics by the Company, and/or as a result of user feedback. The symbols or codes used  
15 for the categories and sub-categories of goods create a capital or stock market of goods having the same quality and product characteristics as described in the description of the TDCG/CCG, therefore providing for quality assurance for all goods traded at the IPS.

Fig. 7 provides a bid flow diagram which illustrates the operation of the continuous market auction in accordance with the present invention. Referring to Fig. 7, a commodity such as a  
20 TDCG or CCG is initially registered with the electronic trading system 500 (step S1). The on-line website of electronic trading system 500 then announces the IPS for the posted TDCG/CCG (step S2).

Before trading begins, the market server 20 may access the transaction server 40 to access an initial market price for the posted commodity. This initial market price may be based on the  
25 historical data stored from similar TDCG/CCGs that have been bought/sold, which is contained within transaction server 40. Additionally, the seller of the TDCG/CCG can himself set the initial market price. Moreover, and before the IPS of the TDCG/CCG, the seller may allocate the TDCG/CCGs beforehand to potential buyers before any active trading begins at the IPS.

Essentially in this scenario, the TDCGs having been already allocated, the Company and/or seller by contractual agreement set the IPS date, on which trading begins, with no specific market price set. These bids would help other sellers determine what might be an acceptable market price to set for the IPS, for example. Alternatively, the seller may have the option to use conventionally known auction techniques such as an English auction (highest price bid is the price paid and every bidder knows the bids paid by others), Dutch auction (seller offers lower and lower prices until buyer(s) claim item at last offered price), first-price sealed bid auction (fixed bids submitted and highest accepted), and second-price sealed bid auction (same as the former, but highest bidder pays the amount bid by second-highest bidder). At step S3, the website announces that it is holding an IPS to all registered participants (which may be, and for a TDCG almost always is, for a finite time period), and trading begins. At this point, two simultaneous processes are performed between potential buyers and sellers.

Steps S4-S7 illustrate the actions performed by the potential buyers, whereas steps S24-S27 illustrate the actions initiated by potential sellers of the posted TDCG/CCG. Recall that sellers of the (TDCG/CCG) will post it on the market via a telephone or web interface, the TDCG/CCG information is stored in database server 30 and made available to other participants on a market nexus screen at the website. As noted above, sellers will designate the description of their goods, as well as market attributes such as date to begin sale and type of sale (announced at step S3). Additionally as noted above, buyers access the electronic trading system 500 by logging in through a web browser or another interface, and are provided with a view of the current market, which they may navigate through to select a desired TDCG/CCG to bid on. They are then provided with data such as the current ask price, volume and number of items being traded, and at this point can then issue a bid, which is securely communicated to market server 20 and saved on transactions server 40.

Accordingly, after the IPS is announced and trading begins, the potential buyers make bids (step S4) and potential sellers make bids (step S24). The market nexus screen then asks the users (a potential buyer and/or a potential seller) if the bid is a market bid or specific bid (steps S5/S25). A specific bid/ask is a bid/ask determined by the buyer or seller (an ask of \$30, for example). A

market bid/ask is a bid/ask where the buyer or seller says to bid/ask at the current market price with a limit (buy at the current market price of \$20 with a limit of \$25, for example).

The last transacted price is always the market price. If the buyer and/or seller bid is a market price, the market server 20 determines whether or not the bid equals the last transacted price or market price. If there is no matching transaction, (i.e., no matching price between a buyer and seller yet,) then the price goes to the limit of the market bid/ask. If the bid is a specific price, then market server 20 determines whether or not there are any equal buyer bids that are greater than or equal to the asks (step S8). Since the bid queues and the ask queues are sorted according to price and time of bid/ask, the electronic trading system 500 looks for a buyer bid that is greater than or equal to the lowest ask price (which is the highest ask in the seller queue). It is important to note that a seller making a bid is really a potential seller submitting an ask price for the TDCG/CCG being traded upon.

Regarding step S8, if there are equal price bids of the buyers that are greater than or equal to the lowest seller ask price, then a transaction is executed in step S9, and a market price is set as the average of the transacted bid/ask. After the transaction, the "new" market price would be equal to the average between the transacted or "matching bid/ask, the market price volume would be updated, and the accounts for the prospective buyer and seller would also be updated to reflect the transaction by market server 20. Additionally, in step S11 the market price would be updated to reflect the new calculated price, and new bids (and asks) which are higher or lower than the market price will be moved to the front of a bid/ask cue. It is of note that the market bid cannot fall above or below a specific bid. However, if there are no equal bids of potential buyers that are greater than or equal to the lowest ask bid (top of seller queue) of the potential sellers, the bids enter a queue in step S10. As discussed above, the buy bids are ranked highest to lowest and then by time of entry, whereas the sell asks are ranked lowest to highest and then by time of entry. Accordingly, the market will be sorted by price and time.

A buyer may become a seller, immediately re-posting the TDCG/CCG for sale and selling it in the continuous market auction. This is because the transfer of ownership is a transfer in right of ownership, as noted above, and the transfer (i.e., final transaction) for the TDCG/CCG is complete

only when a buyer requests physical possession of the TDCG/CCG from the current seller.

#### Example

Figs. 8A-8E illustrate an exemplary method of continuously determining and updating market price for a TDCG/CCG with the electronic trading system 500 of the present invention.

5 Initially referring to Fig. 8A, there are illustrated two queues, a seller queue 400 and a buyer queue 410. Each queue is prioritized by price and time, with market bids/asks indicated by "market (\$\$)" with the (\$\$) being the limit at which the buyer will buy and which will become the last transacted or market price, and specific bids indicated by the bid/ask value. As can be seen in Fig. 8A, from the first twelve bid/asks (t01 to t12) there are no matching bid/ask (bid (offer)  $\geq$  ask); therefore

10 each of these first twelve bid/asks are placed in one of the two queues. At time t13, a seller asks 11; this seller now has provided an "ask" in the seller queue 400 which moves to the top of seller queue 400 and which now has several bids which are greater than or equal to it, so there will be a transaction. Since the bid market (14) at time t05 is the highest bid in the buyer queue 410, it is matched with ask 11 at t13 and a transaction is performed where the seller (at time t13) sells to

15 buyer (t05), who buys at the market price, which is the average of the bid and ask, or 12.5. This is now the market price.

In Fig. 8B, it can now be seen that the market price and queues 400 and 410 have been updated, and all the previous limit prices of all the market bids in the buyer queue 410 have been updated to reflect the last transacted price (current market price). In this scenario, a seller at t14

20 asks at (11) the market price of 12.5, and a transaction is immediately executed between the seller at t14 and the highest bid in the queue, market=12.5 (previously 13) at t03. This is because the decision at step S8 in Fig. 7 has been satisfied. Note that although the ask was actually 11, the transaction price occurs at the market price of 12.5. Although there were three equal buy bids, the one at t03 gets precedence because it was the earliest (t03, versus t06 and t11). Similarly to Fig.

25 8A, the market and queues 400 and 410 are updated (no change here since the highest bid of 12.5 was = to the ask of 12.5 (which at t14 was sent to the top of the seller queue 400 as the top ask).

In Fig. 8C, it can be seen that at the very next time, t15, a seller asks at 10, which initiates a transaction since the top buy bid in the buyer queue is still at 12.5 (meeting the criteria of Step S8 in

Fig. 7). Accordingly, the transaction occurs at the market price of 12.5, selling the TDCG/CCG to the buyer bidding the market price at time t06. However, and as shown in Fig. 8D, at time t16 a buyer enters a specific bid of 13. Since the top ask in the seller queue 400 is now market (16) at t02, the decision of Step S8 is not satisfied, so the specific bid of 13 would line up behind the market bids at times t06 and t11. Further these market bids (at t06 and t11) adjust to their limit, since the specific bid is equal to their limit of 13. This satisfies item (c) in step S11 of Fig. 7. Accordingly, the buyer bidding market (13) at t06 (remember the market bid has shifted to its limit) would go to the top of buyer queue 410. Thereafter, a seller asks 10 at t17, which initiates a transaction between the buyer bidding market (13) at t06, and the seller asking 10 at t17. The transaction occurs at the average of the bid/ask, or 11.5, which is set as new the market price for future trading.

In situations where there are periods when there are no matching bids/asks, the market bids/asks automatically default to their limit values. This time period prior to default, however, can be adjusted as desired by the Company, i.e., from instantaneous—as soon as there is no match, to any desired delay time. The length of delay may be influenced by or based upon such factors which may include, but are not limited to historical volume for a particular market, company specifications, specifications requested by the original seller/supplier of the traded TDCGs/CCGs, etc. Such a delay could serve to ensure that the market flows more evenly, so that it does not jump uncontrollably up and down between the limits of the bids and asks. Further, use of a delay would help prevent any brief pause in trading from causing all the market bids/asks to default to their limits.

Therefore, the preferred embodiment of the present invention enables continuous updating of market price in a cost-effective manner, which prevents shortages and surpluses in the supply of TDCGs and CCGs. Regarding TDCGs, the present invention enables businesses to sell out events without having to allocate vast resources and time searching for an accurate market price; and consumers will be able to purchase TDCGs without waiting in long lines. Regarding CCGs, the preferred embodiment provides a centralized market nexus so that buyers and sellers will always find an available supply and demand at the market price. Moreover, the preferred embodiment

allows continuous trading of the TDCGs and/or CCGs, with the option of executing physical delivery of the good or executing mere right in ownership of the good within a specified time period to promote the accurate development of a market price. Further, the electronic trading system 500 provides an incentive for sellers to warehouse their own goods, providing a warehouse fee which  
5 may be a function of the number of successive sales of an item an/or which may be based on a pro-rata share of the market.

The invention being thus described, it will be obvious that the same may be varied in many ways. For example, the market price determination has been characterized as being the average of the matching bid/ask. However, market price may be determined in other ways as well, including  
10 but not limited to setting the market price at the sellers transacted price; setting the market price at the buyer's transacted price; setting the market price using the spread between the closest buyer bid and seller ask to the current market price; and/or using the price of the oldest buyer bid as the market price. Such variations are not to be regarded as a departure from the spirit and scope of the invention, and all such modifications as would be obvious to one skilled in the art are intended to be  
15 included within the scope of the following claims.

1    What is Claimed is:

2           1.    A method of electronically determining market price for a consumer good,  
3    comprising:

4           hosting trading of a consumer good at a market nexus, wherein said market nexus is  
5    electronically accessible by potential buyers and sellers;

6           accepting bids/asks from potential buyers and potential sellers at the market nexus;

7           processing the bids to determine possible buyers and sellers to a transaction;

8           determining whether a bid/ask has met a given condition; and

9           transacting right in ownership of the consumer good from seller to buyer when a bid/ask  
10   meets the given condition, wherein the transaction amount reflects the updated market price of the  
11   consumer good.

1           2.    The method of claim 1, wherein said step of processing includes prioritizing bids  
2    and asks by time and by offered amount.

1           3.    The method of claim 1, wherein said step of hosting includes announcing the initial  
2    public sale (IPS) of said consumer good to include at least the date, time, quantity of consumer  
3    good for sale, initial market price and duration of the IPS.

1           4.    The method of claim 1, wherein the consumer good is a time dependent consumer  
2    good and/or a consumer collectible good.

1           5.    The method of claim 2, wherein bids not meeting said given condition are placed in  
2    a queue and ranked from highest to lowest bid and then by time entered in the market, for equal  
3    bids.

1           6.       The method of claim 1, wherein the step of processing includes setting the market  
2 price as the average of the buyer bid and seller ask, once a bid/ask has met the given condition.

1           7.       The method of claim 1, wherein the step of processing includes setting the market  
2 price as the spread between the closest buyer bid and seller ask to the current market price.

1           8.       The method of claim 1, where the buyer of the transacted consumer good can re-  
2 post the consumer good for trading, the final transaction dependent on a buyer requesting physical  
3 possession of the consumer good.

1           9.       The method of claim 1, further comprising:  
2           registering said buyers and sellers for trading; and  
3           registering the description and quantity of consumer good desired to be posted for trading  
4 by said sellers, wherein said steps of registering are performed prior to said step of hosting.

1           10.      The method of claim 3, wherein the initial market price is set based on stored  
2 historical data of similar consumer goods previously traded and sold, or is determined by the seller.

1           11.      The method of claim 9, wherein sellers post consumer goods for registration via an  
2 electronic interface.

1           12.      The method of claim 11, wherein said electronic interface includes at least one of a  
2 telephone, dial-up modem, ISDN line, DSL/ADSL line, satellite broadband, wireless and fiber-optic  
3 cable, wherein said electronic interface connects the buyer and/or seller with a website  
4 encompassing the market nexus.

1           13.      The method of claim 1, wherein the market nexus is a client communication  
2 package on a central server that is accessed by potential buyers and sellers.

1           14.      The method of claim 1,



2 wherein said bids and asks are apportioned to a respective buyer queue and seller queue,  
3 and

4 wherein said step of determining includes determining whether any bids in the buyer queue  
5 are greater than or equal to an ask bid in the seller queue.

1 15. The method of claim 3, wherein an original seller offering a good at the IPS is the  
2 warehouse of the good, and receives a commission for each transaction of the good until a request  
3 for physical delivery.

1 16. The method of claim 15, wherein, if there are multiple original sellers of a block of  
2 consumer goods at the IPS, the commission is allocated to the sellers as a pro-rata share of the  
3 market.

1 17. The method of claim 1, wherein the step of processing includes setting the market  
2 price at the transacted buy bid of the buyer or at the transacted ask price of the seller.

1 18. The method of claim 10, wherein a seller can allocate his consumer goods to  
2 potential buyers before the IPS so as to set the market price for others potential buyers and/or  
3 sellers when trading begins at the time of the IPS.

1 19. A computer program product comprising a computer-readable medium having  
2 computer program logic stored thereon for enabling a processor in a computer system to determine  
3 market price for a consumer good, said computer program logic comprising:

4 hosting trading of a consumer good at a market nexus, wherein said market nexus is  
5 electronically accessible by potential buyers and sellers;

6 accepting bids/asks from potential buyers and potential sellers at the market nexus;

7 processing the bids to determine possible buyers and sellers to a transaction;

8 determining whether a bid/ask has met a given condition; and

9           transacting right in ownership of the consumer good from seller to buyer when a bid/ask  
10       meets the given condition determined, wherein the transaction amount reflects the updated market  
11       price of the consumer good.

1           20.    An application service provider having at least one server for determining market  
2       price for a consumer good, said server performing the functions of:

3           hosting trading of a consumer good at a market nexus, wherein said market nexus is  
4       electronically accessible by potential buyers and sellers;

5           accepting bids/asks from potential buyers and potential sellers at the market nexus;

6           processing the bids to determine possible buyers and sellers to a transaction;

7           determining whether a bid/ask has met a given condition; and

8           transacting right in ownership of the consumer good from seller to buyer when a bid/ask  
9       meets the given condition determined, wherein the transaction amount reflects the updated market  
10       price of the consumer good.

Fig. 1

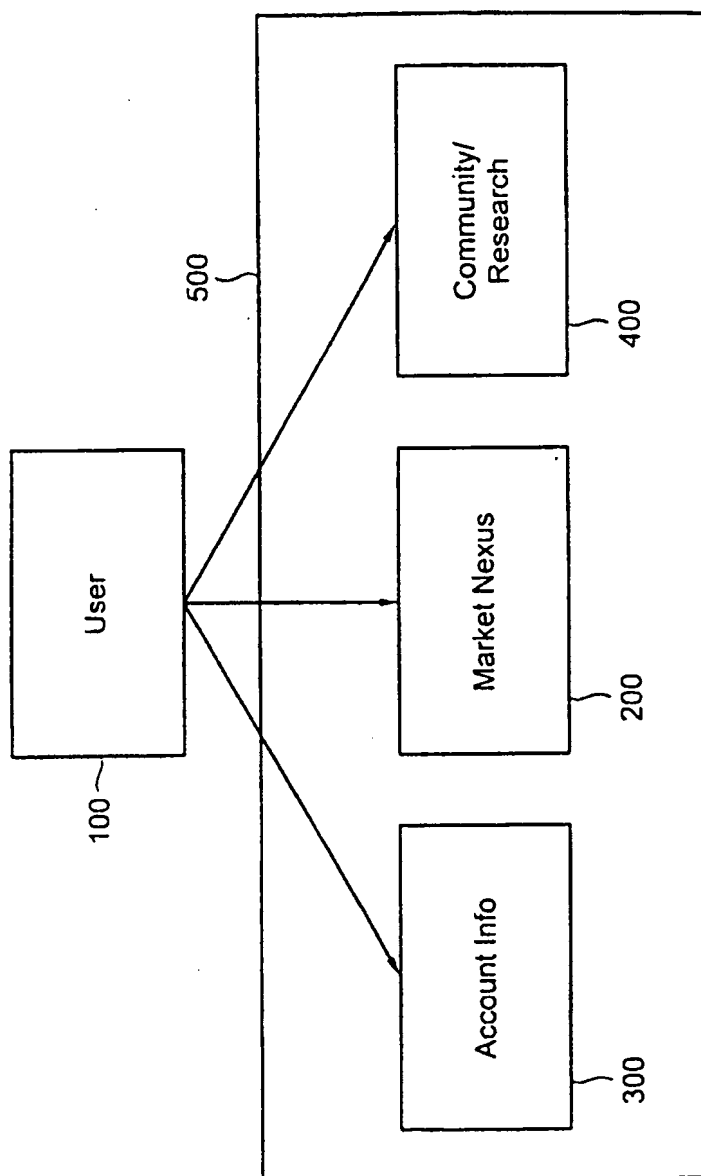


Fig. 2

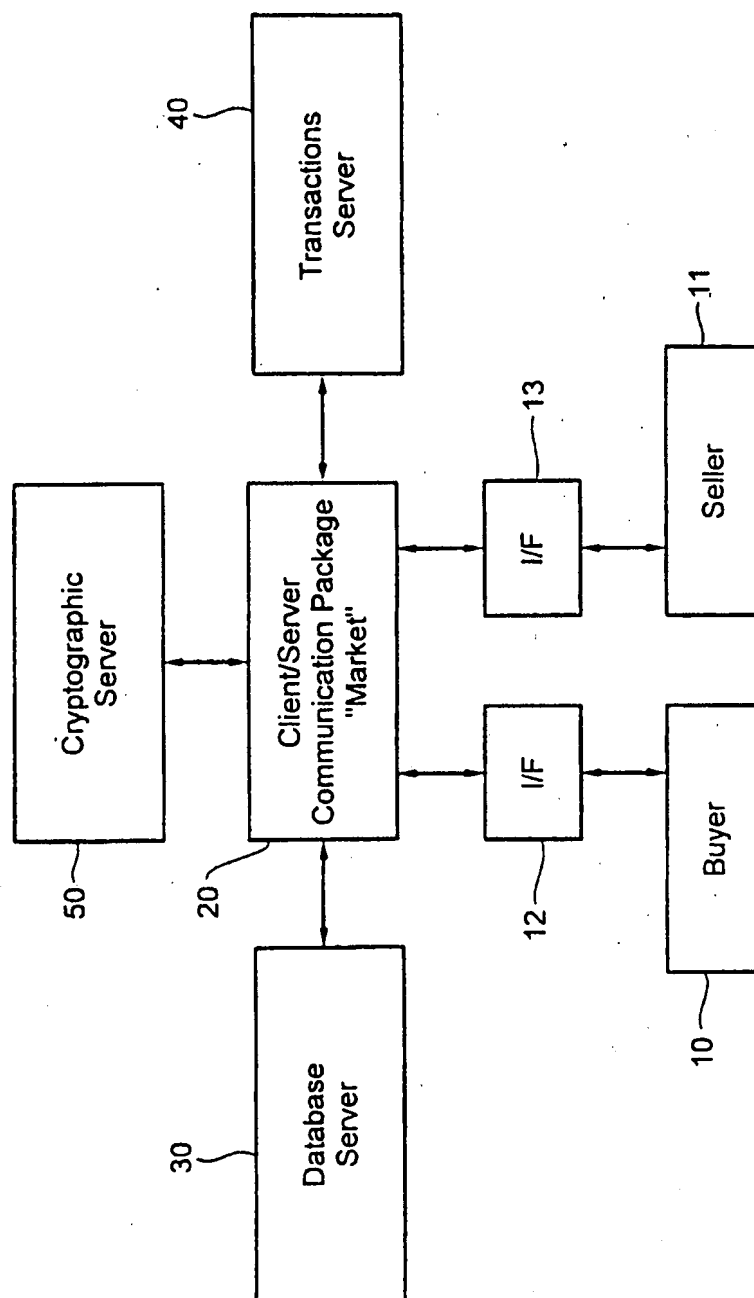


Fig. 3

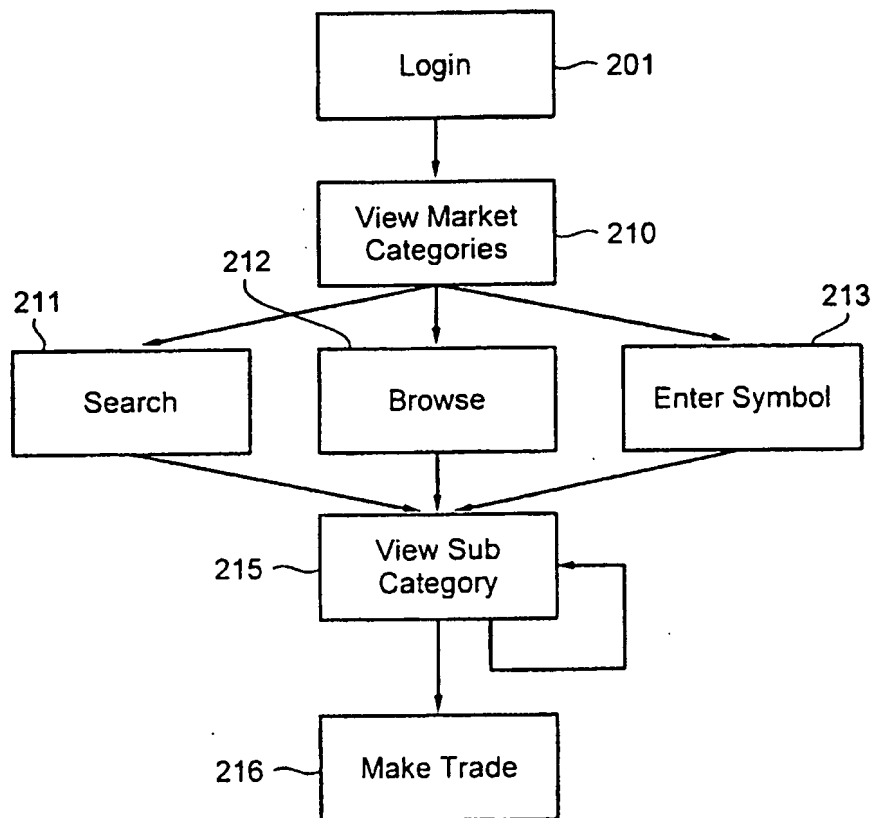
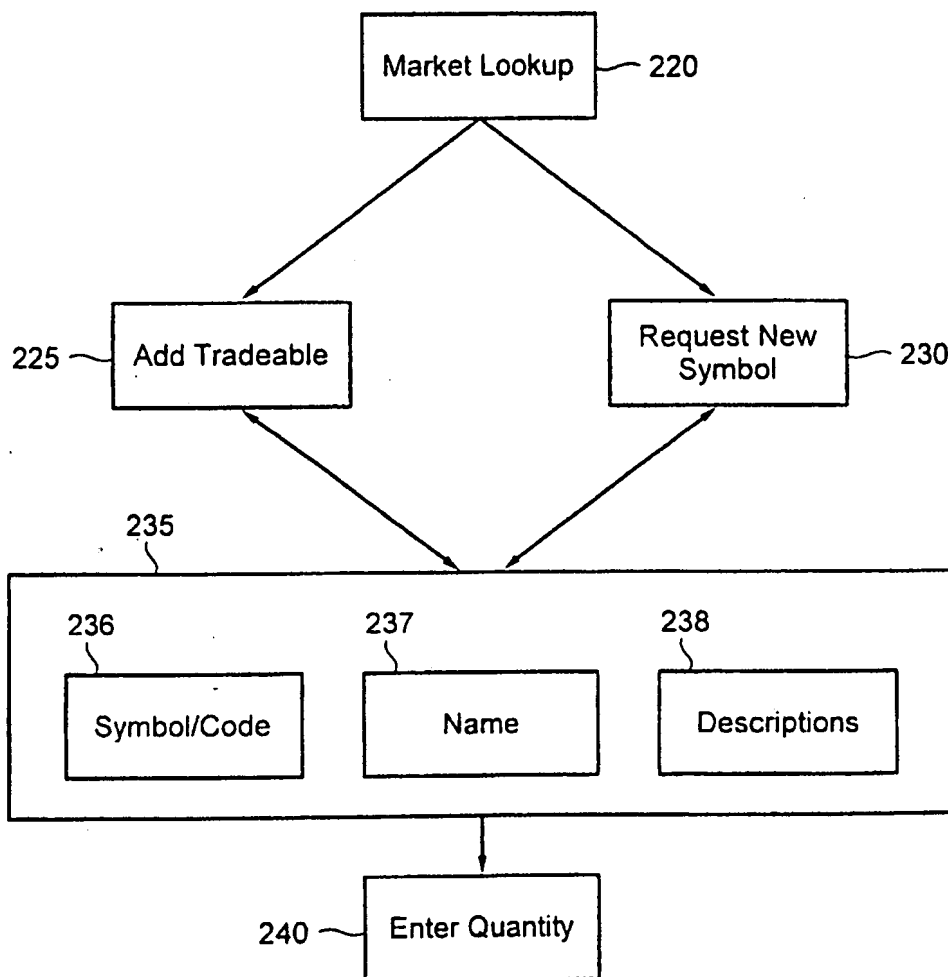
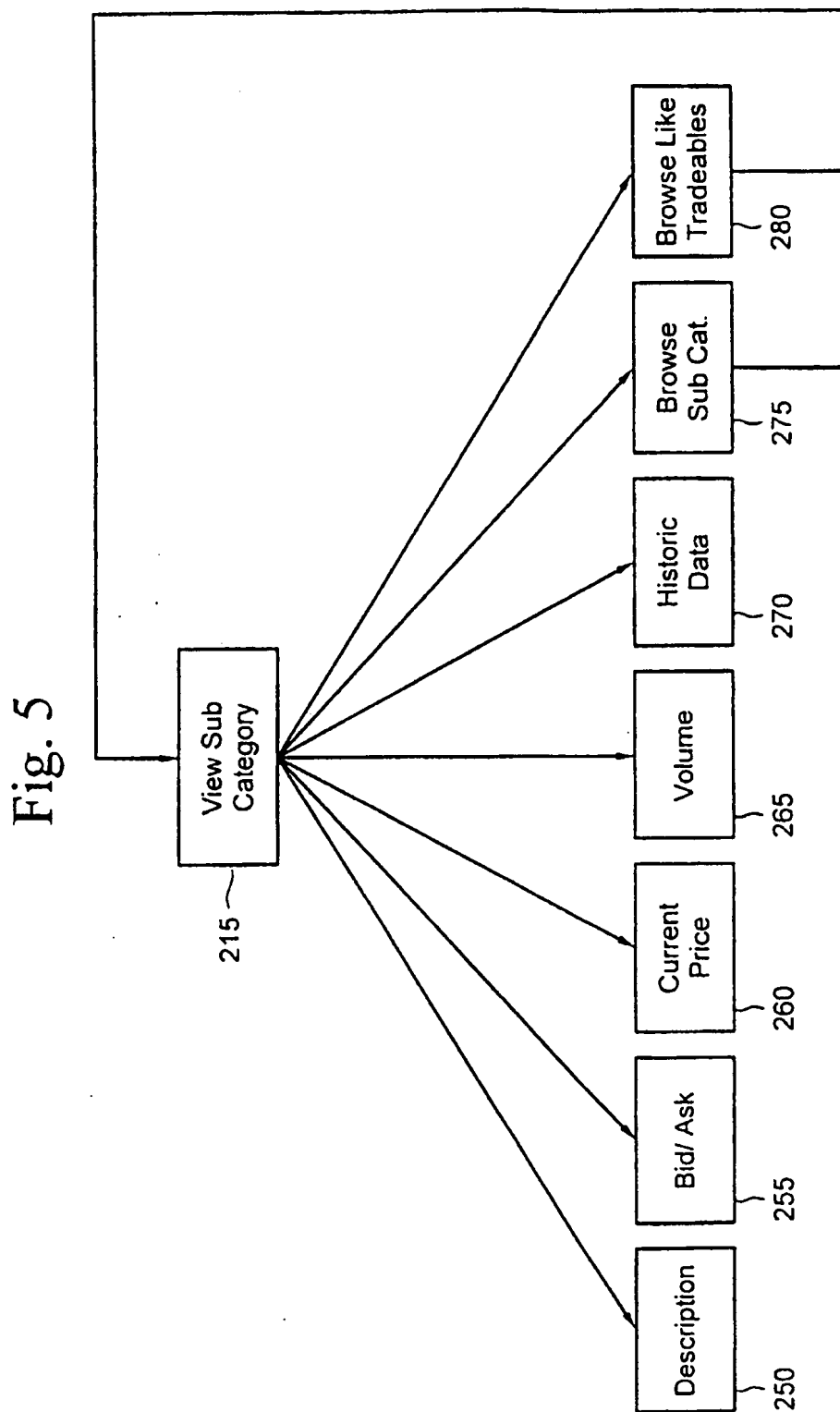


Fig. 4





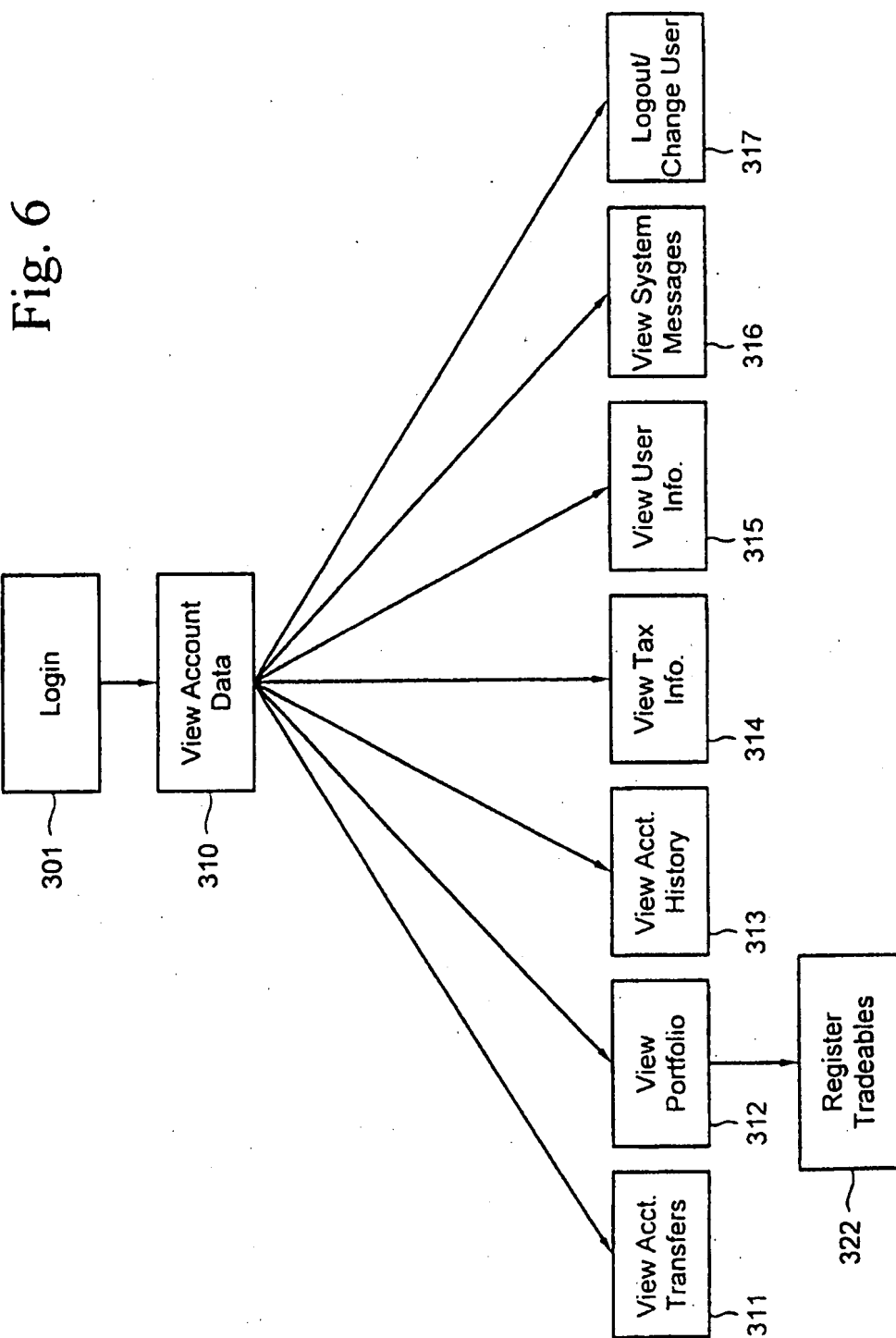
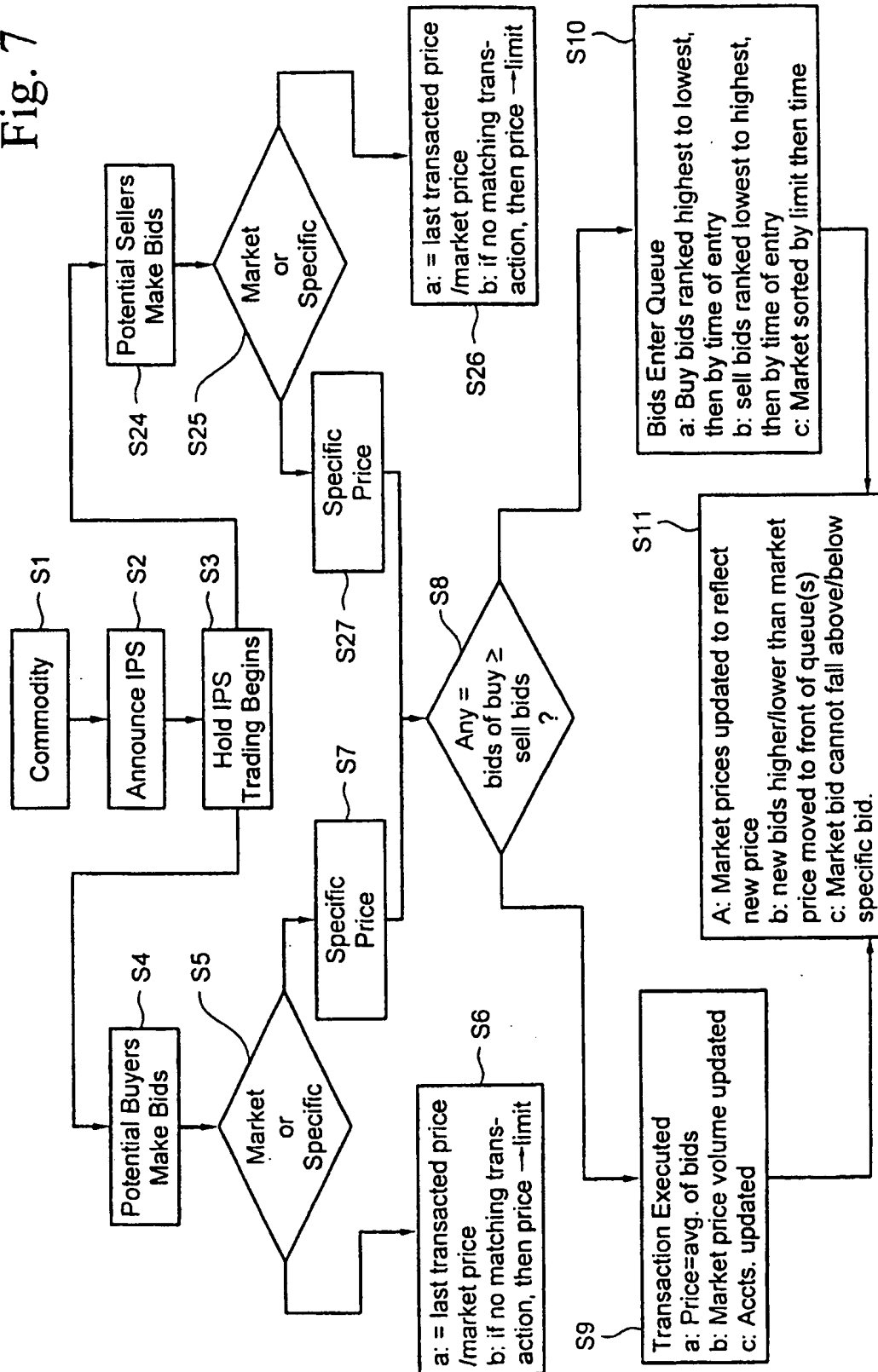




Fig. 7



400      410

Time	Ask	Bid	Time	Action	Market Price	Time (Seller Ask)	Seller Queue Ask	Buyer Queue Bid	Time (Buyer Ask)
t13	11			t13 sells to t05	12.5	t02	market (16)	market (14)	t05
						t12	17	market (13)	t03
						t01	market (17.5)	market (13)	t06
						t07	18	market (13)	t11
						t09	18	10	t04
						t08	20	9	t10

Fig. 8A

Time	Ask	Bid	Time	Action	Market Price	Time (Seller Ask)	Seller Queue Ask	Buyer Queue Bid	Time (Buyer Ask)
t14	mkt=12.5 (11)			t14 sells to t03	12.5	t02	market (16)	mkt=12.5 (13)	t03
						t12	17	mkt=12.5 (13)	t06
						t01	market (17.5)	mkt=12.5 (13)	t11
						t07	18	10	t04
						t09	18	9	t10
						t08	20		

Fig. 8B

Time	Ask	Bid	Time	Action	Market Price	Time (Seller Ask)	Seller Queue Ask	Buyer Queue Bid	Time (Buyer Ask)
t15	mkt=12.5 (10)			t15 sells to t06	12.5	t02	market (16)	mkt=12.5 (13)	t06
						t12	17	mkt=12.5 (13)	t11
						t01	market (17.5)	10	t04
						t07	18	9	t10
						t09	18		
						t08	20		

Fig. 8C

Time	Ask	Bid	Time	Action	Market Price	Time (Seller Ask)	Seller Queue Ask	Buyer Queue Bid	Time (Buyer Ask)
		13	t16	t16 enters Queue	12.5	t02	market (16)	mkt=12.5 (13)	t06
						t12	17	mkt=12.5 (13)	t11
						t01	market (17.5)	10	t04
						t07	18	9	t10
						t09	18		
						t08	20		

Fig. 8D

Time	Ask	Bid	Time	Action	Market Price	Time (Seller Ask)	Seller Queue Ask	Buyer Queue Bid	Time (Buyer Ask)
t17	10			t17 sells to t06	11.5	t02	market (16)	market (13)	t11
						t12	17	13	t16
						t01	market (17.5)	10	t04
						t07	18	9	t10
						t09	18		
						t08	20		

Fig. 8E

First Hit

L3: Entry 3 of 10

File: JPAB

Apr 19, 2002

PUB-NO: JP02002117232A  
DOCUMENT-IDENTIFIER: JP 2002117232 A  
TITLE: SYSTEM AND METHOD FOR SUPPORTING STOCK TRANSACTION, VIRTUAL STOCK  
TRANSACTION GAME SYSTEM AND METHOD FOR PROVIDING VIRTUAL STOCK TRANSACTION GAME

PUBN-DATE: April 19, 2002

## INVENTOR-INFORMATION:

NAME

COUNTRY

AOKI, JUN

## ASSIGNEE-INFORMATION:

NAME

COUNTRY

KONAMI CO LTD

APPL-NO: JP2000311246

APPL-DATE: October 11, 2000

INT-CL (IPC): G06 F 17/60

## ABSTRACT:

PROBLEM TO BE SOLVED: To output an alarm for order reviewing to a user or a player after ordering real or virtual stock trading and before contract.

SOLUTION: When a stock trading order is received from a terminal 16, a stock transaction server 12 registers the order in an uncontracted order table. Contract data for specifying a contracted order are supplied to the server 12, and the server 12 deletes the contracted order from the uncontracted order table. The IDs of players, brand code, stock price at ordering and a limit are stored in the uncontracted order table while made to correspond to one another, and the server 12 notifies a player who has placed a limit order of an alarm to the effect that the difference between the current price and the limit is apart from the difference between a price at limiting and the limit by not less than a fixed value, in the form of e-mail with respect to the limit order that has not been contracted yet, when the difference between the current price and the limit exists in the above way.

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(19) 日本国特許庁 (J P)

(12) 公開特許公報 (A)

(11) 特許出願公開番号

特開2002-117232

(P2002-117232A)

(43) 公開日 平成14年4月19日 (2002. 4. 19)

(51) Int.Cl. <sup>7</sup>	識別記号	F I	フィート(参考)	
G 0 6 F 17/60	2 3 4	G 0 6 F 17/60	2 3 4 C	5 B 0 4 9
	Z E C		Z E C	5 B 0 5 5
	2 3 2		2 3 2	
	3 1 8		3 1 8 G	
	3 2 6		3 2 6	

審査請求 有 請求項の数10 O L (全 9 頁) 最終頁に続く

(21) 出願番号 特願2000-311246(P2000-311246)

(22) 出願日 平成12年10月11日 (2000. 10. 11)

(71) 出願人 000105637

コナミ株式会社

東京都港区虎ノ門四丁目3番1号

(72) 発明者 青木 潤

東京都港区虎ノ門4-3-1 コナミ株式会社内

(74) 代理人 100109025

弁理士 岩本 康隆

Fターム(参考) 5B049 BB47 CC02 CC05 CC08 DD01

DD05 EE01 EE41 FF03 FF04

FF09 GG04 GG07

5B055 BB20 CC10 EE02 EE21 EE27

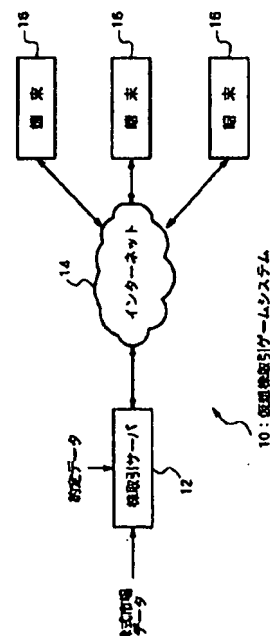
PA02 PA34

(54) 【発明の名称】 株取引支援システム並びに方法、仮想株取引ゲームシステム、及び仮想株取引ゲーム提供方法

(57) 【要約】

【課題】 現実又は仮想的な株式売買の注文後、約定前に、注文見直しのためのアラームをユーザ又はプレイヤに出力する。

【解決手段】 端末16から株式売買注文があると、株取引サーバ12では未約定注文テーブルに当該注文を登録する。株取引サーバ12には、約定した注文を特定する約定データが供給されており、約定した注文は株取引サーバ12により未約定注文テーブルから削除される。未約定注文テーブルにはプレイヤのID、銘柄コード、注文時株価及び指値が対応づけられて記憶されており、株取引サーバ12では、未だ約定していない指値注文については、現在価格と指値との差が、指値時価格と指値との差から一定以上離れていれば、その指値注文をしたプレイヤにその旨のアラームを電子メール形式で通知する。



## 【特許請求の範囲】

【請求項1】 株式市場データを順次取得する株式市場データ取得手段と、

ユーザから株式売買の注文を受け付ける注文受付手段と、

各注文について約定の有無を監視する約定監視手段と、未だ約定していない注文に係る株式銘柄に対応する情報を前記株式市場データから取得し、その取得される情報に基づいて該注文をしたユーザに対するアラームを生成するアラーム生成手段と、

生成されるアラームを出力するアラーム出力手段と、を含むことを特徴とする株取引支援システム。

【請求項2】 請求項1に記載の株取引支援システムにおいて、

前記株式銘柄に対応する情報は、該株式銘柄の価格を表す情報を含むことを特徴とする株取引支援システム。

【請求項3】 請求項2に記載の株取引支援システムにおいて、

前記アラーム生成手段は、未だ約定していない注文に係る株式銘柄の価格推移に基づいてアラームを生成することを特徴とする株取引支援システム。

【請求項4】 請求項1乃至3のいずれかに記載の株取引支援システムにおいて、

前記株式銘柄に対応する情報は、該株式銘柄の出来高を表す情報を含むことを特徴とする株取引支援システム。

【請求項5】 請求項4に記載の株取引支援システムにおいて、

前記アラーム生成手段は、未だ約定していない注文に係る株式銘柄の出来高推移に基づいてアラームを生成することを特徴とする株取引支援システム。

【請求項6】 請求項2に記載の株取引支援システムにおいて、

前記注文受付手段は、ユーザから指値注文を受け付け、前記アラーム生成手段は、未だ約定していない指値注文に係る株式銘柄の価格を前記株式市場データから取得し、その取得される価格と当該指値注文での指値との差に基づき、当該指値注文をしたプレイヤーに対するアラームを生成する、

ことを特徴とする株取引支援システム。

【請求項7】 請求項6に記載の株取引支援システムにおいて、

前記アラーム生成手段は、指値注文に係る株式銘柄の前記株式市場データから取得される最新価格と当該指値注文での指値との差、及び該指値注文に係る株式銘柄の前記株式市場データから取得される指値時価格と当該指値注文での指値との差に基づき、当該指値注文をしたユーザに対するアラームを生成する、

ことを特徴とする株取引支援システム。

【請求項8】 株式市場データを順次取得する株式市場データ取得ステップと、

ユーザから株式売買の注文を受け付ける注文受付ステップと、

各注文について約定の有無を監視する約定監視ステップと、

未だ約定していない注文に係る株式銘柄に対応する情報を前記株式市場データから取得し、その取得される情報に基づいて該注文をしたユーザに対するアラームを生成するアラーム生成ステップと、

生成されるアラームを出力するアラーム出力ステップと、

を含むことを特徴とする株取引支援方法。

【請求項9】 株式市場データを順次取得する株式市場データ取得手段と、

プレイヤーから仮想的な株式売買の注文を受け付ける注文受付手段と、

各注文について約定の有無を監視する約定監視手段と、未だ約定していない注文に係る株式銘柄に対応する情報を前記株式市場データから取得し、その取得される情報に基づいて該注文をしたプレイヤーに対するアラームを生成するアラーム生成手段と、

生成されるアラームを出力するアラーム出力手段と、を含むことを特徴とする仮想株取引ゲームシステム。

【請求項10】 株式市場データを順次取得する株式市場データ取得ステップと、

プレイヤーから仮想的な株式売買の注文を受け付ける注文受付ステップと、

各注文について約定の有無を監視する約定監視ステップと、

未だ約定していない注文に係る株式銘柄に対応する情報を前記株式市場データから取得し、その取得される情報に基づいて該注文をしたプレイヤーに対するアラームを生成するアラーム生成ステップと、

生成されるアラームを出力するアラーム出力ステップと、

を含むことを特徴とする仮想株取引ゲーム提供方法。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は株取引支援システム並びに方法、仮想株取引ゲームシステム、及び仮想株取引ゲーム提供方法に関する。

【0002】

【従来の技術】株式を売買するための注文には指値注文と成りゆき注文がある。前者は株式銘柄、株数、及び株価（指値）を指定して株式を購入又は売却する注文であり、後者は株式銘柄及び株数を指定して株式を購入又は売却する注文である。

【0003】

【発明が解決しようとする課題】指値注文では購入価格又は売却価格を指定するが、注文後に株価が注文主の予想に反する値動きをした場合、約定までに時間がかかっ



*TRW*

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of      Sam BALABON  
Group Art Unit            :      3624  
Application No.            :      **10/840,378**  
Examiner                    :      (Unassigned)  
Filed                        :      07 May 2004  
Docket No.                :      **12664/3**  
For                          :      **SYSTEM AND METHOD FOR EXECUTION DELAYED  
TRADING**

INFORMATION DISCLOSURE STATEMENT

COMMISSIONER FOR PATENTS  
Customer Service Window  
Randolph Bldg.  
401 Dulany Street  
Alexandria, VA 22314

Sir:

Pursuant to 37 CFR § 1.56, the attention of the Patent and Trademark Office is hereby directed to the reference(s) listed on the attached PTO-1449. Unless otherwise indicated herein, one copy of each reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom. The filing of this Information Disclosure Statement and the enclosed PTO Form No. 1449, shall not be construed as an admission that the information cited is prior art, or is considered to be material to patentability as defined in 37 C.F.R. § 1.56(b). The paragraphs marked below are applicable. It is believed that no fees other than those indicated below are due, but authorization is hereby given to charge any additional fees due, or to credit any overpayment, to deposit account 11-0600.

☒ 1. This Information Disclosure Statement is being filed (a) within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d), (b) within three months of the date of entry of the national stage as set forth in 37 C.F.R. § 1.491 in an international application, (c) before the mailing date of a first Office Action on the merits in the present application, OR (d) before the mailing of a first office action after filing of a request for continued examination. No certification or fee is required.

☐ 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action

on the merits, but before the mailing date of a final action, Notice of Allowance, or any action that otherwise closes prosecution.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ c. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached. 37 CFR §1.97(c)(2).

☐ 3. This Information Disclosure Statement is being filed after the mailing date of a final action, Notice of Allowance or an action that otherwise closes prosecution, but before payment of the Issue Fee. Applicant(s) hereby request(s) that the Information Disclosure Statement be considered. Please debit Deposit Account No. 11-0600 in the amount of \$180.00 in payment of the petition fee under 37 CFR §1.17(p) to ensure consideration of the disclosed information. Two duplicate copies of this paper are attached.

☐ a. I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in any counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(1).

☐ b. I hereby certify that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 CFR §1.97(e)(2).

☐ 4. Relevance of the non-English language reference(s) is discussed in the present specification.

☐ 5. The reference(s) was/were cited in a counterpart foreign application. An English language version of the foreign search report is attached for the Examiner's information.

☐ 6. A concise explanation of the relevance of certain non-English language reference(s) appears in the Appendix attached hereto.

☐ 7. The Examiner's attention is directed to co-pending U.S. Patent Application No. \_\_\_\_\_, filed, which is directed to related technical subject



matter. The identification of this U.S. Patent Application is not to be construed as a waiver of secrecy as to that application now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited application and the art cited therein during examination of the present application.

☐ 8. This application is one of a series of related applications, identified in the attached Appendix, which are directed to related technical subject matter. The identification of those U.S. Patent Applications is not to be construed as a waiver of secrecy as to those applications now or upon issuance of the present application as a patent. The Examiner is respectfully requested to consider the cited applications and the art cited therein during the examination.

☐ 9. The reference(s) was/were cited by or submitted to the Office in parent application No. \_\_\_\_\_, filed \_\_\_\_\_, which is relied upon for an earlier filing date under 35 U.S.C. §120. Thus, copies of these references are not attached. 37 CFR §1.98(d).

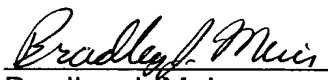
☐ 10. English-language Abstracts of the non-English language references are attached hereto.

☒ 11. Copies of U.S. references are not required.

☒ 12. Other: The references were cited in the International Search Report, a copy of which is enclosed.

Respectfully submitted,

Date: 16 February 2007

  
Bradley J. Meier  
(Reg. No. 44,236)

KENYON & KENYON LLP  
1500 K Street, N.W.  
Washington, D.C. 20005

Telephone: (202) 220-4200  
Facsimile: (202) 220-4201

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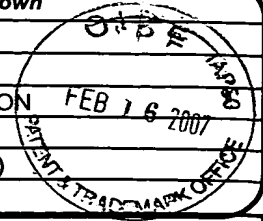
## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet	1	of	2
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**Complete if Known**

<b>Application Number</b>	10/840,378
<b>Filing Date</b>	07 May 2004
<b>First Named Inventor</b>	Sam BALABON
<b>Art Unit</b>	3624
<b>Examiner Name</b>	(Unassigned)
<b>Attorney Docket Number</b>	12664/3



## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code <sup>2</sup> (if known)			
	1	US-2004/0143538 A1	07/22/04	KORHAMMER et al.	
	2	US-2004/0024689 A1	02/05/04	ZHOU et al.	
	3	US-7,035,819 B1	04/25/06	GIANAKOUROS et al.	

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case.

Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
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Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/840,378	05/07/2004	Sam Balabon	12664-3

23838  
KENYON & KENYON  
1500 K STREET, N.W., SUITE 700  
WASHINGTON, DC 20005

CONFIRMATION NO. 1030

**FORMALITIES LETTER**



\*OC000000014115109\*

Date Mailed: 10/18/2004

**NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION**

**FILED UNDER 37 CFR 1.53(b)**

*Filing Date Granted*

**Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

**SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is **\$65** for a Small Entity

- **\$65** Late oath or declaration Surcharge.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*

12/16/2004 ZJUHR1 00000024 110600 10840378

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Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant:	BALABON, Sam	
Appl'n No.:	10/840,378	Group Art Unit: 3624
Filing Date:	07 May 2004	Examiner: ALPERT, James M. (anticipated)
For:	SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING	

**MS Missing Parts**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO NOTICE TO FILE MISSING PARTS  
OF NONPROVISIONAL APPLICATION**

Sir:

In response to the Notice to File Missing Parts of Nonprovisional Application mailed on October 18, 2004, enclosed herewith are the following:

- (1) Copy of Notice to File Missing Parts of Nonprovisional Application, mailed on October 18, 2004
- (2) Declaration and Power of Attorney executed by the inventor


The Office is authorized to charge the \$65.00 small entity late declaration surcharge required by 37 C.F.R. § 1.16(e) to Deposit Account No. 11-0600. A duplicate of this sheet is provided for this purpose.

Although not believed necessary, the Office is hereby authorized to charge any additional fees required under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayments to Deposit Account No. 11-0600.

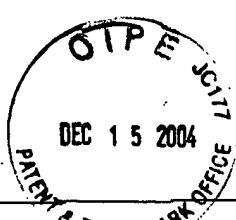
The Examiner is invited to contact the undersigned at 202-220-4200 to discuss any matter regarding this application.

Respectfully submitted,

Dated: December 15, 2004

  
Bradley J. Meier  
(Reg. No. 44,236)

KENYON & KENYON  
1500 K Street, N.W., Suite 700  
Washington, D.C. 20005  
(202) 220 - 4200 (telephone)  
(202) 220 - 4201 (facsimile)



## DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

### SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING

the specification of which is attached hereto unless the following is entered:

was filed on	as United States Application Number or PCT International Application Number	and was amended on (if applicable)
<b>07 May 2004</b>	<b>10/840,378</b>	

and which in part discloses and claims subject matter disclosed in the pending prior U.S. application(s) listed below.

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56.

### PRIOR FOREIGN APPLICATION(S)

I hereby claim foreign priority benefits under 35 U.S.C. § 119(a-d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below any foreign application(s) for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed:

Application Number	Country	Filing Date (day/month/year)	Priority Not Claimed

### PROVISIONAL APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below:

Application Number	<b>60/431,913</b>	Filing Date	<b>09 December 2002</b>
--------------------	-------------------	-------------	-------------------------

### PRIOR UNITED STATES APPLICATION(S)

I hereby claim the benefit under 35 U.S.C. § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 C.F.R. § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application:

Application Number	Filing Date	Status (patented, pending, abandoned)
<b>10/730,360</b>	<b>09 December 2003</b>	<b>Pending</b>

## POWER OF ATTORNEY

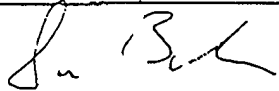
I hereby appoint the following attorney(s) and/or agent(s):

All practitioners associated with the Customer Number **23838**,

with full power of substitution and revocation, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

<b>Direct telephone calls to:</b> <b>Bradley J. Meler</b> , (Reg. No. 44,236) (202) 220-4200	<b>Send correspondence to:</b> The address designated for Customer Number <b>23838</b> .
--	--

I hereby declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issuing thereon.

<i>Full Name of Inventor</i>	Last Name <b>Balabon</b>	First Name <b>Sam</b>	Middle Name
<i>Residence</i>	City <b>Houston</b>	State or Country <b>Texas</b>	Country of Citizenship <b>U.S.A.</b>
<i>Post Office Address</i>	Street <b>7934 S. Wellington Court</b>	City <b>Houston</b>	Country, Zip/Postal Code <b>U.S.A., 77055-3511</b>
<i>Signature</i> 	<i>Date</i> <b>12/13/04</b>		

**Title 37, Code of Federal Regulations, Section 1.56**  
**Duty to Disclose Information Material to Patentability**

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is cancelled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is cancelled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) Prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) The closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

(i) Opposing an argument of unpatentability relied on by the Office, or

(ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

(c) Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

(1) Each inventor named in the application;

(2) Each attorney or agent who prepares or prosecutes the application; and

(3) Every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application.

(d) Individuals other than the attorney, agent or inventor may comply with this section by disclosing information to the attorney, agent, or inventor.

(e) In any continuation-in-part application, the duty under this section includes the duty to disclose to the Office all information known to the person to be material to patentability, as defined in paragraph (b) of this section, which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.





**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: BALABON, Sam

Appl'n No.: 10/840,378

Filing Date: 07 May 2004

For: SYSTEM AND METHOD FOR  
EXECUTION DELAYED TRADING

Group Art Unit: 3624

Examiner: ALPERT, James M.  
(anticipated)

**MS Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. § 1.97 & § 1.98**


Sir:

Under the provisions of 37 C.F.R. § 1.97(b)(1), and in accordance with the Applicant's duty of disclosure under 37 C.F.R. § 1.56, Applicant would like to call to the Examiner's attention the references listed on the attached form PTO-1449. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

As this statement is being filed before the mailing of a first Office action on the merits pursuant to 37 C.F.R. § 1.97(b), no fee is believed due. However, the Office is hereby authorized to charge any additional fees required under 37 C.F.R. § 1.16 or § 1.17 or credit any overpayments to Deposit Account No. 11-0600.

The Examiner is invited to contact the undersigned at 202-220-4200 to discuss any matter regarding this application.

Respectfully submitted,

  
Bradley J. Meier  
(Reg. No. 44,236)

Dated: November 16, 2004

KENYON & KENYON  
1500 K Street, N.W., Suite 700  
Washington, D.C. 20005  
(202) 220 - 4200 (telephone)  
(202) 220 - 4201 (facsimile)

Please type a plus sign (+) inside this box →



Reformatted PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 1

### Complete if Known

Application Number	10/840,378
Filing Date	07 May 2004
First Named Inventor	BALABON, Sam
Group Art Unit	3624
Examiner Name	Alpert, James. M. (anticipated)
Attorney Docket Number	12664-3

### U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		5,689,652		LUPIEN et al.	11-18-1997	

### OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

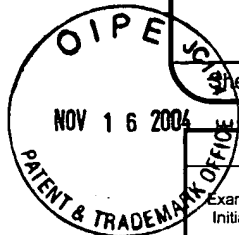
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>3</sup>
		"Researchers Study the Cost of Conducting Trades in Financial Markets", Stanford Business School, March 1995, <a href="http://www.gsb.stanford.edu/research/faculty/news_releases/peter.reiss/werner.htm">http://www.gsb.stanford.edu/research/faculty/news_releases/peter.reiss/werner.htm</a> (printed Nov. 3, 2003)	
		Ljungqvist, Alexander P. et al., "Hot Markets, Investor Sentiment, and IPO Pricing", November 6, 2003, AFA 2004 San Diego Meetings; Twelfth Annual Utah Winter Finance Conference; Texas Finance Festival; posted November 2, 2003 at <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=282293">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=282293</a>	
		Brown, David P. et al., "Adjustable Limit Orders", March 15, 2002, posted June 1, 2000 at <a href="http://www.kelley.iu.edu/Finance/wp3.htm">http://www.kelley.iu.edu/Finance/wp3.htm</a>	
		Web Pages for "Order Types Available on RealTick®" at <a href="http://www.terranoaonline.com/TNO_Forms/PDF_Forms/RT_OrderTypes.pdf">http://www.terranoaonline.com/TNO_Forms/PDF_Forms/RT_OrderTypes.pdf</a>	
		Schmerken, Ivy, "New Kids on the Block", March 26, 2004, Wall Street & Technology Online, available at <a href="http://www.wallstreetandtech.com/showArticle.jhtml?articleID=18402829">http://www.wallstreetandtech.com/showArticle.jhtml?articleID=18402829</a>	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NUMBER	FILING OR 371 (c) DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
10/840,378	05/07/2004	Sam Balabon	12664-3

23838  
KENYON & KENYON  
1500 K STREET, N.W., SUITE 700  
WASHINGTON, DC 20005

CONFIRMATION NO. 1030

FORMALITIES LETTER



\*OC000000014115109\*

Date Mailed: 10/18/2004

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*

**Items Required To Avoid Abandonment:**

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$65 for a small entity in compliance with 37 CFR 1.27, must be submitted with the missing items identified in this letter.

**SUMMARY OF FEES DUE:**

Total additional fee(s) required for this application is **\$65** for a Small Entity

- **\$65** Late oath or declaration Surcharge.

Replies should be mailed to: Mail Stop Missing Parts  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

*A copy of this notice **MUST** be returned with the reply.*



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Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 3 - OFFICE COPY



13281 U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No.	12664-3
First Inventor	Sam BALABON
Title	SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING
Express Mail Label No.	

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 37 ]  
(preferred arrangement set forth below)  
- Descriptive title of the Invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table,  
or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 14 ]
5. Oath or Declaration [Total Sheets      ]  
a. ☐ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 18 completed)  
i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:**Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)  
a. ☐ Computer Readable Form (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☐ Paper  
c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATIONS PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. 3.73(b) Statement ☐ Power of  
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,  
or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP)of prior application No: 10 / 730,360Prior application information: Examiner     Art Unit:     

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b,  
is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only  
be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**☒ Customer Number23838OR ☐ Correspondence address below

Name					
Address					
City		State		Zip Code	
Country		Telephone		Fax	

Name (Print/Type)	Bradley J. Meier	Registration No. (Attorney/Agent)	44,236
-------------------	------------------	--------------------------------------	--------

Signature	<u>Bradley J. Meier</u>	Date	May 7, 2004
-----------	-------------------------	------	-------------

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 836.00

## Complete if Known

Application Number	To Be Assigned
Filing Date	May 7, 2004
First Named Inventor	Sam BALABON
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	12664-3

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None  
Order

☒ Deposit Account:

Deposit  
Account  
Number

11-0600

Deposit  
Account  
Name

Kenyon & Kenyon

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee  
to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	385
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$ 385)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	51	-20 **	=	31	X	9	=	279
Independent Claims	7	-3 **	=	4	X	43	=	172
Multiple Dependent					X		=	0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 451)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	


Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0)

## SUBMITTED BY

Complete (if applicable)

Name (Print/Type)	Bradley J. Meier	Registration No. (Attorney/Agent)	44,236	Telephone	202-220-4200
Signature		Date	May 7, 2004		

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



13281 U.S. PTO

PTO/SB/05 (08-03)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office. U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**UTILITY  
PATENT APPLICATION  
TRANSMITTAL**

(Only for new nonprovisional applications under 37 C.F.R. 1.53(b))

Attorney Docket No.	12664-3
First Inventor	Sam BALABON
Title	SYSTEM AND METHOD FOR EXECUTION DELAYED TRADING
Express Mail Label No.	

**APPLICATION ELEMENTS**

See MPEP chapter 600 concerning utility patent application contents.

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original and a duplicate for fee processing)
2. ☒ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 37 ]  
(preferred arrangement set forth below)  
- Descriptive title of the Invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table,  
or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 14 ]
5. Oath or Declaration [Total Sheets      ]  
a. ☐ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63 (d))  
(for a continuation/divisional with Box 18 completed)  
i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s)  
named in the prior application, see 37 CFR  
1.63(d)(2) and 1.33(b).
6. ☐ Application Data Sheet. See 37 CFR 1.76

**ADDRESS TO:**Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

7. ☐ CD-ROM or CD-R in duplicate, large table or  
Computer Program (Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)  
a. ☐ Computer Readable Form (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☐ Paper  
c. ☐ Statements verifying identity of above copies

**ACCOMPANYING APPLICATIONS PARTS**

9. ☐ Assignment Papers (cover sheet & document(s))
10. ☐ 37 C.F.R. 3.73(b) Statement ☐ Power of  
(when there is an assignee) Attorney
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure ☐ Copies of IDS  
Statement (IDS)/PTO-1449 Citations
13. ☐ Preliminary Amendment
14. ☒ Return Receipt Postcard (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122  
(b)(2)(B)(i). Applicant must attach form PTO/SB/35  
or its equivalent.
17. ☐ Other:

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment,  
or in an Application Data Sheet under 37 CFR 1.76:

☐ Continuation ☐ Divisional ☒ Continuation-in-part (CIP)of prior application No: 10 / 730,360Prior application information: Examiner     Art Unit:     

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b,  
is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only  
be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**19. CORRESPONDENCE ADDRESS**☒ Customer Number23838OR ☐ Correspondence address below

Name

Address

City

State

Zip Code

Country

Telephone

Fax

Name (Print/Type)

Bradley J. Meier

Registration No.  
(Attorney/Agent)

44,236

Signature

Bradley J. Meier

Date

May 7, 2004

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

# FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☒ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 836.00

## Complete if Known

Application Number	To Be Assigned
Filing Date	May 7, 2004
First Named Inventor	Sam BALABON
Examiner Name	To Be Assigned
Art Unit	To Be Assigned
Attorney Docket No.	12664-3

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money ☐ Other ☐ None  
Order

☒ Deposit Account:

Deposit  
Account  
Number

11-0600

Deposit  
Account  
Name

Kenyon & Kenyon

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments  
☒ Charge any additional fee(s) during the pendency of this application  
☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1001	770	2001	385	Utility filing fee	385
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	
SUBTOTAL (1)					(\$ 385)

### 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	51	-20 **	=	31	X	9	=	279
Independent Claims	7	-3 **	=	4	X	43	=	172
Multiple Dependent					X		=	0

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$ 451)

\*\*or number previously paid, if greater; For Reissues, see above

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

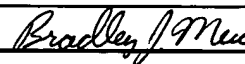
Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17 (q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify)

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 0)

## SUBMITTED BY

Name (Print/Type)	Bradley J. Meier	Registration No. (Attorney/Agent)	44,236	Telephone	202-220-4200
Signature		Date	May 7, 2004		

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**UNITED STATES LETTERS PATENT APPLICATION  
FOR:**

**SYSTEM AND METHOD FOR  
EXECUTION DELAYED TRADING**

**INVENTOR:  
Sam Balabon**

*Prepared by:*

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202.220.4200

**SYSTEM AND METHOD FOR  
EXECUTION DELAYED TRADING**

5    **Cross Reference To Related Applications**

[0001] This is a continuation-in-part application of U.S. Patent Application No. 10/730,360, filed December 9, 2003, which claims the benefit under 35 U.S.C. § 119(e) of U.S. Provisional Application No. 60/431,913, filed December 9, 2002.

**Background Of The Invention**

10   [0002] Large institutions often wish to trade in sizes far beyond the liquidity that is instantly available in the market. In today's markets, the best bid or offer quote is usually good for only a few hundred or a few thousand shares. This number or shares is minuscule to institutions that want to trade 100,000 or a million shares. These institutions must carefully choose their trading strategies in order to get good prices on their trades. They face several obstacles:

15       1. Market Impact

[0003] Trading a large number of shares inevitably moves the share price. The art of trading is to complete the trade while minimizing the market impact; this often involves trading the shares slowly over time. Indeed, revealing the intention to trade, such as by posting a public limit order into an ECN (Electronic Communication Network) or a stock  
20       exchange, can itself cause market impact by scaring away the other side of the trade.

2. Front Running

[0004] Institutions are justifiably mistrustful that others in the industry will take advantage of their desire to trade through a practice known as "front running." One example of a classic front running situation is the case in which a broker finds out that a  
25       customer wants to buy a large number of shares. Knowing that this purchase interest will increase the share price, the broker buys a number of shares for her or his own account. Alas, this purchasing itself pushes up the price, meaning that the original customer pays a higher price than necessary for the shares.

[0005] Other types of front running are more subtle. For example, a trader who sees a large limit order in an ECN to buy at \$20 may guess that the stock will soon rise. The trader then puts in an order to buy at \$20.01. If the stock rises, the trader makes a profit, and if the stock does not rise, then the trader can sell into the large limit order at \$20.

5 [0006] Similarly, a sharp day trader who observes a particular trading pattern may correctly infer that someone is working a large buy order which will push prices up even further. This trader then buys shares, pushing up the price that the original purchaser has to pay to complete the block.

### 3. Adverse Selection

10 [0007] No one ever wants to trade with someone who knows more than they do, because they will likely lose in the transaction. An institution that decides to buy a million shares may end up purchasing them from a seller who knows more than they do. This information may originate from within the firm, as in classical insider trading, or the information could be that the other institution wants to sell ten million shares.

15 [0008] Over the years, a variety of methods have been developed to solve the institutional trading problem:

#### 1. The NYSE Floor

20 [0009] The information environment on the NYSE floor is very complex and generally poorly understood by outsiders. On the NYSE, small orders are handled by computers, but large orders are still negotiated face to face. An institution gives an order to a floor broker, who physically stands at the post on the NYSE where a particular stock is traded. This floor broker interacts on a continuing basis with the other floor brokers and with the NYSE specialist. Hence, the reputation of the floor broker and the specialist are extremely important.

25 [0010] The floor broker will often reveal bits and pieces of information to the floor IF he or she thinks that it will help fill the order at a better price. The floor broker with a large

order will talk with others in the crowd and with the specialist to find out if other brokers are working large orders. Often the specialist will point out to a buyer that another floor broker is representing a seller and the two floor brokers will negotiate the trade face to face. The advantage of this method is that only serious buyers and sellers find out about the desire to trade, reducing information leakage and thus market impact.

## 2. "Upstairs" Market

[0011] In the so-called "upstairs" market, an institution gives the order to a brokerage firm with experience in trading blocks. In the classic approach, the broker then calls natural counter parties. For example, if a buyer wants to purchase 1 million shares, the block broker will first contact its other clients that have been recent sellers and see if they want to sell some more. The broker will also examine institutional holdings and look for holders that have been reducing their stakes. A skilled block broker can thus find the natural counter party to the trade without spilling the trading information to the whole world.

## 3. ECNs

[0012] Unlike the NYSE floor, ECNs offer speed and anonymity. However, the transparency of ECNs deters investors from placing very large orders into them. Displaying a large order just invites front running behavior from traders who are watching the book. Even if the other traders don't actively front run, displaying a large order may spook the other side of the trade into withdrawing and waiting for a better price.

[0013] ECNs often allow "reserve" or hidden orders that are not displayed in the ECN book as one solution to the excess transparency problem. However, this is not a complete solution to the block trading problem.

#### 4. Basket Trading

[0014] Because one of the main risks to traders is that the other side knows more than they do, traders often attempt to prove that they have no information about a particular stock. One way to do this is to trade an entire portfolio. Thus, a mutual fund that has experienced a fund outflow may want to sell an entire basket of stocks. A block trader such as the equity trading desk at Goldman or Merrill may bid aggressively to purchase the entire basket, knowing that the seller has no special information about where the stocks are going.

#### 5. "Slice and Dice" Trading

[0015] The opposite of the basket/block approach is the "Slice and Dice" approach. Given the problems with market impact, one of the obvious ways to reduce impact is to break the order up into smaller pieces and then make a number of small trades. Trading software today makes it easy to break up an order and drip it continuously into the market. Smart order routers opportunistically move orders to whatever venue has liquidity at the moment.

[0016] "Slice and Dice" trading has become very popular in recent years because many institutions evaluate the performance of their trading desks against a VWAP (Value Weighted Average Price) benchmark. A trader who breaks up the order and continuously drips or sprays it into the marketplace will come pretty close to the VWAP benchmark.

#### 6. POSIT

[0017] ITG, Inc. operates the POSIT matching system. In the POSIT system, investors place anonymous and secret orders into a matching system that conducts periodic matches during the trading day. If a match is found, the trade is crossed at the midpoint of the bid-ask spread. ITG also acts as an agency broker for institutions, helping them to work the residuals that don't match in POSIT, and they also provide a variety of trading tools. In addition, ITG's TriAct system also allows incoming order flow to interact against the orders they are holding on their way to market.

## 7. Liquidnet

[0018] Liquidnet operates a Napster-like system in which the LiquidNet software operates on the order management software of large buy-side institutions. The LiquidNet software acts like a trusted spy and talks to the other LiquidNet processes running at other institutions. When it finds a matching order, a little chat box pops up only on the screens of the two matching entities so that they can anonymously negotiate the trade. Only the two natural counter parties ever find out about the trading interest of the other side.

## 8. NYFIX Millennium

[0019] NYFIX started off as a back office technology provider, transmitting order flow to other trading platforms. However, they were carrying so much order flow that they now offer firms the ability to trade against that order flow.

[0020] None of these methods, however, provide a complete solution to the institutional trading problem. Accordingly, there is a need in the art for a system and method that improves price discovery and reduces slippage associated with trading large orders of financial instruments such as equities.

### **Summary Of The Invention**

[0021] Embodiments of the present invention provide for trading financial instruments with an execution delay. According to one embodiment, a trading system receives from a first party an order to trade a financial instrument, the order specifying timing information for delaying completion of the order, determines a current market value of the financial instrument upon matching the order with a contra order of a second party, and completes the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.

[0022] A trading system according to an embodiment of the present invention provides a continuous auction market that reduces the cost of placing limit orders and thus increases liquidity in markets such as the equity markets.

**Brief Description Of The Drawings**

[0023] FIG. 1 is a flow chart that depicts a process for implementing execution delayed trading in accordance with an embodiment of the present invention.

5 [0024] FIG. 2 is a block diagram that depicts a user computing device in accordance with an embodiment of the present invention.

[0025] FIG. 3 is a block diagram that depicts a system architecture for execution delayed trading in accordance with an embodiment of the present invention.

[0026] FIG. 4 is a block diagram that depicts data flow in execution delayed trading in accordance with an embodiment of the present invention.

10 [0027] FIG. 5 is a flow chart that depicts order entry to an execution delayed trading system in accordance with an embodiment of the present invention.

[0028] FIG. 6 is a screen shot of an order entry screen in accordance with an embodiment of the present invention.

15 [0029] FIG. 7 is a screen shot of an order display screen in accordance with an embodiment of the present invention.

[0030] FIG. 8 is a flow chart that depicts activation of execution delayed trades in accordance with an embodiment of the present invention.

[0031] FIG. 9 is a flow chart that depicts execution of execution delayed trades in accordance with an embodiment of the present invention.

20 [0032] FIG. 10 is a flow chart that depicts a process for implementing above/below market trading in accordance with an embodiment of the present invention.

[0033] FIG. 11 is a graphical representation of positioning above/below market trade orders in accordance with an embodiment of the present invention.

[0034] FIG. 12 is a flow chart that depicts order entry to an above/below market trading system in accordance with an embodiment of the present invention.

[0035] FIG. 13 is a flow chart that depicts activation of above/below market trades in accordance with an embodiment of the present invention.

5 [0036] FIG. 14 is a flow chart that depicts execution of above/below market trades in accordance with an embodiment of the present invention.

### **Detailed Description**

#### **OVERVIEW**

10 [0037] FIG. 1 depicts a process for implementing execution delayed trading in accordance with an embodiment of the present invention. A trading system receives an order to trade a financial instrument that specifies timing information for delaying completion of the order (step 100). Upon matching of the order with a contra order, the trading system determines a current market value of the financial instrument (step 110), and completes the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the  
15 timing information specified in the order. (step 120).

[0038] By allowing traders to peg their orders to a financial instrument quote (such as the bid, ask or midpoint of the NBBO (National Best Bid and Offer)) and having the orders only execute if the quote remains unchanged for a predefined amount of time (such as a random time period within a user-specified minimum and maximum time limit, or a pre-set or variable amount of  
20 time necessary to verify the pertinent quote in other systems in order to verify the price of the peg), the trading system of the present invention reduces the cost to move money into the market and out of the market, improves the efficiency of the transaction between the buyer and seller by eliminating opportunistic electronic trading programs from the transaction, and reduces many risks associated with placing orders.



[0039] Embodiments of the present invention lower the following risks associated with placing limit orders:

5 [0040] A. Inventory risk is reduced because the trading system provides the ability to trade in only steady markets. This is because each trade will require a level of market stability in order to execute. This is achieved by making sure executions will only occur after prices stay steady for a predetermined time before a trade can occur. The level of market stability can be adjusted by increasing or decreasing the minimum time that the peg must remain unchanged in order to execute the trade. The greater the minimum required time of an unchanged quote the greater price stability of the financial instrument to be traded.

10 [0041] B. Option to rest of the market is reduced because the trading system prevents market participants from using orders displayed in the system as a type of low-cost option by placing orders that improve the price of a displayed bid or offer by a penny or even smaller amounts. The ability to peg with execution delays based on unchanged quotes discourages traders from relying on the option that a displayed order provides to place orders on the same side of the market that marginally improve on the displayed order's price.

15 [0042] C. Asymmetric information impact is also reduced. Current systems give market participants the ability to trade on new public information before existing limit orders can be changed to reflect this new public information. When a negative news event occurs the quotes in the standard order books will be picked off first in most cases before the orders of the system of the present invention will begin to execute. One example is a news release of a major terrorism event. If this event occurs, in matter of seconds, all existing buy limit orders in standard order books will be picked off until the market price of the financial instrument adjusts to reflect the new information. The adjustable random execution delay aspect of the present invention prevents limit orders from being picked off immediately after news of the event is released. In this event buy limit orders in the trading system of the present invention may not execute at all or they may execute some

time after such an event at much lower prices than the existing limit orders in standard trading systems that are executed immediately after the news event.

[0043] The trading system of the present invention also provides for a new market where picking off orders by informed traders will become a more costly endeavor than currently and will have new consequences. This is due to the increased uncertainty of trade executions. Once an order has been matched with a contra order at any time during the random time execution delay, the pegged quote can change and thus prevent an execution. The informed traders will have to weigh the opportunity costs to delay picking off firm (i.e., not conditioned on an execution delay) limit orders in standard order books in hopes to get an execution with the orders in the system of the present invention.

[0044] Embodiments of the invention provide the following benefits to equity trading:

[0045] A. Neither the buyer nor seller will know what exact time the trade will occur or if the trade will occur at all. This equals the playing field between the manual online order entry systems that are offered to the majority of traders and the direct order entry systems that are operated by proprietary computer programs of the broker dealers that are connected directly to the order books.

[0046] B. The limit order structure having an execution condition based on a minimum and maximum random time delay off an unchanged quote protects limit orders in fast markets and declining markets.

[0047] C. The use of a minimum and maximum random time delay off an unchanged quote creates a new mechanism to establish market value of a stock. Using this new mechanism to establish market value, the invention provides a new type of limit order that is priced away from the market value of a financial instrument, thus creating a new type of order book that shows deeper liquidity the greater the price distance from the inside quotes of financial instruments. The invention introduces "advertising" of large orders of financial instruments to the financial markets.

[0048] D. The orders in a system of the present invention are easy to understand and don't require many order entry fields.

### ARCHITECTURE

[0049] FIGS. 2 and 3 illustrate the components of a basic computer and network architecture in accordance with an embodiment of the present invention. FIG. 2 depicts user computing device 200, which may be a personal computer, workstation, handheld personal digital assistant ("PDA"), or any other type of microprocessor-based device. User computing device 200 may include a processor 210, input device 220, output device 230, storage device 240, client software 250, and communication device 260.

[0050] Input device 220 may include a keyboard, mouse, pen-operated touch screen or monitor, voice-recognition device, or any other device that accepts input. Output device 230 may include a monitor, printer, disk drive, speakers, or any other device that provides output.

[0051] Storage device 240 may include volatile and nonvolatile data storage, including one or more electrical, magnetic or optical memories such as a RAM, cache, hard drive, CD-ROM drive, tape drive or removable storage disk. Communication device 260 may include a modem, network interface card, or any other device capable of transmitting and receiving signals over a network. The components of user computing device 200 may be connected via an electrical bus or wirelessly.

[0052] Client software 250 may be stored in storage device 240 and executed by processor 210, and may include, for example, web browser software or the client side of client/server software that implements the functionality of the present invention.

[0053] FIG. 3 illustrates a network architecture in accordance with an embodiment of the present invention. The network architecture allows user 300 to access trading system 305, embodying the above/below market trading functionality of the present invention through server software 320, on user computing device 200 through network 310.

[0054] Network links 315 may include telephone lines, DSL, cable networks, T1 or T3 lines, wireless network connections, or any other arrangement that implements the transmission and

reception of network signals. Network 310 may include any type of interconnected communication system, and may implement any communications protocol, which may be secured by any security protocol.

[0055] In one particular embodiment, trading system 305 may be an ECN embodying the functionality of the present invention. Server 320 includes a processor and memory for executing program instructions, as well as a network interface, and may include a collection of servers, such as an application server and a database server. Database 340 may represent a relational or object database, and may be accessed via server 320.

[0056] User computing device 200 and server 320 may implement any operating system, such as Windows or UNIX. Client software 250 and server software 330 may be written in any programming language, such as C, C++, Java or Visual Basic.

[0057] FIG. 4 depicts a data flow block diagram in accordance with an embodiment of the present invention. Trading system 305 (marked by the dotted square box) receives execution criteria 410 (e.g., execution delay time period information) along with other order information from user 300 through order entry screen 400. The order information is stored in order database 420 and continuously processed with live quotes via order calculation process 430. Live quote updates 450 are continuously provided by data vendor 460 and stored in live quotes database 440. As the order information is calculated, it is stored in order book database 470 and displayed to other users through order display screen 480 (via the Internet, for example).

## EXAMPLE EMBODIMENT

[0058] FIG. 5 depicts order entry to trading system 305 from a buyer or seller (e.g., user 300) in accordance with an embodiment of the present invention, and FIG. 6 depicts a possible order entry screen. In step 500, trading system 305 receives the side of a trade order, such as “buy” or “sell” (column 600).

[0059] The system then receives the amount to be traded (step 510, column 610), along with an identifier for the financial instrument to be traded (step 520, column 620). When using trading system 305 in the stock market, for example, the amount and identifier may include the number of shares of a stock and the stock symbol, respectively. Trading system 305 may accept and

trade orders for any financial instrument, including stocks, bonds, funds, contracts, options, futures, commodities and currencies.

[0060] In step 530, the system receives the type of order (column 630). For example, if user 300 were to click on the “Day” button in FIG. 6, the order would expire at the end of the day. If user 300 were to click on the “GTC” button, the order would be good until canceled. The system receives the minimum and maximum price acceptable to trade in step 540 (column 640); user 300 may enter the same price in both fields.

[0061] In step 550, the system receives market criteria for calculating the market value to which the order will be pegged. This market criteria may include the bid, ask, midpoint of bid and ask (all of which are shown in column 650), prices based on available lot sizes, VWAP, last trade, trailing averages and any other formula that uses active market data to determine a price. The bid, ask and midpoint may include those prices determined by the NBBO.

[0062] In step 560, the system receives the price difference from the pegged market value upon which the order may execute. This difference may be entered as a percentage or dollar amount (as shown in column 660), for example.

[0063] If user 300 desires to specify additional conditions for activating and/or executing the order, trading system 305 may receive such conditions in steps 570 and 580, respectively. These conditions are generally based on stable market data so that user 305 may insure against sudden price declines or surges. Order activation conditions may include, for example, activating the order only if the market value of the instrument remains unchanged for a particular interval of time (as shown in column 670), or activating the order only on a one-minute up tick on a particular market index, such as the Dow Jones Industrial Average, NASDAQ composite index, etc. Order execution conditions may include, for example, completing the order only if a particular market index increases during a particular interval of time (e.g., one minute) after the order is accepted, completing the order only if the market value of the instrument remains unchanged for a particular interval of time (as shown in column 680) or any other formula that uses active market data to determine a market condition of execution.

[0064] By pressing button 690 in FIG. 6, user 300 submits the order to trading system 305. After trading system 305 receives the order, it is placed for public display. In one embodiment, the order may be posted on a web-accessible site over network 310, with each listing provided in a bulletin board type fashion, as shown by order display screen 480 in FIG. 7. The system may  
5 choose to display limited information about the order to the public, such as the identity and amount of each order's underlying instrument, along with any other execution conditions, if specified. Additionally, trading system 305 may allow user 300 to hide their order entirely, or show only a portion of their order.

[0065] In order display screen 480 in FIG. 7, user 300 may enter a stock symbol in the field next  
10 to the "Get Symbol" label on the top left corner of the screen, press the "Go" button, and be presented with the order book of that particular stock (e.g., "YHOO"). Underneath the "Get Symbol" label, the "Last" field represents the last traded price of the stock, the "Change" field represents the price change from the close of the previous day, and the "Volume" field represents the day's total trading volume.

[0066] In the "Price" column (700), the "Bid" field represents the best offer to buy at least 100  
15 shares of the stock, the "Ask" field represents the best offer to sell at least 100 shares of the stock, and the "Mid" field represents the midpoint price between the bid price and the ask price. The "Current" column (710) represents the amount of time since the most recent change in price of the bid, ask and midpoint prices; these values will be incrementing like a running stopwatch.  
20 The "Last" column (720) represents the amount of time that has elapsed between the last two changes in price of the bid, ask and midpoint prices. The "Last 5 avg" column (730) represents the average amount of time that has elapsed between the last five changes in price of the bid, ask and midpoint prices.

[0067] Column 740 represents buy limit orders for a particular stock, displaying the amount of  
25 shares, price and execution criteria for each. Similarly, column 750 represents sell limit orders for a particular stock, displaying the amount of shares, price and execution criteria for each. Column 760 represents buy or sell limit orders priced at the midpoint of the stock; in this embodiment all limit orders pegged at the "midpoint only" without any price difference from midpoint are treated the same as any other orders except there is no indication if the order is a

buy or sell order posted on the order book. Thus, 50% of all active orders attempting to pick off “midpoint only” limit orders will be rejected because of wrong side of trade. This policy aims to protect the users from any information leakage.

[0068] The execution criteria “1/2 B” (for example, as listed in the first listing of column 740)

5 means that in order for an execution for this limit order to occur, the bid price must remain unchanged for a minimum of 1 second after trading system 305 matches the order with a contra order. A random number between 1 and 2 seconds is assigned to the match. The bid quote must remain unchanged for this random assigned time, for example 1.8 seconds. If the bid remains unchanged for 1.8 seconds the execution will occur at 1.8 seconds. If the bid changes before the  
10 1.8 seconds then trading system 305 resets the execution clock and assigns a new minimum time, such as 1.5 seconds, to the trade. Trading system 305 continually attempts to execute the order until it succeeds based on the pre-entered conditions of the limit order or is canceled by either the buyer or seller. Cancellations of orders by either the buyer or seller will pend until the current execution attempt fails. It will be impossible for either the buyer or seller to know in advance  
15 the exact time when the execution will occur or if the execution will occur at all due to a constantly changing peg. During the execution process, the limit order being hit is displayed on the system’s order book as active, an indication that the order is available for trading.

[0069] Once the order is displayed, it may be accepted only if activated (i.e., made available for trading). Trading system 305 may indicate that an order is available for trading by, for example,  
20 associating a particular color with the posted order. In one embodiment, if an order is colored green, it is active (i.e., available for trading); if the order is colored gray, then the order is inactive (i.e., not available for trading) - potentially due to non-satisfaction of an activation condition.

[0070] FIG. 8 depicts a static peg activation scenario in accordance with an embodiment of the  
25 present invention, whereby the order is activated only if the pegged market value of the instrument remains unchanged for a particular interval of time. If no activation condition is specified with an order (step 800), then trading system 305 posts an active order (step 810). However, if a static peg activation condition is specified, then the system posts an inactive order (step 820), determines the market value (e.g., bid, ask or midpoint) of the financial instrument

(step 830) and starts a clock (i.e., timer) on the activation delay time period (step 840). The system then determines an updated market value (step 850), and if the value changes (step 860) before the activation delay time period expires (step 880), then the clock is reset (step 870). If not, trading system 305 posts an active order (step 890).

5 [0071] This static peg activation aspect of the present invention addresses the risks associated with pegging systems in today's equity markets whereby traders peg to the bid or ask price of the inside quote of an equity, thus allowing their limit orders to float with the bid or ask. One risk is that other traders will identify the limit order as being pegged to the bid or ask. In stocks with large spreads this can be especially costly to the traders who use pegging systems because once  
10 their order has been identified as a peg order, other traders can send and cancel as few as a 100 share limit order in less than a few seconds to manipulate the price of the pegged order. This means the price of a 10,000 share limit order if pegged can be manipulated by a 100 share order entered into the market and immediately canceled.

[0072] For example: XYZ stock's bid price is \$7.56 and it's ask price is \$7.99. Trader A places  
15 an order to buy 5,000 shares of XYZ stock and pegs the order to the bid. The buy limit order is entered into the market at \$7.56 which is the bid. Trader B enters a buy limit order to buy 1,000 shares of XYZ stock at \$7.57. Trader A's 5,000 limit order is immediately re-priced at \$7.57. Trader C is a seller and sees that Trader A's order automatically re-priced the instant Trader's B order was entered. Thus, Trader C enters a hundred share buy limit order at \$7.98 and then  
20 immediately cancels it. Trader A's order automatically goes to \$7.98 and then Trader C picks off Trader A's order, basically cheating trader A out of the spread.

[0073] Other risks are temporary imbalances in the supply and demand of a stock. This can happen when there are not enough shares to fill market orders at the inside quote. Automated fill programs can simply pick off any limit order at multiple price points resulting in large gyrations  
25 in the price of a stock. This can result in very quick price increases or declines that lead to brief liquidity voids that last as few as a couple of seconds. Once other traders recognize that the automated fill program is completed, they immediately start bidding up limit order prices until they reach close to the prior price of the stock before the automated fill program hit the stock.



[0074] Pegging to the inside quote can result in better or worse executions compared to other order types such as market orders or standard limit orders. One aspect of the static peg activation aspect of the present invention is to reduce the time periods that it is not in the trader's interest to peg to the inside quote. A second aspect is to create a new order type that is easy for traders to use with few fields of order entry.

[0075] An order posted by trading system 305 (whether active or inactive) may list the offered buy or sell price in different ways, such as by percentage (i.e., percentage discount off the current market value), a price differential (i.e., distance in monetary amount away from current market value), or the actual offered buy/sell price. For this last display method, trading system 305 may continuously update the offered buy/sell price by scanning the current market price to which the order is pegged (using third party market scanning software in one embodiment), and subtracting/adding the specified distance, if any, from that market value for display.

[0076] Embodiments of trading system 305 are not limited in the ways in which an order may be accepted. In one embodiment, a user may accept a posted order by clicking on it. In another embodiment, a user may enter an order on the opposite side of an existing order in the system, and the system will automatically match the two orders (if conforming), resulting in acceptance. Users of trading system 305 may be registered with the system, and be required to enter user identification and passwords for authentication.

[0077] Once the order is accepted, trading system 305 determines if the trade can be completed according to the associated execution criteria. FIG. 9 depicts an execution scenario in accordance with an embodiment of the present invention.

[0078] Upon the matching of an active order with a contra order (step 900), the system assigns an execution delay time period based on the execution criteria of the matched orders (step 905). This execution delay time period could be, for example, a random time period within a user-specified minimum and maximum time limit, or a pre-set or variable amount of time (e.g., a fraction of a second) necessary to verify the pertinent quote in other systems in order to verify the price of the peg. The system then determines the appropriate market value (e.g., bid, ask or midpoint) of the financial instrument (step 910) and starts a clock on the execution delay time

period (step 915). The system next determines an updated market value (step 920), and if the value changes (step 925) before the execution delay time period expires (step 930) then the clock is reset (step 950) and the process starts over, unless a cancellation request is pending (step 940) in which case the order is canceled (step 945). If market value does not change prior to the expiration of the execution delay time period, trading system 305 completes the order (step 935). Trading system 940 may complete the order by, for example, executing the order itself or submitting the order to a third party system for execution.

[0079] For example, suppose a limit order to buy 10,000 shares of ABC stock pegged to the bid at \$25.00 with a 2-4 second static bid price requirement is received at trading system 305 at 13:00:00.

[0080] At 13:08:00 further suppose a limit order to sell 10,000 shares at bid is received at trading system 305 and is matched with the existing limit order to buy 10,000 shares of ABC stock. The system will match the orders and assign a random time (e.g., 2.8 seconds) for the initial matching of the orders. The clock will begin at the exact time the orders are matched. If the bid remains static for 2.8 seconds the system will execute the trade. If the bid changes any time before 2.8 seconds then the clock will restart and the system will assign a new time period between 2 to 4 seconds (e.g., 3.8 seconds on the second attempt) and will repeat this process until the orders are executed or canceled.

[0081] Once a match has been made and the system receives a cancel order, the cancellation will hang until the minimum time delay of a static quote condition has been met or not. If it is not met then the cancellation can take place at that point.

[0082] If a limit order is matched with multiple existing limit orders then the first existing order that meets its time contingency requirement will execute. Each time the peg changes a new minimum time requirement will be assigned to each of the existing limit orders. The first existing limit order that meets its time contingency requirements will execute with the limit order. If by remote chance two orders have the same price and are assigned the exact minimum time contingency then the order that was received first at trading system 305 will execute.

[0083] In another example, trading system 305 accepts a limit order that is priced away from its peg.

[0084] Example: at 15:30:00, trader A enters an inferior limit order to purchase 250,000 shares of ABC at a maximum price of \$80.25 and a peg price of \$.10 below the NBB (national best bid).

[0085] An “inferior” limit order means that a buy limit order is priced below the bid or a sell limit order is priced above the ask. These orders are priced inferior to the quote prices of the NBBO, for example, and generally add liquidity to trading system 305. These limit orders can be fully or partially displayed in trading system 305 according to a particular embodiment. A

“superior” limit order means that a buy limit order is priced above the ask or a sell limit order is priced below the bid. These limit orders generally take away liquidity from a trading system. These limit orders are not displayed in trading system 305 according to a particular embodiment.

[0086] Continuing with the example, trader A specifies that the NBB must remain unchanged for a random period between 5 and 10 seconds prior to execution and designates the order to be displayed in full. At 15:30:01, the bid is \$79.90 and the ask is 79.92. The system displays trader A's order as an order to purchase 250,000 shares of ABC at a \$.10 discount to the National Best Bid with a displayed price of \$79.80. At 15:40:00, trader B enters a superior limit order to sell 250,000 shares of ABC at a minimum price of \$79.50, and a peg price of \$.10 below the NBB. At 15:40:00, the bid is \$79.95 and the ask is \$79.98. The system receives the order and matches the inferior and superior limit orders because all of the price conditions of both orders have been met: \$.10 below the NBB is \$79.85, which matches both peg prices and is within each of the trader's minimum and maximum limit prices. Once the orders are matched, the system assigns an 8.3 second minimum time period of an unchanged bid to the order (8.3 seconds is not revealed to the buyer or seller). At 15:40:05, the NBB of ABC increases to \$80.01, and so the orders are not executed because the NBB did not remain unchanged for 8.3 seconds. The orders remain potential matches, however, and the system assigns a new minimum time period of 7 seconds to the trade. This new time period begins at the time the bid changed. At 15:40:12, the NBB has remained constant for 7 seconds at \$80.01 and the orders are executed at the price of \$79.91.

[0087] According to a particular embodiment, once a superior limit order is received at trading system 305, the system will continuously attempt to match the superior limit order with an inferior limit order. The superior limit order will generally only be matched with an inferior limit order with equal or greater lot size. If the system matches two orders and the conditions of the inferior limit order are not met, then the system will keep the superior limit order active but may not display it. The system will continuously wait until it can match the superior limit order with an inferior limit order or until the superior limit order is canceled. If a cancel is received at the system for either the superior or inferior limit order, the system will cancel the order unless the order is in a pending match. If there is a pending match the system will wait until the order is executed. If the execution does not occur the order is canceled.

#### **ABOVE/BELOW MARKET TRADING EMBODIMENT**

[0088] FIG. 10 depicts a process for implementing above/below market trading in accordance with an embodiment of the present invention. A trading system receives an order to trade a financial instrument at a predetermined distance and direction away from the instrument's market value (step 1000). Upon acceptance of the order at a particular price, the trading system determines the updated market value of the instrument (step 1010), and completes the order only if the accepted price is at least the predetermined distance and direction away from the updated market value (step 1020).

[0089] By executing orders at a specified discount, for example, and therefore outside market value, the party who enters the order into the trading system receives a discount to the current market value of the financial instrument, while the party who accepts the order posted by the trading system pays a premium above the current market value of the instrument. This is different to the current operation of limit orders in the open market, for example, which only execute once the market value of the underlying instrument reaches a specific price.

[0090] The trading system of the present invention creates a new form of liquidity for markets by taking advantage of the difference between the short term and long term liquidity values of financial instruments. The system allows the market to determine the value of this difference in the form of a discount, which is effectively converted into a tradable spread. This spread is much like the difference between the bid and ask prices of current trading systems.

[0091] Taking an example, assume that a stock S is trading at \$10/share (a current market value of the share) and it can absorb only 500 share blocks without significantly affecting the market. Further assume that there is a broker/dealer interested in buying 50,000 shares of S providing she can buy it at a 2.5 % discount (25 cents/share) lower than the market price of the stock which is constantly changing and is currently trading at \$10/share. The broker/dealer estimates over the next three days she will be able to sell the shares at an average price of \$9.80/share, thus realizing a profit of \$.05 cents a share or \$2500.

[0092] However, to explore the possibility of finding a seller, the broker/dealer places an order to buy 50,000 shares of S pegged at \$.25 lower than the current trading price of stock S.

[0093] A mutual fund wants to sell 50,000 shares of S, and estimates that if she places a market order to sell, she will realize an average execution price of \$9.70/share. Thus, the estimated loss for the seller would be \$15,000 ( $\$0.3/\text{share} * 50,000 \text{ shares}$ ). The buyer sees the seller's order and estimates by accepting the price of \$9.75 she will save \$.05/share or ( $\$.05 * 50,000$ ) \$2500 and thus reduce her selling costs to liquidate 50,000 shares of S from \$15,000 to \$12,500.

[0094] The mutual fund sees the posted order of the broker/dealer and accepts the price of \$9.75 per share of S. In this instance both the broker/dealer and mutual fund receive a price improvement of \$.05 a share on the execution using the system. These price improvements are because of the inefficiency of current trading systems.

[0095] FIG. 11 demonstrates this positioning of liquidity in a graphical form. Assume curves C1, C2 and C3 represent the following:

5 C1: Short term liquidity value  
C2: Trading opportunity curve  
C3: Long term liquidity value

A1, A2 and A3 are three points on the curves C1, C2 and C3, respectively. Further assume the following values for these points:

10 A1 = \$9.70 Estimated execution price of 50,000 share block if liquidated immediately on the open market.  
A2 = \$9.75 Estimated trading opportunity for both parties.  
A3 = \$9.80 Estimated execution price of 50,000 share block if liquidated in smaller lots over time on the open market.

The current trading price (i.e., market value) for a financial instrument is \$10/share, shown as point P on the graph of FIG. 11.

15 [0096] At point A2, both a buyer and seller agree to trade the 50,000 share block. The buyer measures her ability to make a profitable trade using long term liquidity curve C3 while the seller uses her ability to make a profitable trade using the short term liquidity curve C1. The buyer observes that the 50,000 shares traded at point A2 (\$9.75/share) are worth the amount at point A3 (\$9.80/share) based on long term liquidity curve C3. The seller observes that the 50,000  
20 shares traded at point A2 (\$9.75/share) are worth the amount at point A1 (\$9.70/share) based on the short term liquidity curve C1. So it can be seen that the trading opportunity curve C2 provides an opportunity for both the buyer and the seller to make a profitable trade.

[0097] The profit and loss conditions for the party that posts the buy limit order (advertiser) can be summarized as follows:

**Equation 1**

profit when:  $(1 - \% \text{ discount}) * \text{current value} / \text{future estimated value} < 1$

5        loss when:  $(1 - \% \text{ discount}) * \text{current value} / \text{future estimated value} > 1$

The future estimated value is the price at which the buyer thinks she would be able to sell the stock after buying it at a % discount to the current market value. Based on this example, if the advertiser buys the stock at a 2.5% discount to the current value (\$10/share) and estimates the future value at \$9.80/share, she would make a profit. Based on this data the buyer's equation  
10    above (Equation 1) equals .995, which is less than 1 which indicates profit  $[(1 - .025) * \$10 / \$9.80 > 1]$ .

[0098] The profit and loss conditions for the seller that accepts the buy limit order can be summarized as follows:

**Equation 2**

15        profit when:  $\text{estimated liquidation cost} / \text{discount} > 1$

loss when:  $\text{estimated liquidation cost} / \text{discount} < 1$

[0099] As a further example, assume that a stock S is trading at \$10/share (a current market value of the share) and it can absorb only 500 share blocks without significantly affecting the market. Further assume that there is a broker/dealer interested in selling short 50,000 shares of S  
20    providing she can sell short at a 2.5% premium (25 cents/share) higher than the market price of the stock which is constantly changing and is currently trading at \$10/share. The broker/dealer estimates over the next three days she will be able to buy back the shares at an average price of \$10.20/share, thus realizing a profit of \$.05 cents a share or \$2500. However, to explore the possibility of finding a buyer, the broker/dealer places an order to sell 50,000 shares of S pegged  
25    at \$.25 higher than the current trading price of stock S.

[00100] A mutual fund wants to buy 50,000 shares of S, and estimates that if she places a market order to buy, she will realize an average execution price of \$10.30/share. Thus, the estimated loss for the buyer would be \$15,000 ( $\$0.3/\text{share} \times 50,000 \text{ shares}$ ). The buyer sees the seller's order and estimates by accepting the price of \$10.25 she will save \$.05/share or ( $\$.05 \times$   
5 50,000) \$2500 and thus reduce her acquisition cost of 50,000 shares of S from \$15,000 to \$12,500.

[00101] The mutual fund sees the posted order of the broker/dealer and accepts the price of \$10.25 per share of S. In this instance both the broker/dealer and mutual fund receive a price improvement of \$.05 a share on the execution using the system. These price improvements are  
10 because of the inefficiency of current trading systems.

[00102] FIG. 11 further demonstrates this positioning of liquidity in a graphical form. Assume curves C4, C5 and C6 represent the following:

15 C6: Short term liquidity value  
C5: Trading opportunity curve  
C4: Long term liquidity value

A4, A5 and A6 are three points on the curves C4, C5 and C6, respectively. Further assume the following values for these points:

20 A6 = \$10.30 Estimated execution price of 50,000 share block if liquidated immediately on the open market.  
A5 = \$10.25 Estimated trading opportunity for both parties.  
A4 = \$10.20 Estimated execution price of 50,000 share block if liquidated in smaller lots over time on the open market.

The current trading price (i.e., market value) for a financial instrument is \$10/share, shown as point P on the graph of FIG. 11.

25 [00103] At point A5, both a buyer and seller agree to trade the 50,000 share block. The seller measures her ability to make a profitable trade using long term liquidity curve C4 while the buyer uses her ability to make a profitable trade using the short term liquidity curve C6. The seller observes that the 50,000 shares traded at point A5 (\$10.25/share) are worth the amount at point A4 (\$10.20/share) based on long term liquidity curve C4. The buyer observes that the



50,000 shares traded at point A5 (\$10.25/share) are worth the amount at point A6 (\$10.30/share) based on the short term liquidity curve C6. So it can be seen that the trading opportunity curve C5 provides an opportunity for both the buyer and the seller to make a profitable trade.

[00104] The profit and loss conditions for the party that posts the sell limit order  
5 (advertiser) can be summarized as follows:

**Equation 3**

profit when:  $(1 + \% \text{ premium}) * \text{current value} / \text{future estimated value} > 1$

loss when:  $(1 + \% \text{ premium}) * \text{current value} / \text{future estimated value} < 1$

10 The future estimated value is the price at which the seller thinks she would be able to buy back the stock after selling it for the % premium to the current market value. Based on this example, if the advertiser sells the stock at a 2.5% premium to the current value (\$10/share) and estimates the future value at \$10.20/share, she would make a profit. Based on this data the seller's equation above (EQUATION 3) equals 1.005, which is greater than 1 which indicates profit  $[(1 + .025) * \$10 / \$10.20 > 1]$ .

15 [00105] The profit and loss conditions for the buyer that accepts the sell limit order can be summarized as follows:

**Equation 4**

profit when:  $\text{estimated cost of purchase} / \text{premium} > 1$

loss when:  $\text{estimated cost of purchase} / \text{premium} < 1$

20 [00106] The trading system of the present invention also allows a trader to approve execution conditions before accepting a limit order, thus approving the allowance of a safety measure that reduces trading costs for those who place limit orders into the system.

[00107] FIG. 12 depicts order entry to trading system 305 from a buyer or seller (e.g., user 300) in accordance with an embodiment of the present invention. In step 1200, trading system  
25 305 receives the side of a trade order, such as "buy" or "sell". In step 1210, the system receives

market criteria for calculating the market value to which the order will be pegged. This market criteria includes the bid, ask, midpoint of bid and ask, number of shares at a better price, last trade, trailing averages and any other formula that uses active market data to determine a price. The bid, ask and midpoint may include those prices determined by the NBBO.

5 [00108] The system then receives an identifier for the financial instrument to be traded (step 1220), along with the amount to be traded (step 1230). When using trading system 305 in the stock market, for example, the identifier and amount may include the symbol and number of shares of a stock, respectively. Trading system 305 may accept and trade orders for any financial instrument, including stocks, bonds, funds, contracts, options, futures, commodities and  
10 currencies.

[00109] In step 1240, the system receives the price difference from the pegged market value upon which the order may execute. This difference may be entered as a percentage or dollar amount, for example.

[00110] If user 300 desires to specify additional conditions for activating and/or executing  
15 the order, trading system 305 may receive such conditions in steps 1250 and 1260, respectively. These conditions are generally based on stable market data so that user 305 may insure against sudden price declines or surges. Order activation conditions may include, for example, activating the order only if the market value of the instrument remains unchanged for a particular interval of time (e.g., 15 seconds), or activating the order only on a one-minute up tick on a  
20 particular market index, such as the Dow Jones Industrial Average, NASDAQ composite index, etc. Order execution conditions may include, for example, completing the order only if a particular market index increases during a particular interval of time (e.g., one minute) after the order is accepted, completing the order only if the market value of the instrument remains unchanged for a particular interval of time (e.g., a random period between 15-45 seconds) or any  
25 other formula that uses active market data to determine a market condition of execution.

[00111] The following represents a possible user interface screen that may be presented to user 300 for entering order information:

1. Please enter:
  - A. Buy
  - B. Sell
2. Please enter what you want your order pegged to:
  - A. Bid
  - B. Ask
  - C. Midpoint of bid and ask
  - D. Last trade
  - E. Custom Peg [see advanced features]
3. Please enter the symbol:
4. Please enter the number of shares to be traded:
5. Please enter the price or percentage difference from your peg:
6. Do you want a condition to activate your order? If so, choose:
  - A. Activate my order only on a 1-minute up tick on the DJIA index.
  - B. Activate my order only if the bid price remains unchanged for 15 seconds.
  - C. Activate my order based on my own market criteria see advanced features.
7. Do you want a condition to execute your order? If so, choose:
  - A. Execute my order only if 1 minute after the initial match the DJIA index increases in that minute.
  - B. Execute my order only if after the initial match, the bid price remains unchanged for a random time period between 15-45 seconds.
  - C. Execute my order based on my own market criteria see advanced features.

[00112] After trading system 305 receives the order, it is placed for public display. In one embodiment, the order may be posted on a web-accessible site over network 310, with each listing provided in a bulletin board type fashion. The system may choose to display limited information about the order to the public, such as the identity and amount of the order's underlying instrument, along with the distance from market value required to execute the order and any other execution conditions, if specified. Additionally, trading system 305 may allow user 300 to hide their order entirely, or show only a portion of their order.

[00113] Once the order is displayed, it may be accepted only if activated (i.e., made available for trading). Trading system 305 may indicate that an order is available for trading by, for example, associating a particular color with the posted order. In one embodiment, if an order is colored green, it is active (i.e., available for trading); if the order is colored gray, then the order is inactive (i.e., not available for trading) - potentially due to non-satisfaction of an activation condition.

[00114] FIG. 13 depicts an activation scenario in accordance with an embodiment of the present invention. If no activation conditions were specified with an order (step 1300), then trading system 305 posts an active order (step 1310). However, if activation conditions were specified, then the system posts an inactive order (step 1320) until all activation conditions are satisfied (step 1330). Once satisfied, the system activates the posted order (step 1340) while the activation conditions remain satisfied (step 1350). If they do not remain satisfied, the order is deactivated (step 1360) until the activation conditions become satisfied again.

[00115] An order posted by trading system 305 (whether active or inactive) may list the offered buy or sell price in different ways, such as by percentage (i.e., percentage discount off the current market value), a price differential (i.e., distance in monetary amount away from current market value), or the actual offered buy/sell price. For this last display method, trading system 305 may periodically (e.g., several times per minute) update the offered buy/sell price by scanning the current market price to which the order is pegged (using third party market scanning software in one embodiment), and subtracting/adding the specified distance from that market value for display.

[00116] Embodiments of trading system 305 are not limited in the ways in which an order may be accepted. In one embodiment, a user may accept a posted order by clicking on it. In another embodiment, a user may enter an order on the opposite side of an existing order in the system, and the system will automatically match the two orders (if conforming), resulting in acceptance. Users of trading system 305 may be registered with the system, and be required to enter user identification and passwords for authentication.

[00117] Once the order is accepted, trading system 305 determines if it can be completed according to associated execution conditions. FIG. 14 depicts an execution scenario in accordance with an embodiment of the present invention.

[00118] Upon acceptance of the order (step 1400), the system scans the market to  
5 determine the updated market value of the underlying financial instrument (step 1410) according to the market criteria specified in the order by user 300. Third party software programs that scan market data may be utilized in this step. Once the updated market value is determined, if the accepted price is not at least the predetermined distance away from the updated value as specified in the order, then the order is canceled (step 1460). If the accepted price is at least the  
10 predetermined distance away from the updated value, then absent further execution conditions the order is completed (step 1440). Trading system 1440 may complete the order by, for example, executing the order itself or submitting the order to a third party system for execution.

[00119] If execution conditions were specified with the order (step 1430), then trading system 305 completes the order if the execution conditions are satisfied (step 1450). If the  
15 execution conditions are not satisfied, the order is canceled.

[00120] According to embodiments of the present invention, orders may not be completed, and users may not be notified of order acceptance and completion, until any and all associated activation and execution conditions are satisfied.

[00121] Listing 1 below illustrates hypothetical buy and sell orders as posted by trading  
20 system 305 in accordance with an embodiment of the present invention:

### Listing 1

#### Stock XYZ

Reference	Amount	Price	Execution Condition	Reference	Amount	Price	Execution Condition
A	400	80.02	B15	E	300	80.04	A15
B	1,000	80.00		F	800	80.07	
C	1,200	79.99		G	2,000	80.08	
D	100,000	79.75		H	75,000	80.20	

[00122] For purposes of this listing, assume that the buy order marked by code identifier B15 is pegged to the current bid price of stock XYZ, and includes an execution condition requiring the bid price to remain unchanged for 15-45 seconds after a seller accepts the order (hence, the “B” in the code stands for pegging to the bid price and the “15” stands for the particular execution condition and corresponding time interval). Any code identifier may be found in a dictionary of definitions in trading system 305. Thus, order D represents that the buyer will buy 100,000 shares of stock XYZ if the bid price remains unchanged for 15-45 seconds after the initial matching of orders. This particular execution condition prevents gaming of the system (the exact time period need not be disclosed to either the buyer or seller). The seller sees the code identifier and accepts the execution condition B15 set forth by the buyer. Once the seller accepts to sell 100,000 shares of stock XYZ, neither the buyer nor the seller may cancel the order until the system executes the trade or cancels it.

[00123] On the other side, assume that the sell order marked by code identifier A15 is pegged to the current ask price of stock XYZ, and includes an execution condition requiring the ask price to remain unchanged for 15-45 seconds after a buyer accepts the order (hence, the “A” in the code stands for pegging to the ask price and the “15” stands for the particular execution condition and corresponding time interval). Thus, order H represents that the seller will sell 75,000 shares of stock XYZ if the ask price remains unchanged for 15-45 seconds after the initial matching of orders. Similarly, the buyer sees the code identifier and accepts the execution condition A15 set forth by the seller. Once the buyer accepts to buy 75,000 shares of stock XYZ, neither the buyer nor the seller may cancel the order until the system executes the trade or cancels it.

[00124] Several embodiments of the invention are specifically illustrated and/or described herein. However, it will be appreciated that modifications and variations of the invention are covered by the above teachings and within the purview of the appended claims without departing from the spirit and intended scope of the invention.

**What Is Claimed Is:**

1. A computer-implemented method for trading financial instruments, comprising:  
receiving from a first party an order to trade a financial instrument, the order specifying  
5 timing information for delaying completion of the order;  
upon matching the order with a contra order of a second party, determining a current  
market value of the financial instrument; and  
completing the order only if the determined market value of the financial instrument  
remains unchanged for an amount of time based on the timing information specified in the  
10 order.
2. The method of claim 1, wherein the timing information includes a minimum time limit.
3. The method of claim 1, wherein the timing information includes a maximum time limit.
- 15 4. The method of claim 1, wherein the timing information includes a time period between a  
minimum time limit and a maximum time limit.
5. The method of claim 4, wherein the amount of time includes a random time period within the  
20 minimum time limit and the maximum time limit.
6. The method of claim 1, wherein the amount of time includes a pre-set time period.
7. The method of claim 1, wherein the amount of time includes a period of time during which  
25 the determined market value of the financial instrument is verified.
8. The method of claim 1, wherein the order is received from the first party over a network.
9. The method of claim 1, wherein the order to trade is a buy order.
- 30 10. The method of claim 1, wherein the order to trade is a sell order.

11. The method of claim 1, wherein the financial instrument is one of a stock, bond, fund, contract, option, future, commodity and currency.
- 5 12. The method of claim 1, wherein the current market value is based on a bid price.
13. The method of claim 1, wherein the current market value is based on an ask price.
14. The method of claim 1, wherein the current market value is based on the midpoint of a bid  
10 and ask price.
15. The method of claim 1, wherein the current market value is based on a last trade price.
16. The method of claim 1, wherein completing the order includes executing the order.  
15
17. The method of claim 1, wherein completing the order includes submitting the order to a third party system for execution.
18. The method of claim 1, wherein the order further specifies at least one activation condition,  
20 and further comprising delaying activation of the order until the at least one activation condition is satisfied.
19. The method of claim 18, wherein the at least one activation condition includes activating the order only if a market value of the financial instrument remains unchanged for a particular  
25 interval of time.
20. The method of claim 18, wherein the activation of the order includes posting the order in a manner indicating that the order is available for trading.



21. The method of claim 20, wherein the order is posted on a bulletin board transmitted over a network.
22. The method of claim 21, wherein the side of the order is not posted if the current market value is based on the midpoint of a bid and ask price.
23. The method of claim 20, wherein the manner indicating that the order is available for trading includes an association of the posted order with a particular color.
24. The method of claim 1, wherein the current market value is determined based on a software program that scans market data.
25. The method of claim 1, wherein the order further specifies a predetermined distance and predetermined direction away from a market value of the financial instrument at which to trade.
26. The method of claim 25, wherein the predetermined distance is a percentage.
27. The method of claim 25, wherein the predetermined distance is a dollar amount.
28. The method of claim 25, wherein the predetermined direction is below the market value of the financial instrument.
29. The method of claim 25, wherein the predetermined direction is above the market value of the financial instrument.

30. An apparatus for trading financial instruments, comprising:

a processor; and

a memory storing instructions adapted to be executed by said processor to:

receive from a first party an order to trade a financial instrument, the order specifying  
5 timing information for delaying completion of the order,

upon matching the order with a contra order of a second party, determine a current  
market value of the financial instrument, and

complete the order only if the determined market value of the financial instrument  
remains unchanged for an amount of time based on the timing information specified in  
10 the order.

31. A system for trading financial instruments, comprising:

means for receiving from a first party an order to trade a financial instrument, the order  
specifying timing information for delaying completion of the order;

15 means for determining a current market value of the financial instrument upon matching  
the order with a contra order of a second party; and

means for completing the order only if the determined market value of the financial  
instrument remains unchanged for an amount of time based on the timing information  
specified in the order.

20 32. A computer-implemented method for trading financial instruments, comprising:

displaying through a user interface an order entry field soliciting timing information for  
delaying completion of an order to trade a financial instrument;

25 upon receipt of the solicited timing information, determining a current market value of  
the financial instrument; and

completing the order only if the determined market value of the financial instrument  
remains unchanged for an amount of time based on the solicited timing information.

33. A computer-implemented method for trading financial instruments, comprising:  
displaying through a user interface an order listing specifying timing information for  
delaying completion of an order to trade a financial instrument; and  
completing the order only if a current market value of the financial instrument remains  
5 unchanged for an amount of time based on the timing information specified in the order.

34. A computer-implemented method for trading financial instruments, comprising:  
receiving from a first party an order to trade a financial instrument;  
upon matching the order with a contra order of a second party, determining a current  
10 market value of the financial instrument; and  
completing the order only if the determined market value of the financial instrument  
remains unchanged for an amount of time.

35. The method of claim 34, wherein the current market value is based on a bid price.

36. The method of claim 34, wherein the current market value is based on an ask price.

37. The method of claim 34, wherein the amount of time includes a minimum time limit.

38. The method of claim 34, wherein the amount of time includes a maximum time limit.

39. The method of claim 34, wherein the amount of time includes a time period between a  
minimum time limit and a maximum time limit.

40. The method of claim 39, wherein the amount of time includes a random time period within  
the minimum time limit and the maximum time limit.

41. The method of claim 34, wherein the amount of time includes a pre-set time period.

42. The method of claim 34, wherein the amount of time includes a period of time during which the determined market value of the financial instrument is verified.

5 43. A computer-implemented method for providing financial instruments for trading, comprising:

receiving an order to trade a financial instrument, the order specifying timing information for delaying activation of the order;

determining a current market value of the financial instrument; and

10 activating the order only if the determined market value of the financial instrument remains unchanged for an amount of time based on the timing information specified in the order.

15 44. The method of claim 43, wherein activating the order includes posting the order in a manner indicating that the order is available for trading.

45. The method of claim 44, wherein the order is posted on a bulletin board transmitted over a network.

20 46. The method of claim 43, wherein the current market value is based on a bid price.

47. The method of claim 43, wherein the current market value is based on an ask price.

48. The method of claim 43, wherein the timing information includes a minimum time limit.

25 49. The method of claim 43, wherein the timing information includes a maximum time limit.

50. The method of claim 43, wherein the timing information includes a time period between a minimum time limit and a maximum time limit.

51. The method of claim 50, wherein the amount of time includes a random time period within the minimum time limit and the maximum time limit.

**Abstract**

A method and system for trading financial instruments with an execution delay.

According to one embodiment, a trading system receives from a first party an order to trade a  
5 financial instrument, the order specifying timing information for delaying completion of the  
order, determines a current market value of the financial instrument upon matching the order  
with a contra order of a second party, and completes the order only if the determined market  
value of the financial instrument remains unchanged for an amount of time based on the timing  
information specified in the order.

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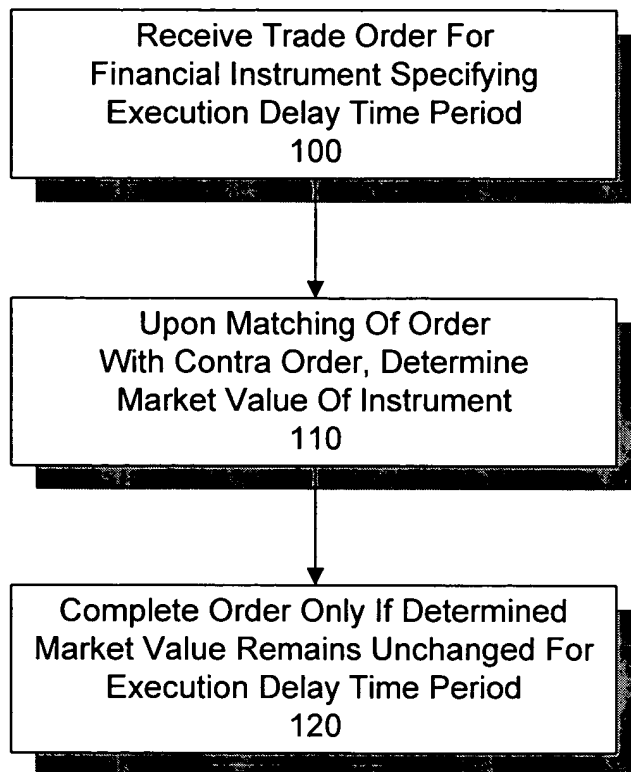


FIG. 1

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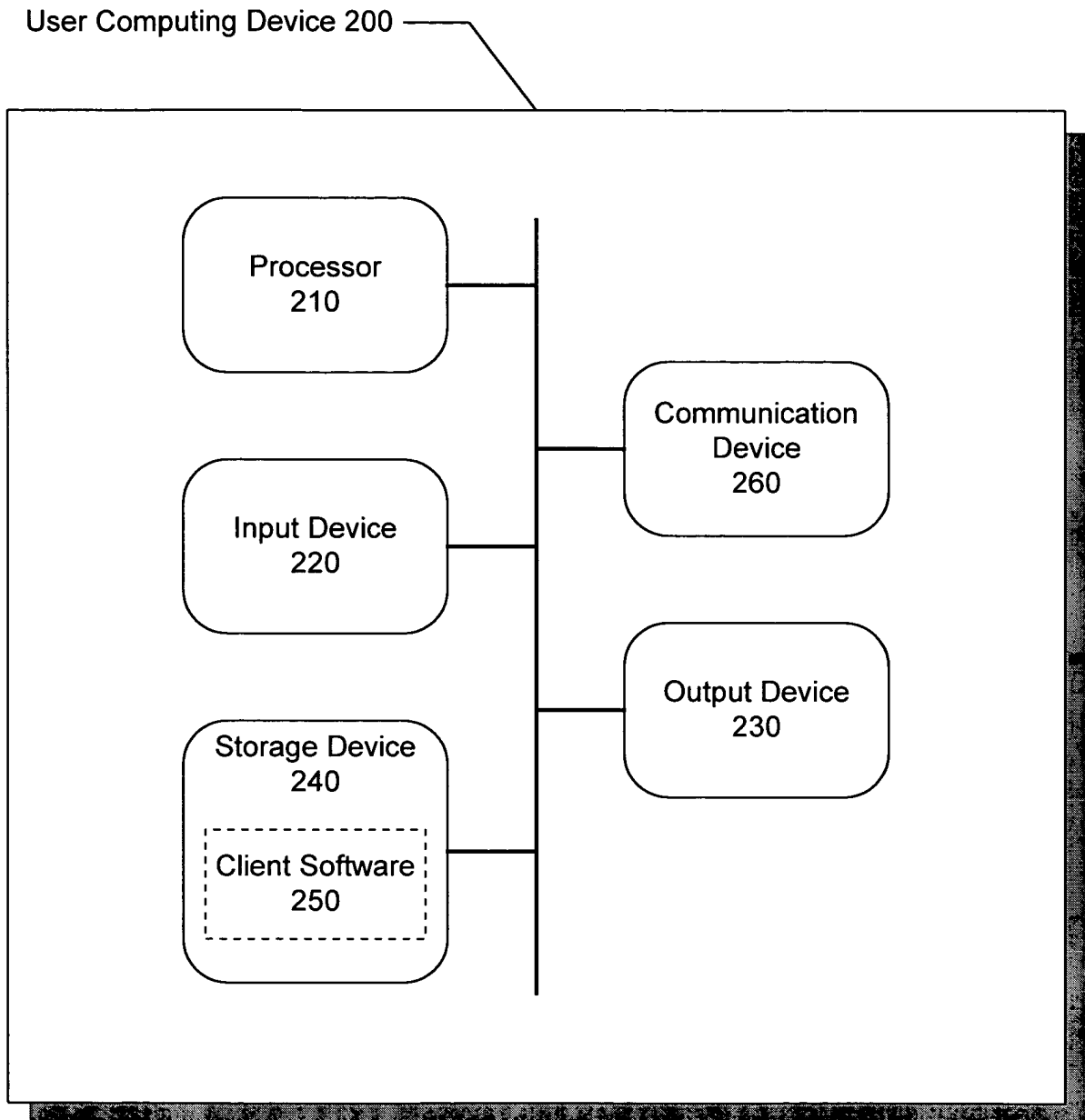


FIG. 2



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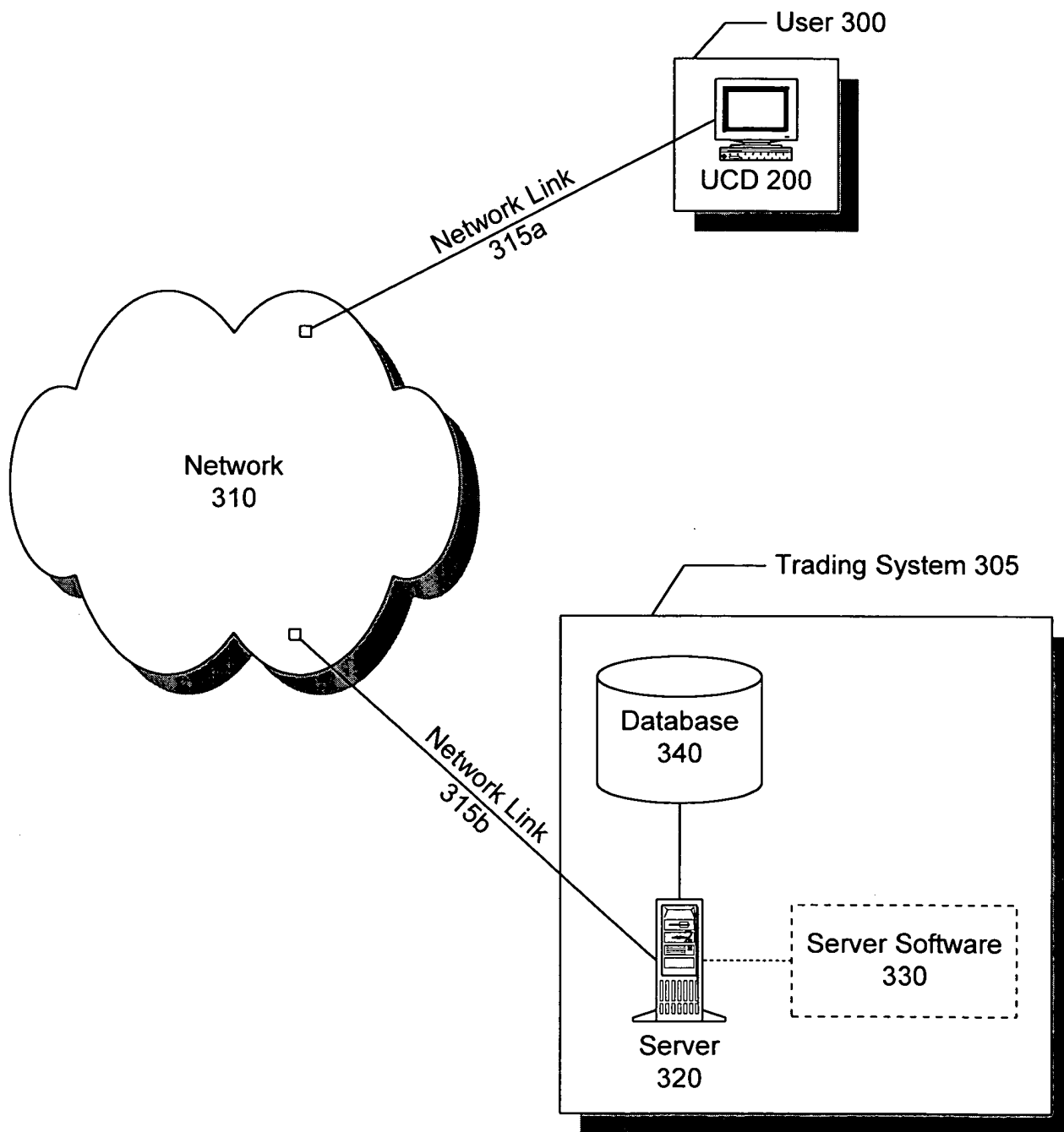


FIG. 3

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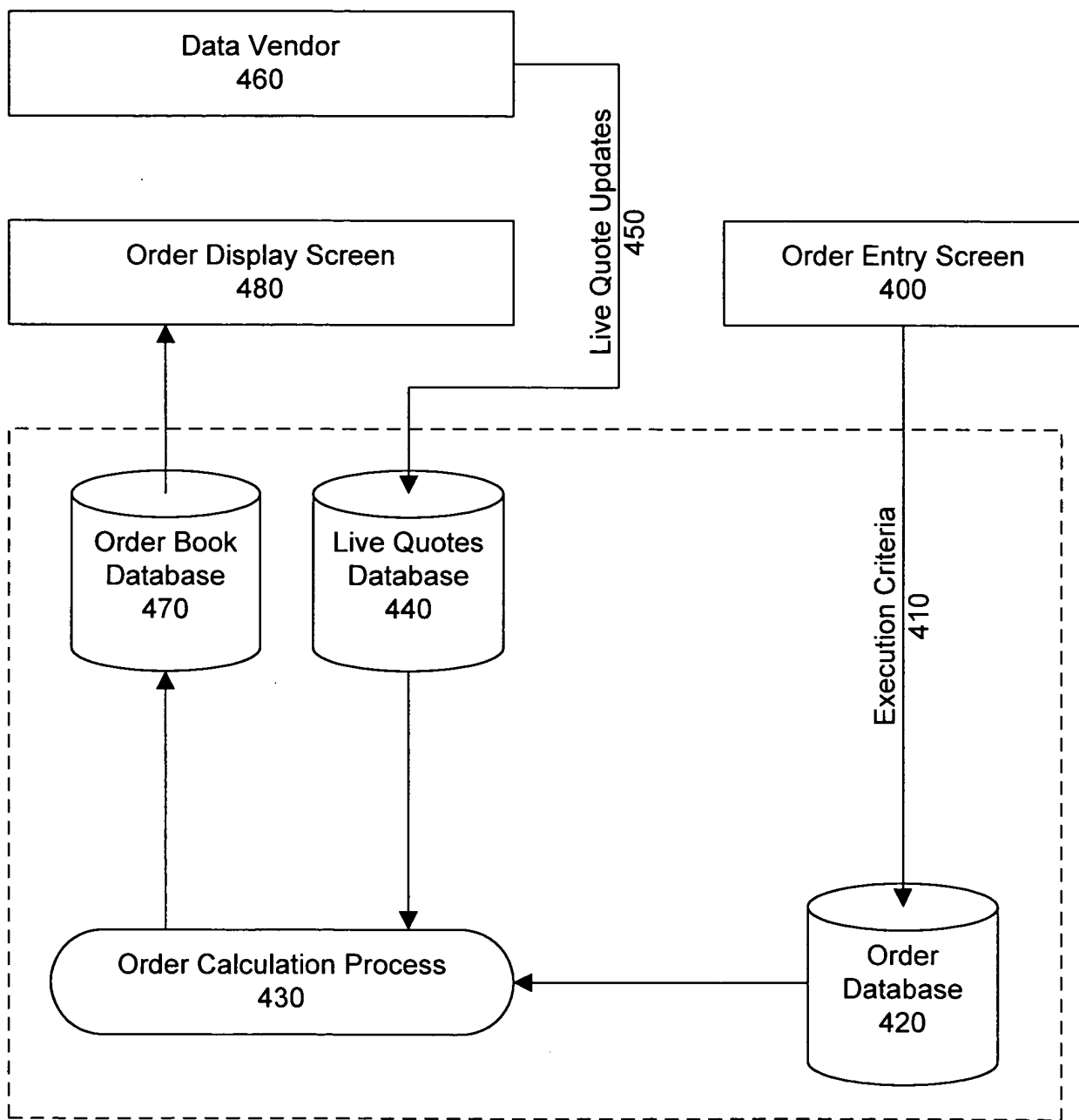


FIG. 4

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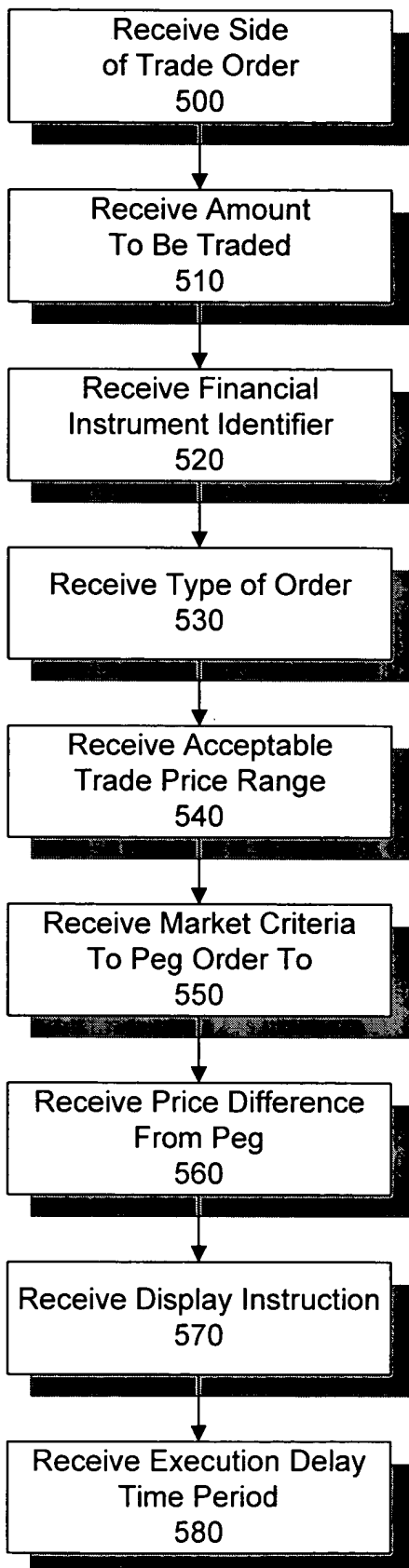


FIG. 5

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Order Entry Screen 400

600	610	620	630	640
<b>Buy/Sell</b>	<b>Quantity</b>	<b>Symbol</b>	<b>Expire</b>	<b>Price</b>
<input type="radio"/> Buy <input type="radio"/> Sell	<input type="text"/>  Show <input type="text"/>	<input type="text"/>	<input type="radio"/> Day <input type="radio"/> GTC	<input type="text"/> Min  <input type="text"/> Max

650	660	670	680
<b>PEG</b>	<b>PEG DIFFERENCE</b>	<b>Static Peg Activation</b>	<b>Static Peg Execution</b>
<input type="radio"/> Bid <input type="radio"/> Mid <input type="radio"/> Ask	<input type="text"/> Number of Pennies	<input type="text"/> Min. Secs	<input type="text"/> Min. Secs  <input type="text"/> Max. Secs


  

690

Enter Order

FIG. 6

Get Symbol



700

710

720

730

01/21/2004

1:06:03 PM

Symbol	YHOO		Price	Current	Last	Last 5 avg	
Last	47.38	BID	47.35	1.4	7.3	2.4	secs
Change	-0.28	ASK	47.37	2.5	5.4	3.8	secs
Volume	826,500	MID	47.36	1.4	5.4	3.0	secs

Buy Orders			Sell Orders			Buy/Sell Mid Orders		
Shares	Price	Execute	Shares	Price	Execute	Shares	Price	Execute
5000	47.35	1/2 B	5000	47.37	1/2 A	8000	47.36	1/2 M
10000	47.35	1/3 B	8000	47.37	1/2 A	10000	47.36	1/4 M
HIDE	47.34	2/5 B	10000	47.38	1/4 A	15000	47.36	2/6 M
25000	47.27	1/4 B	100000	47.42	2/6 A	HIDE	47.36	1/5 M
50000	47.27	2/7 B	HIDE	47.47	1/5 A			
100000	47.22	1/5 B						
250000	47.15	2/10 B						

740

750

760

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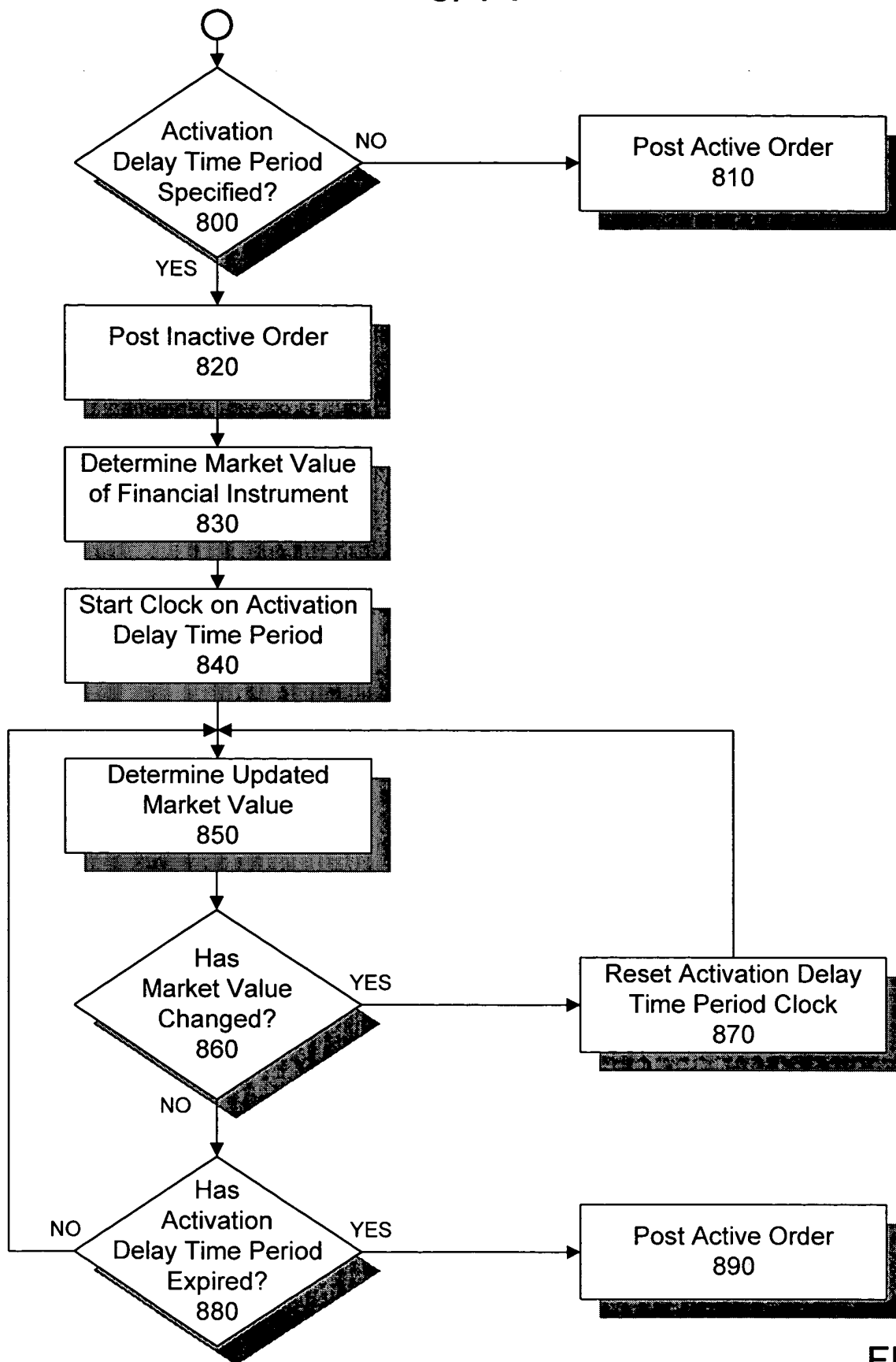


FIG. 8

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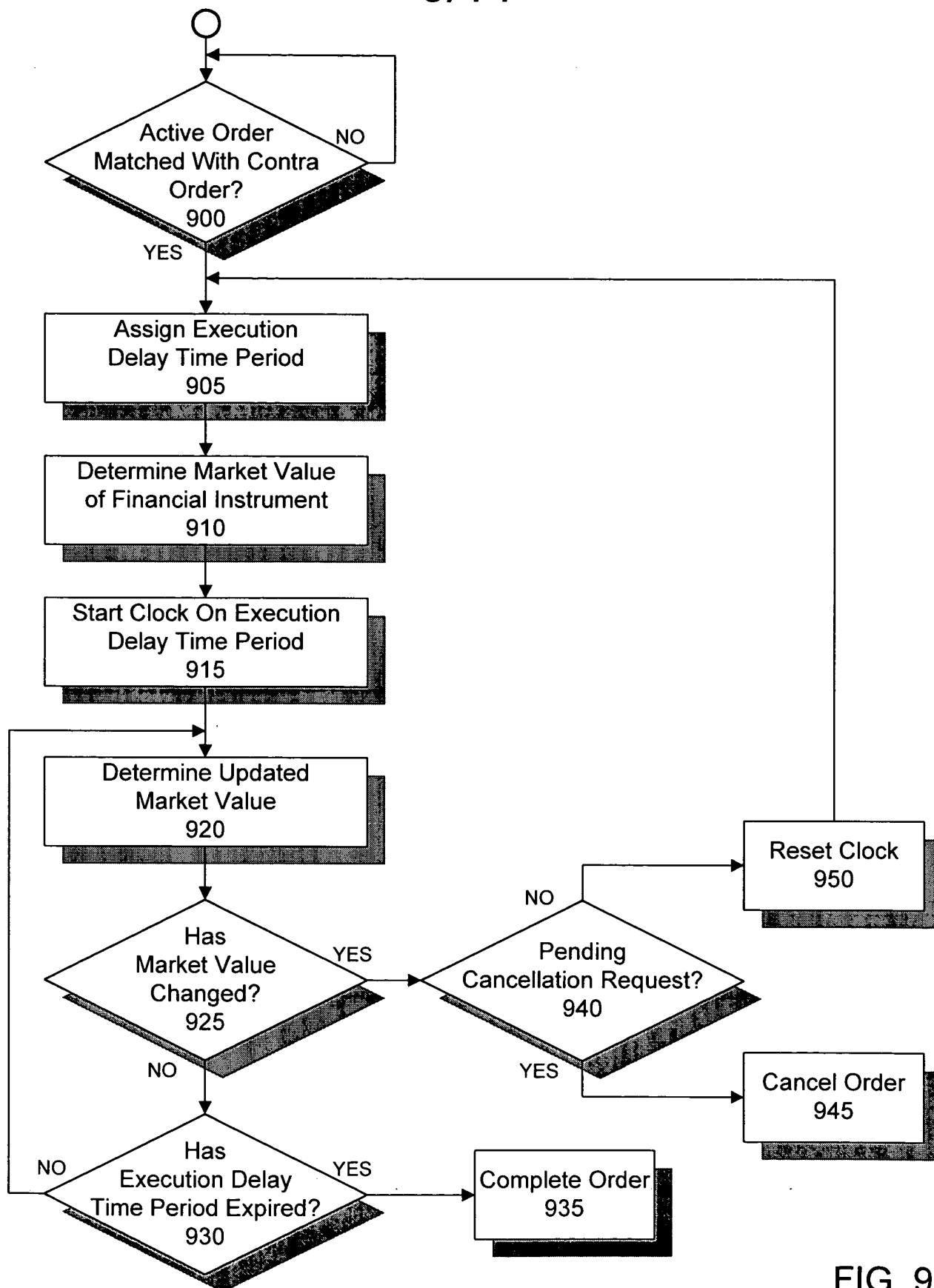


FIG. 9

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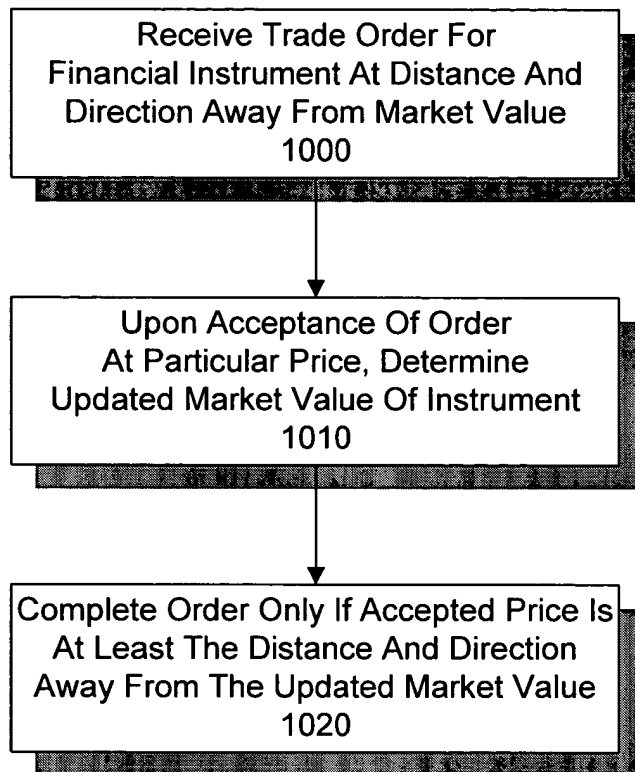


FIG. 10



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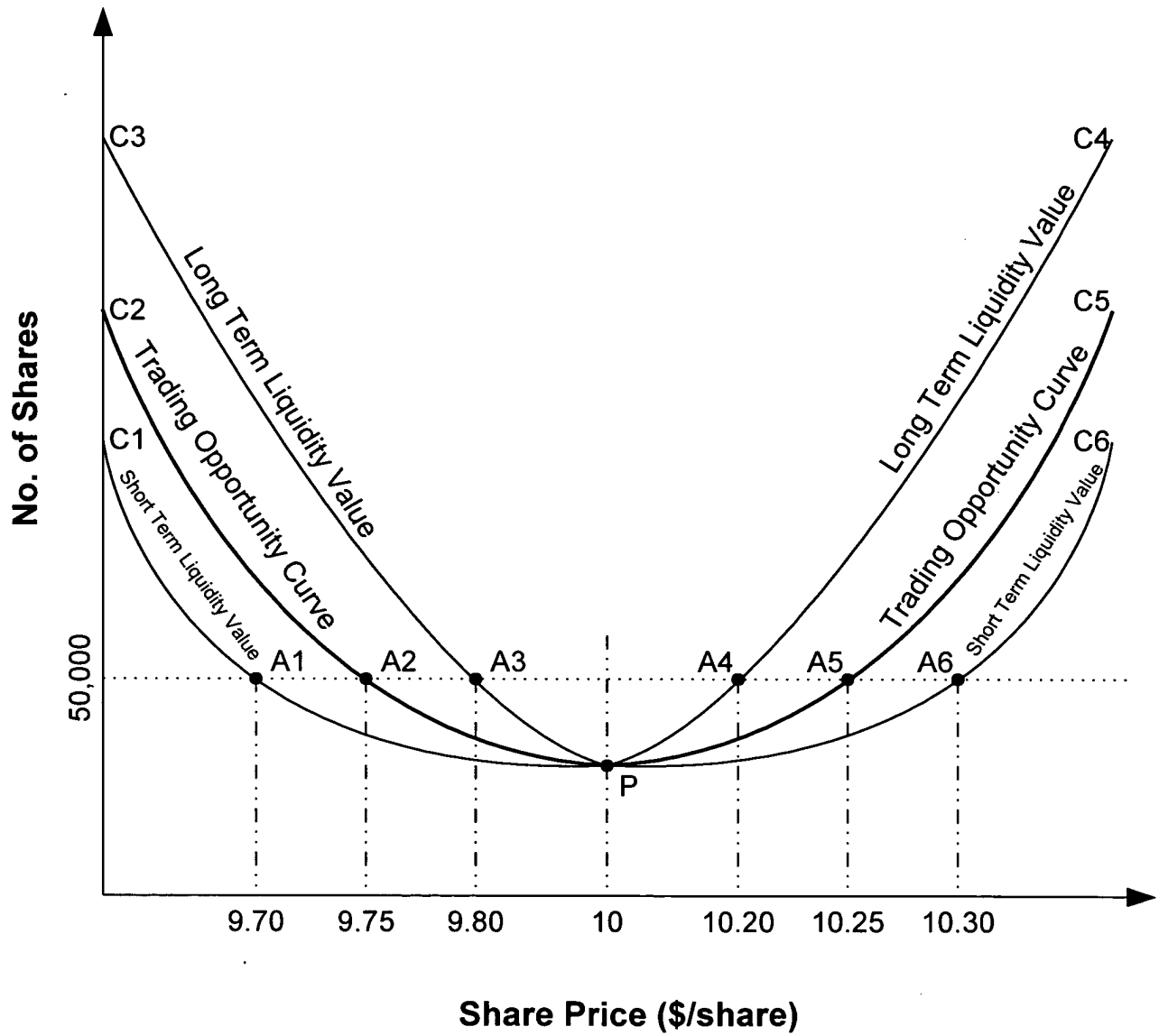


FIG. 11

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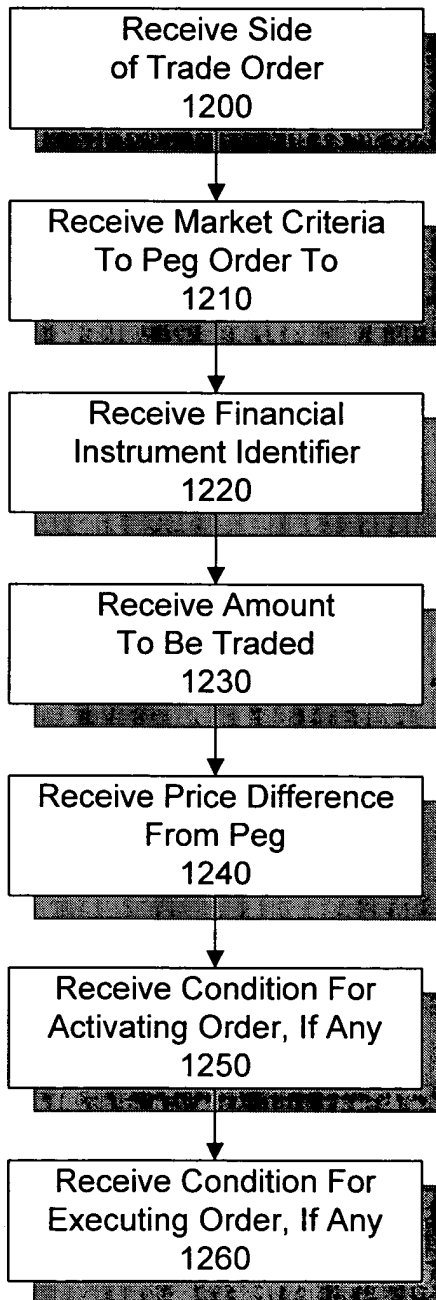


FIG. 12

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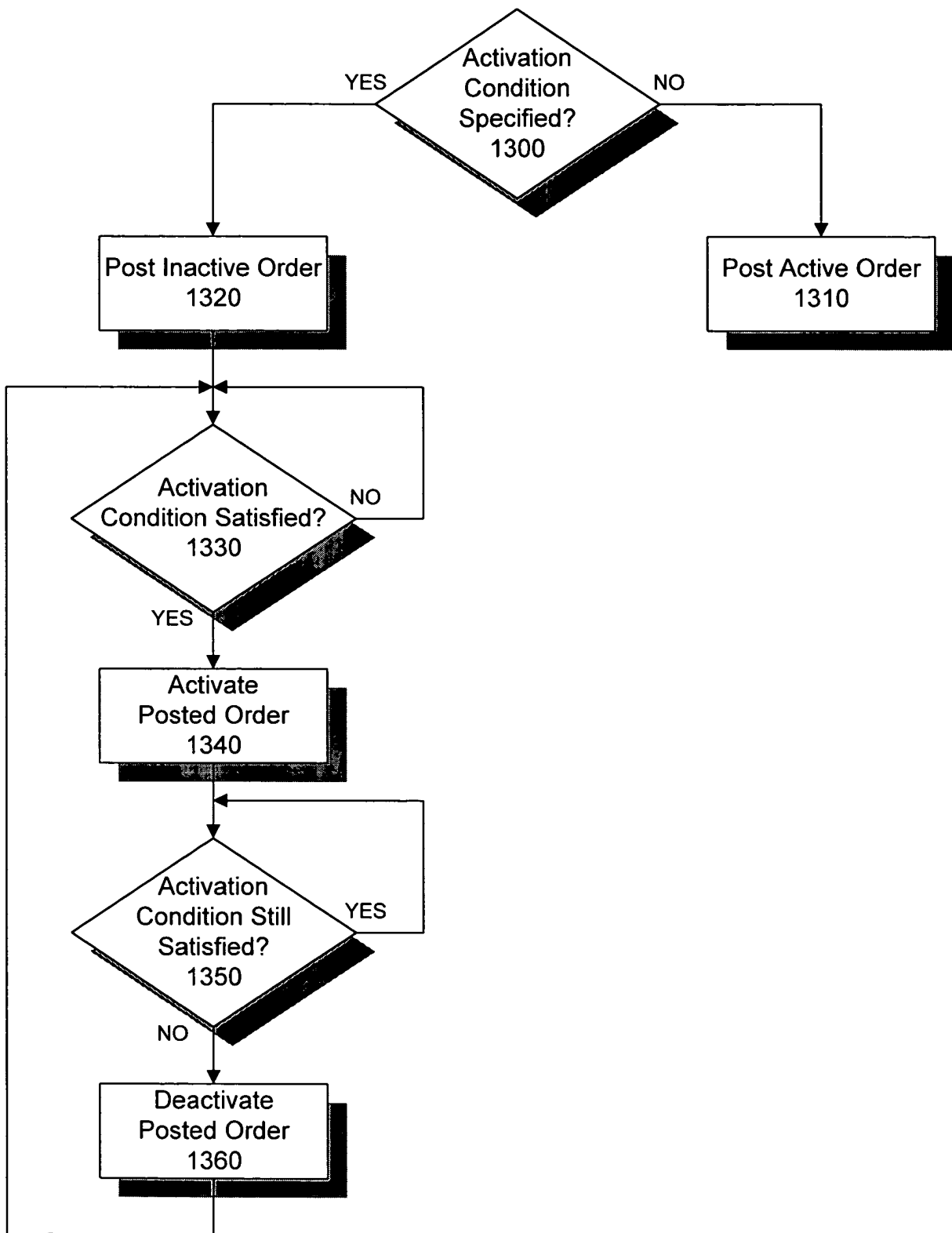


FIG. 13

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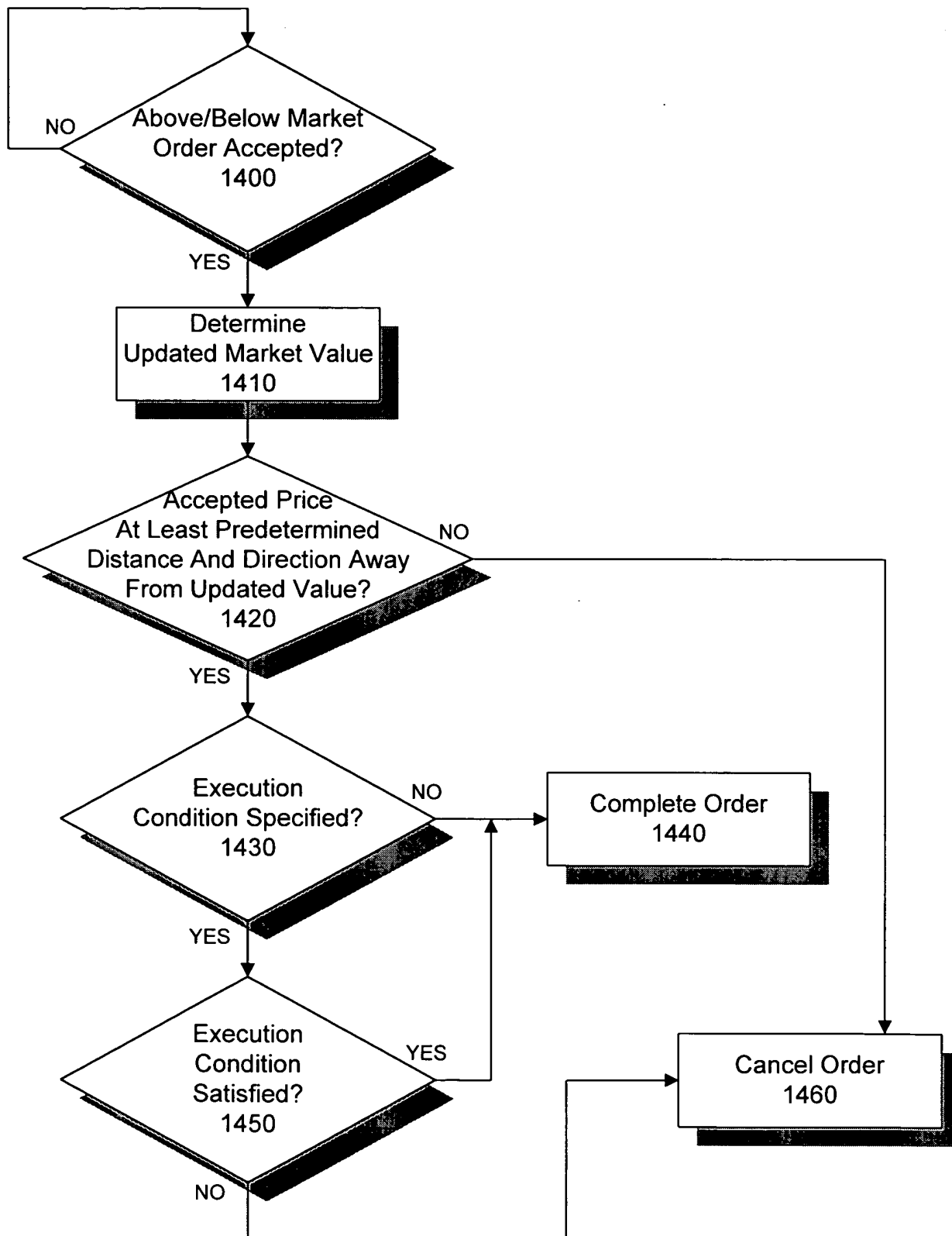


FIG. 14

PATENT APPLICATION SERIAL NO. \_\_\_\_\_

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

05/10/2004 LWONDIM1 00000014 110600 10840378

01 FC:2001	385.00 DA
02 FC:2202	279.00 DA
03 FC:2201	172.00 DA

PTO-1556  
(5/87)

# PATENT APPLICATION FEE DETERMINATION RECORD

Effective October 1, 2003

Application or Docket Number

10840378

## CLAIMS AS FILED - PART I

	(Column 1)	(Column 2)
TOTAL CLAIMS	51	
FOR	NUMBER FILED	NUMBER EXTRA
TOTAL CHARGEABLE CLAIMS	51 minus 20 =	* 31
INDEPENDENT CLAIMS	7 minus 3 =	* 4
MULTIPLE DEPENDENT CLAIM PRESENT <input type="checkbox"/>		

\* If the difference in column 1 is less than zero, enter "0" in column 2

## CLAIMS AS AMENDED - PART II

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT A	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	**
Independent	*	Minus	***
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT B	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	**
Independent	*	Minus	***
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

	(Column 1)	(Column 2)	(Column 3)
AMENDMENT C	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA
Total	*	Minus	**
Independent	*	Minus	***
FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM <input type="checkbox"/>			

\* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20."

\*\*\* If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3."

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

SMALL ENTITY TYPE ☐

OR OTHER THAN SMALL ENTITY

RATE	FEE
BASIC FEE	385.00
XS 9=	279
X43=	172
+145=	
TOTAL	836

RATE	FEE
BASIC FEE	770.00
XS18=	
X86=	
+290=	
TOTAL	

SMALL ENTITY

OR OTHER THAN SMALL ENTITY

RATE	ADDITIONAL FEE
XS 9=	
X43=	
+145=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
XS18=	
X86=	
+290=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
XS 9=	
X43=	
+145=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
XS18=	
X86=	
+290=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
XS 9=	
X43=	
+145=	
TOTAL ADDIT. FEE	

RATE	ADDITIONAL FEE
XS18=	
X86=	
+290=	
TOTAL ADDIT. FEE	