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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
61/585,794	01/12/2012	Moshe Rock	22436-0230P01

26161
FISH & RICHARDSON P.C. (BO)
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CONFIRMATION NO. 4869
ABANDONMENT/TERMINATION
LETTER



Date Mailed: 12/27/2012

NOTICE OF ABANDONMENT

Express Abandonment

The letter of Express Abandonment filed on 12/17/2012 is acknowledged.

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/ylueng/

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Moshe Rock	Art Unit : Unknown
Serial No. : 61/585,794	Examiner : Unknown
Filed : January 12, 2012	Conf. No. : 4869
Title : TOUCH SCREEN ACTUATION GLOVE	

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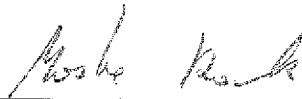
EXPRESS ABANDONMENT UNDER 37 CFR §1.138

Applicant hereby expressly abandons application serial number 61/585,794, filed January 12, 2012.

Please apply any necessary charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Respectfully submitted,

Date: DEC, 12 2012



 Moshe Rock

22952712.doc

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I hereby certify under 37 CFR §1.8(a) that this correspondence is either (A) addressed as set out in 37 CFR §1.1(a) and being deposited with the United States Postal Service as first class mail with sufficient postage, or (B) being transmitted by facsimile in accordance with 37 CFR § 1.6(d) or via the Office electronic filing system in accordance with 37 CFR § 1.6(a)(4), on the date indicated below.

December 17, 2012

 Date of Deposit or Transmission

Nancy Bechet

 Signature

Nancy Bechet

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Electronic Acknowledgement Receipt

EFS ID:	14484928
Application Number:	61585794
International Application Number:	
Confirmation Number:	4869
Title of Invention:	Touch Screen Actuation Glove
First Named Inventor/Applicant Name:	Moshe Rock
Customer Number:	26161
Filer:	Timothy A. French/Nancy Bechet
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Attorney Docket Number:	22436-0230P01
Receipt Date:	17-DEC-2012
Filing Date:	12-JAN-2012
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1	Letter Express Abandonment of the application	expressaban.pdf	25498 <small>20c6238343f57af8c943acfd8bc3f6ef068c671</small>	no	1

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Table with 6 columns: APPLICATION NUMBER, FILING or 371(c) DATE, GRP ART UNIT, FIL FEE REC'D, ATTY. DOCKET NO, TOT CLAIMS, IND CLAIMS. Row 1: 61/585,794, 01/12/2012, 250, 22436-0230P01

CONFIRMATION NO. 4869

26161
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P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

FILING RECEIPT



Date Mailed: 01/25/2012

Receipt is acknowledged of this provisional patent application. It will not be examined for patentability and will become abandoned not later than twelve months after its filing date. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Moshe Rock, Brookline, MA;

Power of Attorney:

Timothy French--30175

If Required, Foreign Filing License Granted: 01/20/2012

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US 61/585,794

Projected Publication Date: None, application is not eligible for pre-grant publication

Non-Publication Request: No

Early Publication Request: No

Title

Touch Screen Actuation Glove

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Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process simplifies the filing of patent applications on the same invention in member countries, but does not result in a grant of "an international

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Title 37, Code of Federal Regulations, 5.11 & 5.15

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PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 C.F.R. §1.53(c).

INVENTOR(S)					
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)			
Moshe	Rock	Brookline, MA			
Additional inventors are being named on the <u> 0 </u> separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
Touch Screen Actuation Glove					
CORRESPONDENCE ADDRESS					
<i>Direct all correspondence to:</i>					
<input checked="" type="checkbox"/> Customer Number: 26161					
OR					
<input type="checkbox"/> Firm <i>or</i> Individual Name					
Address					
Address					
City		State		ZIP	
Country		Telephone		Fax	
ENCLOSED APPLICATION PARTS (check all that apply)					
<input type="checkbox"/> Application Data Sheet. See 37 C.F.R. § 1.76.					
<input type="checkbox"/> CD(s), Number					
<input checked="" type="checkbox"/> Specification <i>Number of Pages</i> <u> 11 </u>					
<input type="checkbox"/> Other (specify):					
<input checked="" type="checkbox"/> Drawing(s) <i>Number of Sheets</i> <u> 4 </u>					
Application Size Fee: If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$270 (\$135 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. § 41(a)(1)(G) and 37 C.F.R § 1.16(s)					
METHOD OF PAYMENT OF FILING FEES AND APPLICATION SIZE FEE FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input type="checkbox"/> Applicant Claims small entity status. See 37 C.F.R. § 1.27.					
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees.					
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
<input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit					
Account Number <u> 06-1050 </u> A copy of this form is enclosed for fee processing.					
TOTAL FEE AMOUNT (\$)					
250					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are:					

Respectfully submitted,

Signature: /timothy a. french/ Date: January 12, 2012

Timothy A. French , Reg. No. 30,175

Telephone No: (617) 542-5070 _____

Docket No: 22436-0230P01 _____

Touch Screen Actuation Glove

TECHNICAL FIELD

This disclosure relates to thermally insulated gloves that permit actuation of capacitive touch screens while being worn in cold weather conditions.

BACKGROUND

5 Touch screen devices are actuated by capacitive sensing. The human body is an electrical conductor. Touching the surface of a capacitive touch screen device will result in distortion of the screen's electrostatic field, measurable as a change in capacitance. Different technologies may be used to determine the location of the touch, and to detect movement of the touch location. In cold weather, gloves with good thermal insulation
10 facing the palm/fingers can restrict touch actuation. This can represent a considerable limitation on effective use of capacitive touch screen devices in cold weather.

Some lines of touch screen actuation gloves currently available have a conductive fabric patch, e.g. of woven or knit fabric construction, attached to fingertip regions of the glove, or have a pattern of conductive threads or yarns sewn to the glove fingertip
15 regions. Both processes are labor intensive and costly, and the products can have limited aesthetic appeal. Also, neither process is conducive to the current trend of being able to activate the touch screen using any finger, or multiple fingers, or other parts of the hand, i.e. palm, knuckle, back of the hand, etc.

SUMMARY

20 According to the disclosure, a capacitive touch screen compatible glove comprises a plaited terry sinker loop knit construction fabric defining a glove. The fabric has a technical face layer defining a smooth surface as an outer surface of the glove, a technical back layer defining a raised surface as an inner surface of the glove, and an interface region where yarns of the technical face layer and yarns of the technical back
25 layer are intimately plaited together. At least the technical face layer comprises defined regions containing electrically conductive elements. When a glove wearer applies a defined region of the glove fabric to an opposed region of a touch screen of a capacitive

touch screen device, with pressure, electrical conductivity of the wearer's body is conducted by the defined region of the fabric to the opposed region of the touch screen in a manner to create a desired distortion of the touch screen electrostatic field.

Implementations may include one or more of the following additional features.

5 The technical face layer and the technical back layer comprise corresponding defined regions containing electrically conductive elements disposed in an electrically conductive relationship. There is a pair of touch screen compatible gloves. The fabric of the glove is thermally insulating. Additional surfaces of the glove, beyond index fingertip surfaces, are compatible for operation of a touch screen of a capacitive touch screen device. The
10 additional surfaces of the glove comprise: other fingertip surfaces, thumb tip surfaces, knuckle surfaces, hand palm surfaces, and back-of-the hand surfaces. The inner surface of the glove has a velour finish. The inner surface of the glove has a raised grid finish, comprising discrete pillar regions of raised pile, surrounding on intersecting channels of low pile or no pile. At least one of the technical face layer and the technical back layer
15 comprises elastomeric elements. The elastomeric elements have a predetermined size of about 20 denier to about 150 denier. The elastomeric elements are incorporated on every course, or repeat at every other course or at every X course, where X is any integer. The elastomeric elements are plaited under jersey yarn on the technical back layer. The electrically conductive elements have an electrical resistivity of about 7 Ohms/cm or less.
20 The electrically conductive elements have an electrical resistivity of about 5 Ohms/cm or less. The electrically conductive elements are in the form of conductive yarns. The electrically conductive elements are in the form of conductive fiber blends. The electrically conductive elements are spaced apart by insulative/nonconductive yarns in the defined regions of the at least technical face in a predetermined distribution. The
25 predetermined distribution is a pattern extending across a width of a finger of the glove. The predetermined distribution is a pattern extending along a length of a finger of the glove. The capacitive touch screen compatible glove of claim 1, wherein one or more electrically conductive elements comprises wires extending across the width or along the length of one or more glove fingers and/or thumb and the electrically conductive
30 elements are incorporated by cut-and-sew fabrication techniques.

The details of one or more implementations of the disclosure are set forth in the accompanying drawings and the description below. Other features, objects, and advantages of the disclosure will be apparent from the description and drawings, and from the claims.

5

DESCRIPTION OF DRAWINGS

FIG. 1 is a front (palm side) perspective view of a pair of capacitive touch screen compatible gloves of the disclosure.

FIG. 2 is a rear perspective view of the pair of gloves of FIG. 1.

10

FIG. 3 is a somewhat schematic edge section view of a representative fabric incorporated into gloves of this disclosure.

FIG. 4 is a sectional view of a glove of this disclosure, taken along the line 4-4 of FIG. 2.

FIGS. 5A and 5B are somewhat schematic views of alternative inner fabric surfaces of gloves of this disclosure.

15

FIG. 6 is a side section view of capacitive touch screen device being operated by a user wearing a glove of this disclosure, and FIGS. 6A and 6B are much enlarged, somewhat schematic edge section views of alternative implementations of electrically conductive fabric incorporated the glove of this disclosure during operation of the touch screen device.

20

FIG. 7 is a front (palm side) perspective view of another capacitive touch screen compatible glove of the disclosure, with one or more electrically conduct elements incorporated by cut-and-sew techniques and extending across the width of one or more of the fingers and or thumb.

DETAILED DESCRIPTION

25

Referring to FIGS. 1 and 2, a pair of capacitive touch screen compatible gloves 10R, 10L of this disclosure, shown in face view and rear view, respectively, is formed of a thermal insulation fabric 12 suitable for use of a capacitive touch screen device in cold weather. As will be described in more detail below, the fabric incorporated in the gloves

10R, 10L is constructed to permit the wearer to actuate a touch screen device by touch contact upon the capacitive screen surface with any surface region of the glove, e.g. knuckle, palm, etc., and also, of course, any fingertip.

Referring also to FIG. 3, in one implementation, the fabric 12 has plaited terry
5 sinker loop knit construction, with a raised (e.g. velour or fleece) surface 14 on the technical back, B, and a smooth jersey surface 16 on the technical face, F. Yarn 18 forming the technical face, F, and yarn 20, forming the technical back, B, are plaited together along an interface region, I (suggested in broken line).

Referring to FIG. 4, when the fabric 12 is incorporated into gloves 10R, 10L, the
10 raised (e.g. velour or fleece) surface 14 on the technical back, B, defines the inside surface 30 of the glove 10L, positioned to face the glove wearer's skin surface, S, and the smooth jersey surface 16 on the technical face defines the outside surface 32 of the glove 10L. Referring also to FIGS. 5A and 5B, the raised terry loop surface on the inside of the glove can be, e.g., in a plain velour 30A (FIG. 5A) or in a grid-like pattern 30B (FIG.
15 5B) having raised pile pillars 34 defined by intersecting channels 36 of relatively low pile or no pile, e.g. as shown and described in Rock et al. U.S. Patent No. 6,927,182, the complete disclosure of which is incorporated herein by reference.

Referring now to FIG. 6, and also to FIGS. 6A and 6B, a touch screen capacitive
20 device 50 with a touch screen 52 is shown being operated by contact of the fingertip surface 54 (by way of example only) of the finger 56 of an operator wearing a glove 10L of the disclosure (only one finger portion 58 of the glove is shown). Referring to FIG. 6A, the yarn 18 forming the technical face, F, of the fabric 12, and forming the outside surface of the glove, includes a conductive, e.g., electrically conductive, yarn or includes an electrically conductive fiber blend (for convenience, the term "conductive", as used
25 below, includes "electrically conductive"). The yarn 18 or the conductive elements in the yarn 18, e.g., the conductive yarn or the conductive fiber blend, can have an electrical resistivity of 10^7 in power of 7 per Ohms/centimeter or less, e.g., 5 Ohms/cm. The conductive yarn, e.g. in filament form, or conductive fiber blend, e.g., in spun yarn form, on the jersey side, i.e. the technical face, F, can be in spaced apart regions 60A, 60B that
30 are located at predetermined locations on the surface layer 16 of the gloves 10R, 10L.

The conductive elements of the yarn 18 are flexible (knittable), abrasion resistant (to maintain conductivity for actuation of the touch screen after abrasion. Abrasion resistance can be demonstrated on Martindale or Taber laboratory abrasion testing equipment). The conductive elements in the yarn 18 can be made of multifilament metal wire, e.g. stainless steel VN14/1X90 316L, available by Baekaert Corporation (Akron, Ohio), having electrical resistivity of 0.7 Ohms/cm. The conductive yarn can be made of filaments or of staple fiber where conductive particles are embedded in thermoplastic fiber (polyester, nylon, polypropylene, or acrylic). The conductive particle can be in micrometer (mm) or nanometer (nm) size. The conductive particle can be made of carbon and/or metal, like copper, silver, etc. The conductive particle can be embedded across the whole cross section of the thermoplastic fiber, or in core-sheath pattern where the conductive particles can be in the sheath region (see, e.g., RESISTAT[®] conductive fibers created by a suffusion process that chemically saturates the outer skin of a fiber with carbon particles, as available from Shakespeare Conductive Fibers, LLC, of Columbia, South Carolina, e.g., RESISTAT[®]F901, X505 fiber, having electrical resistivity of 10 in power of 5 Ohms/cm.) or in the core region (see, e.g., CLARETTA[®] conductive fibers with carbon contained layer(s) (polyamide) in a polyester sheath and core, as available from Kuraray Co., Ltd., of Yokayama, Japan). The conductive particles can also be embedded in the cross section of the thermoplastic fiber in a predetermined pattern (see, e.g., NEGA-STAT[®] conductive fibers with a trilobal conductive core surrounded by a polyester sheath, as available from W. Barnet & Son, LLC., of Arcadia, South Carolina, or see, e.g., MEGANA[®] conductive fibers with high concentrations of carbon in a polyester filament yarn or MEGA[®]III conductive fibers formed of nylon filament containing carbon particles, both as available from Unitika Fibers Ltd., of Japan.

In other implementations, the conductive fibers of the yarn 18 can be made by metal deposition on the yarn's surface (vapor deposition, arcing, etc.), or by a process of depositing a conductive "metal" layer on the outer surface of a synthetic fiber by chemical reaction reduction-oxidation (RED-OX), where a layer of copper (see, e.g., CUPRON[®] conductive fibers formed of polymers and/or textiles treated with copper oxide, as available from Cupron Inc., of Israel) or silver (see, e.g., X-STATIC[®] silver-

coated conductive fibers, as available from Noble Fiber Technologies, LLC, of Scranton, Pennsylvania) is applied to fiber surfaces. The conductive fibers can be commingled with or wrap a nonconductive thermoplastic filament yarn. The conductive fibers (staples) can be blended with nonconductive fiber at a predetermined ratio. Other examples of commercially available conductive fibers include, e.g.: S-SHIELD™ PES conductive fibers of 80% polyester and 20% Inox, as available from Schoeller Textiles AG, of Switzerland; CONDUCTROL® conductive fibers of acrylic polymer suffused to carbon fibers, as available from Sterling Chemicals international, Inc., of Houston, Texas; BELLTRON® conductive fibers with a polymer matrix (nylon or polyester) and conductive particles (carbon or metal) exposed on the surface, as available from Kanebo Ltd., of Tokyo, Japan; and MEGATOPIA™ conductive fibers, as available from Toray Industries, Inc., of Japan. Alternatively, the conductive yarns/fibers can be made of carbon fiber (in contrast to synthetic thermoplastic fiber loaded/filled with carbon particles).

Referring again to FIG. 4, the plaited terry sinker loop knit construction 12, with smooth jersey surface 32 on the technical face, F, and with a raised surface 30 on the technical back, B, includes elastomeric yarn elements 38 as part of the jersey (technical face, F) or plaited with the jersey yarn 18. The elastomeric filaments can wrap, cover, or can be commingled with the stitch yarn 18. The elastomeric yarn elements 38 can have any predetermined size, e.g. about 20 denier to about 150 denier, and the elastomeric yarn elements 38 can be incorporated into the fabric on every course, or repeat, e.g., at every other course, or at every X course, where “X” is any integer). Elastomeric yarn elements 38 can be also, or instead, be plaited under the jersey yarn 18 on the technical back, B.

Referring to FIG. 6B, in another implementation, conductive yarns or conductive fiber blend 18 can be on the jersey side 16 of the technical face, F, and in the terry loop yarn 20 on the velour or raised side 14 of the technical back, F, in regions 62A and 62B of the same course, e.g., courses X and Y. In this implementation, the conductive fiber of the terry sinker loop surface 14 (of the technical back, B), in a yarn form or as a raised surface like a velour, will have direct contact to the wearer’s skin surface 54, or in close proximity to the skin surface, and have direct contact through the plaited interface

construction, I, with the conductive yarn on the jersey surface 16 (of the technical face, F) in order to generate direct conductive bridge between the user/wearer's skin surface 54 and the touch screen surface 52.

5 The conductive yarns/fibers may be inserted on the technical face, F, between and/or plaited with nonconductive yarns/fibers 18, in a predetermined distribution. A textile fabric can include electrically conductive yarns spaced apart by insulative nonconductive yarns, e.g., in the predetermined distribution. The fibers/yarns of the general textile construction are typically made of nonconductive materials, such as: synthetic materials (e.g., polyester, nylon, polypropylene, acrylic); natural materials (e.g., 10 cotton or wool); regenerate fibers (e.g., rayon, modal, or Tencel[®] (i.e. Lyocell biodegradable fiber made from wood pulp cellulose)); and/or flame retardant fibers (e.g., p-aramid, m-aramid, PBI (polybenzimidazole), modacrylic, FR synthetic yarn, and FR treated cellulosic).

15 A number of embodiments of the invention have been described. Nevertheless, it will be understood that various modifications may be made without departing from the spirit and scope of the invention. For example, referring to FIG. 7, in another implementation of a capacitive touch screen compatible glove of the disclosure, a glove 100 may have electrically conductive contact regions 102 disposed at one or more 20 fingertip regions 104 and/or the thumb tip region 105, formed by textile fabric elements of conductive yarns and/or wire patterns extending across the width (106) or along the length (108) of one or more glove fingers and/or thumb, and the electrically conductive elements are incorporated by cut-and-sew fabrication techniques.

Accordingly, other embodiments are within the scope of the following claims.

25

WHAT IS CLAIMED IS:

1. A capacitive touch screen compatible glove, comprising:
a plaited terry sinker loop knit construction fabric defining a glove,
the fabric having a technical face layer defining a smooth surface as an outer surface of the glove, a technical back layer defining a raised surface as an inner surface of the glove, and an interface region where yarns of the technical face layer and yarns of the technical back layer are intimately plaited together, and
at least the technical face layer comprising defined regions containing electrically conductive elements,
whereby, when a glove wearer applies a defined region of the glove fabric to an opposed region of a touch screen of a capacitive touch screen device, with pressure, electrical conductivity of the wearer's body is conducted by the defined region of the fabric to the opposed region of the touch screen in a manner to create a desired distortion of the touch screen electrostatic field.
2. The capacitive touch screen compatible glove of claim 1, wherein the technical face layer and the technical back layer comprise corresponding defined regions containing electrically conductive elements disposed in an electrically conductive relationship.
3. The capacitive touch screen compatible glove of claim 1, comprising a pair of touch screen compatible gloves.
4. The capacitive touch screen compatible glove of claim 1, wherein the fabric of the glove is thermally insulating.
5. The capacitive touch screen compatible glove of claim 1, wherein additional surfaces of the glove, beyond index fingertip surfaces, are compatible for operation of a touch screen of a capacitive touch screen device.

6. The capacitive touch screen compatible glove of claim 5, wherein the additional surfaces of the glove comprise: other fingertip surfaces, thumb tip surfaces, knuckle surfaces, hand palm surfaces, and back-of-the hand surfaces.

7. The capacitive touch screen compatible glove of claim 1, wherein the inner surface of the glove has a velour finish.

8. The capacitive touch screen compatible glove of claim 1, wherein the inner surface of the glove has a raised grid finish, comprising discrete pillar regions of raised pile, surrounding on intersecting channels of low pile or no pile.

9. The capacitive touch screen compatible glove of claim 1, wherein at least one of the technical face layer and the technical back layer comprises elastomeric elements.

10. The capacitive touch screen compatible glove of claim 9, wherein the elastomeric elements have a predetermined size of about 20 denier to about 150 denier.

11. The capacitive touch screen compatible glove of claim 9, wherein the elastomeric elements are incorporated on every course, or repeat at every other course or at every X course, where X is any integer.

12. The capacitive touch screen compatible glove of claim 9, wherein the elastomeric elements are plaited under jersey yarn on the technical back layer.

13. The capacitive touch screen compatible glove of claim 1, wherein the electrically conductive elements have an electrical resistivity of about 7 Ohms/cm or less.

14. The capacitive touch screen compatible glove of claim 13, wherein the electrically conductive elements have an electrical resistivity of about 5 Ohms/cm or less.

15. The capacitive touch screen compatible glove of claim 1, wherein the electrically conductive elements are in the form of conductive yarns.

16. The capacitive touch screen compatible glove of claim 1, wherein the electrically conductive elements are in the form of conductive fiber blends.

17. The capacitive touch screen compatible glove of claim 1, wherein the electrically conductive elements are spaced apart by insulative/nonconductive yarns in the defined regions of the at least technical face in a predetermined distribution.

18. The capacitive touch screen compatible glove of claim 17, wherein the predetermined distribution is a pattern extending across a width of a finger of the glove.

19. The capacitive touch screen compatible glove of claim 17, wherein the predetermined distribution is a pattern extending along a length of a finger of the glove.

20. The capacitive touch screen compatible glove of claim 1, wherein one or more electrically conductive elements comprises wires extending across the width or along the length of one or more glove fingers and/or thumb, and the electrically conductive elements are incorporated by cut-and-sew fabrication techniques.

ABSTRACT

Among other things, a capacitive touch screen compatible glove is described. The glove comprises a plaited terry sinker loop knit construction fabric defining a glove. The fabric has a technical face layer defining a smooth surface as an outer surface of the glove, a technical back layer defining a raised surface as an inner surface of the glove, and an interface region where yarns of the technical face layer and yarns of the technical back layer are intimately plaited together. At least the technical face layer comprises defined regions containing electrically conductive elements. When a glove wearer applies a defined region of the glove fabric to an opposed region of a touch screen of a capacitive touch screen device, with pressure, electrical conductivity of the wearer's body is conducted by the defined region of the fabric to the opposed region of the touch screen in a manner to create a desired distortion of the touch screen electrostatic field.

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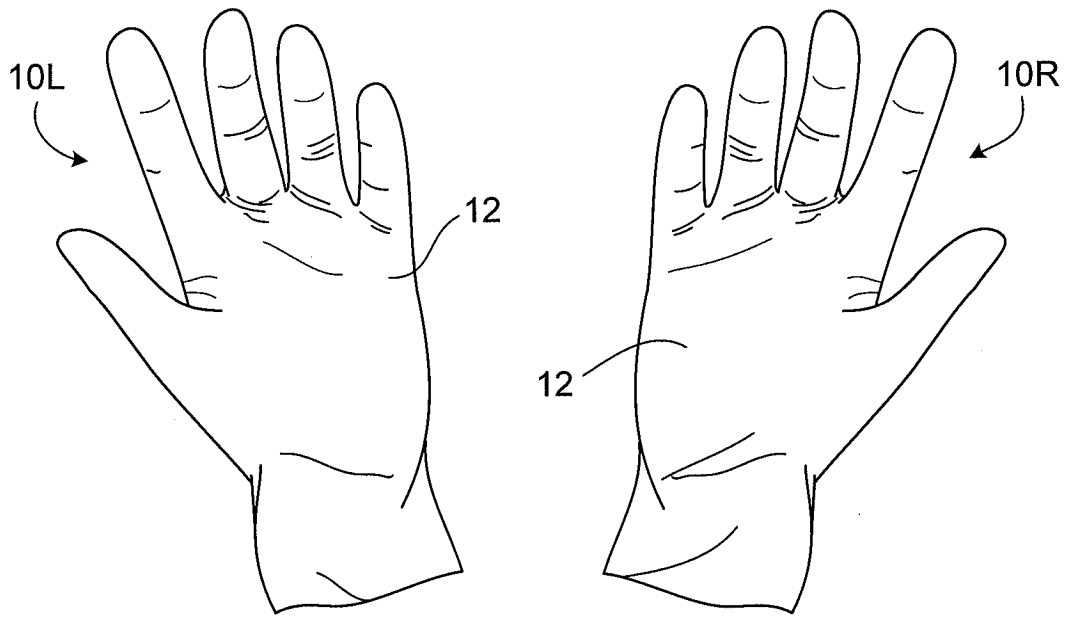


FIG. 1

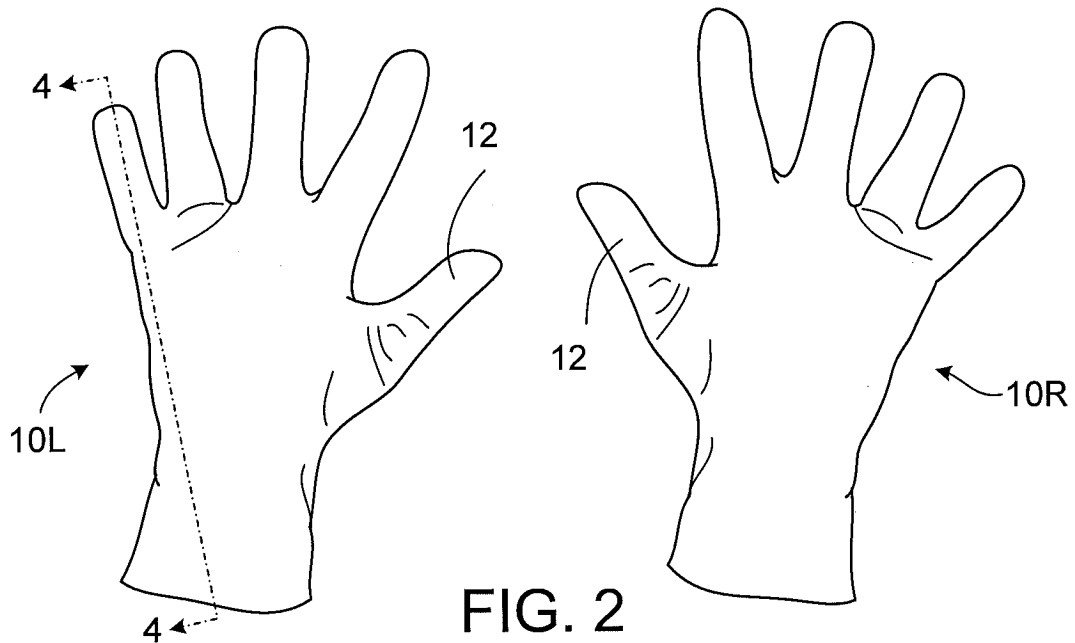


FIG. 2

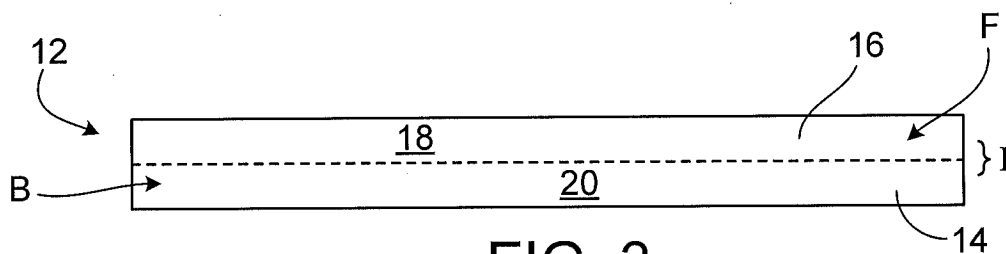


FIG. 3

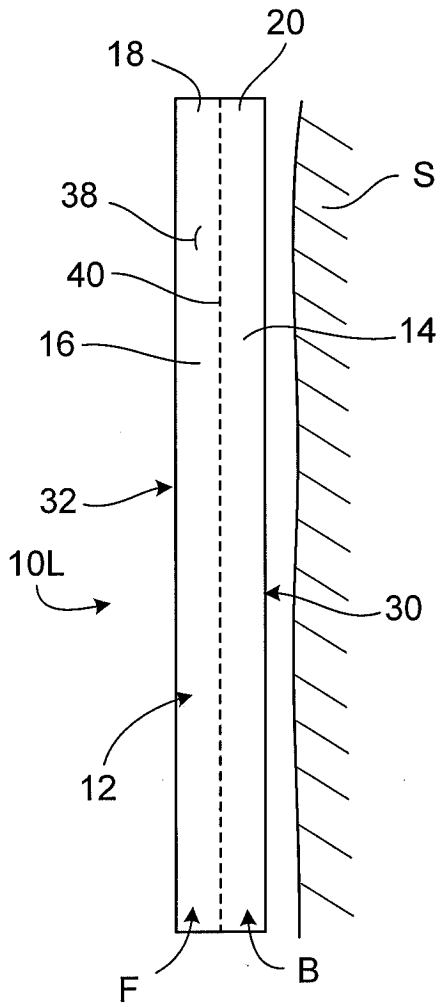


FIG. 4

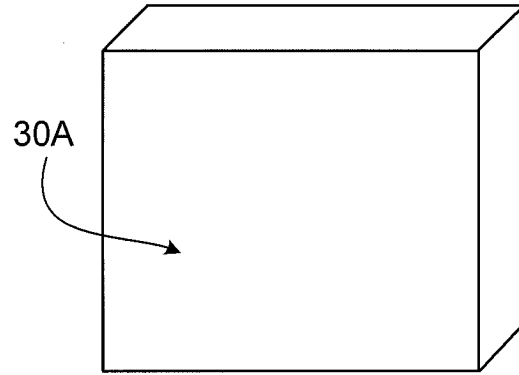


FIG. 5A

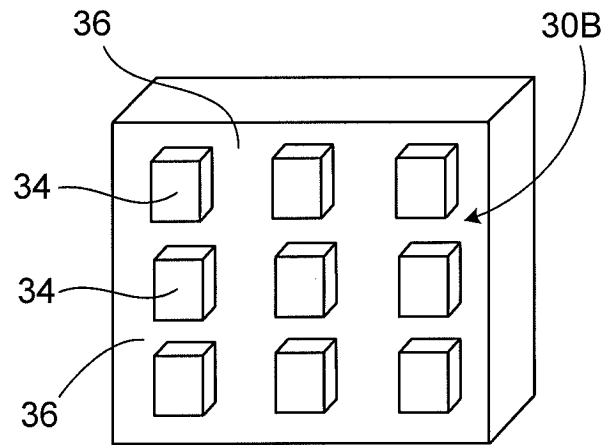


FIG. 5B

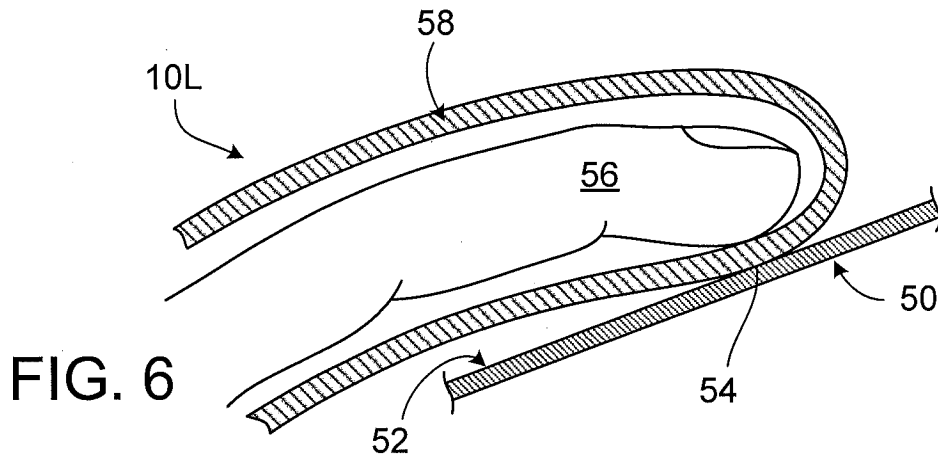


FIG. 6

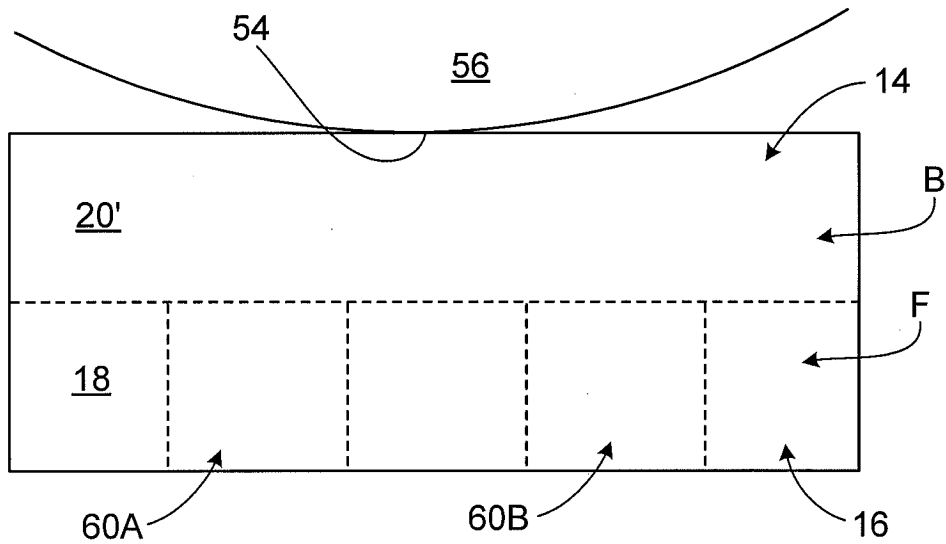


FIG. 6A

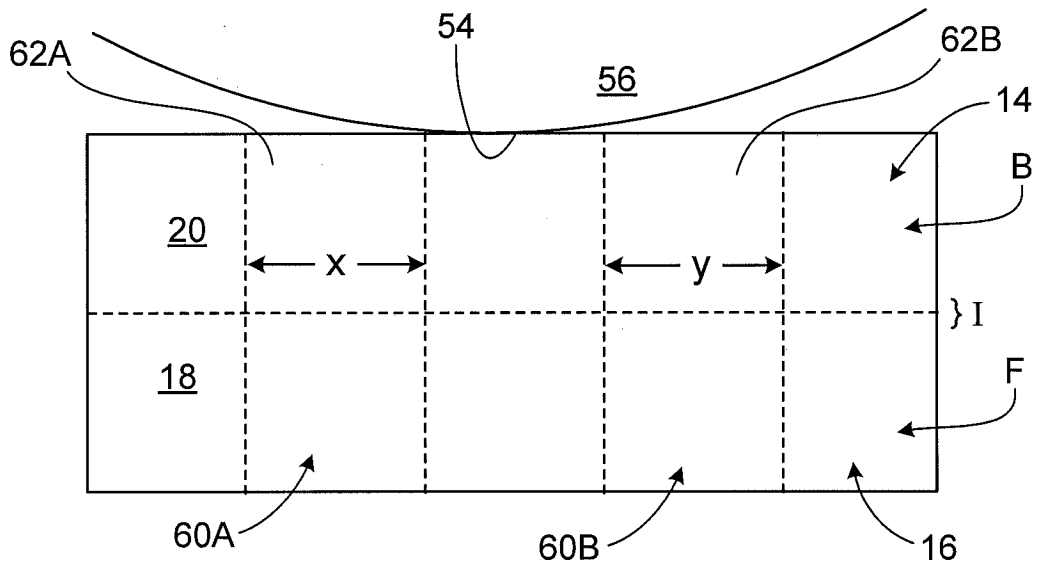


FIG. 6B

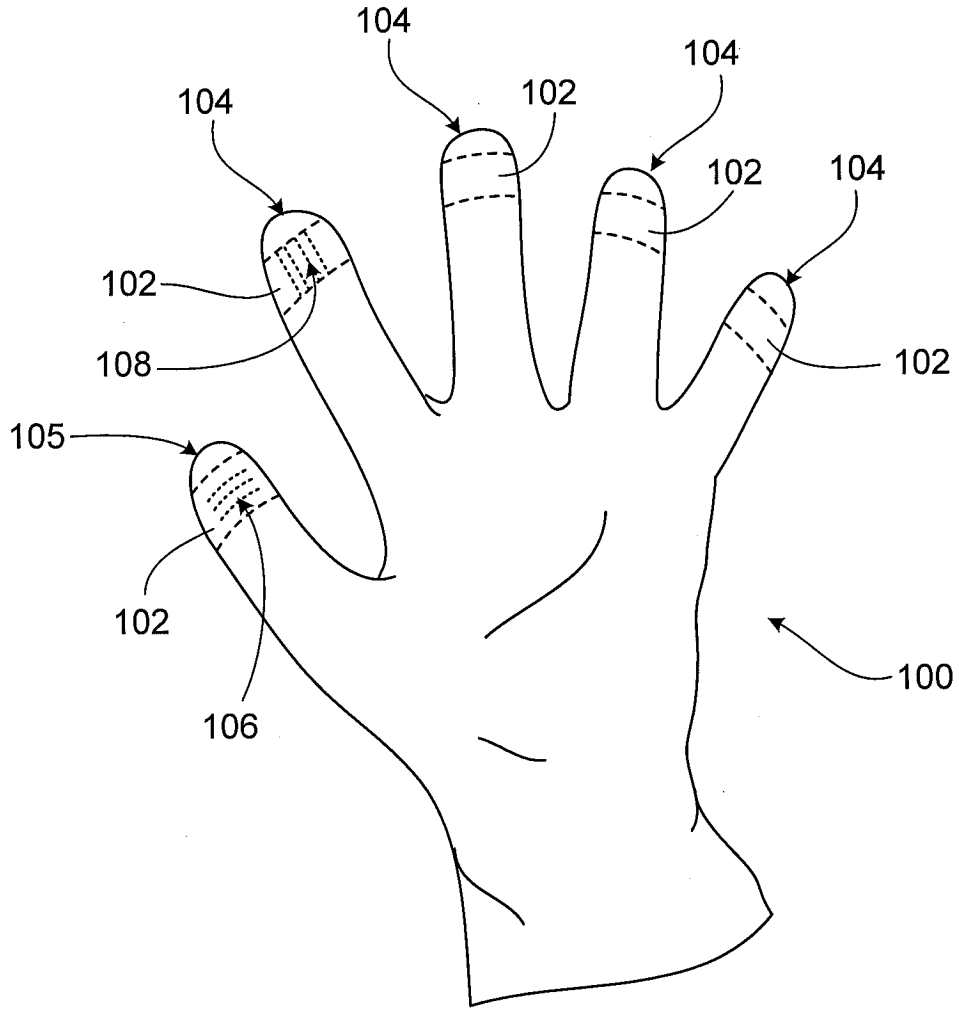


FIG. 7

Electronic Patent Application Fee Transmittal

Application Number:	
Filing Date:	
Title of Invention:	Touch Screen Actuation Glove
First Named Inventor/Applicant Name:	Moshe Rock
Filer:	Timothy A. French/Nancy Bechet
Attorney Docket Number:	22436-0230P01

Filed as Large Entity

Provisional Filing Fees

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Provisional application filing	1005	1	250	250

Pages:

Claims:

Miscellaneous-Filing:

Petition:

Patent-Appeals-and-Interference:

Post-Allowance-and-Post-Issuance:

Extension-of-Time:

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Total in USD (\$)				250

Electronic Acknowledgement Receipt

EFS ID:	11821180
Application Number:	61585794
International Application Number:	
Confirmation Number:	4869
Title of Invention:	Touch Screen Actuation Glove
First Named Inventor/Applicant Name:	Moshe Rock
Customer Number:	26161
Filer:	Timothy A. French/Denise Siede
Filer Authorized By:	Timothy A. French
Attorney Docket Number:	22436-0230P01
Receipt Date:	12-JAN-2012
Filing Date:	
Time Stamp:	14:24:02
Application Type:	Provisional

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$250
RAM confirmation Number	528
Deposit Account	061050
Authorized User	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
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1	Transmittal of New Application	papltr22436230P01.pdf	144672 bec33da3e17abe5725af2415e6c55299b792b3d3	no	1
Warnings:					
Information:					
2		224360230p01application.pdf	594575 89b85121bcc2c1947ee6bd1e4836d35e62c4ed55	yes	15
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	7	
	Claims		8	10	
	Abstract		11	11	
	Drawings-only black and white line drawings		12	15	
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	29370 3a61072a9819f33f4b44a28e177c545a81cb4cda	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			768617		
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