



US 20100083419A1

(19) **United States**

(12) **Patent Application Publication**
Jackson

(10) **Pub. No.: US 2010/0083419 A1**

(43) **Pub. Date: Apr. 8, 2010**

(54) **WEARABLE SUPPORT APPARATUS**

Publication Classification

(76) Inventor: **Ulysses Chanzla Jackson,**
Neptune, NJ (US)

(51) **Int. Cl.**
A41D 19/00 (2006.01)
(52) **U.S. Cl.** **2/160; 2/167**

Correspondence Address:
Ashok Tankha
36 Greenleigh Drive
Sewell, NJ 08080 (US)

(57) **ABSTRACT**

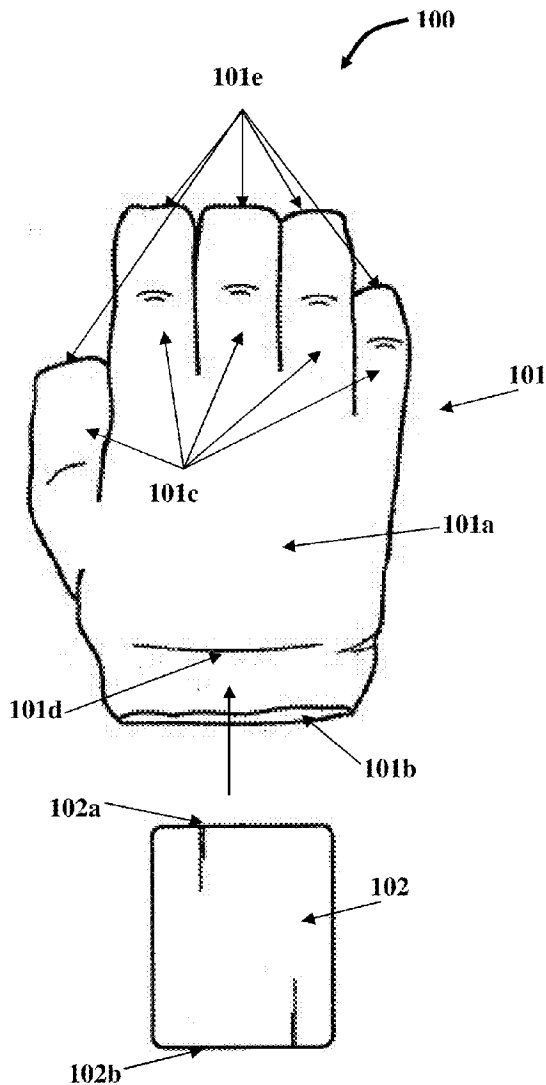
A wearable apparatus is provided for supporting a user on surfaces of a toilet seat. The wearable apparatus comprises a wearable unit and a support element. The wearable unit is configured to conform to a hand of the user. The wearable unit comprises a chamber for accommodating the user's hand. A sleeve is disposed on or within the wearable unit for inserting a support element. The sleeve extends inwardly within the chamber. In an embodiment, the sleeve is detachably disposed on an outer surface of the wearable unit. The support element may be inserted in the sleeve or molded on the outer surface of the wearable unit. The support element in the sleeve of the wearable apparatus reduces pressure from the toilet seat on the user's rear body part and protects the user seated on the toilet seat from discomfort and pain from toilet seat impressions.

(21) Appl. No.: **12/487,653**

(22) Filed: **Jun. 19, 2009**

Related U.S. Application Data

(60) Provisional application No. 61/103,845, filed on Oct. 8, 2008.



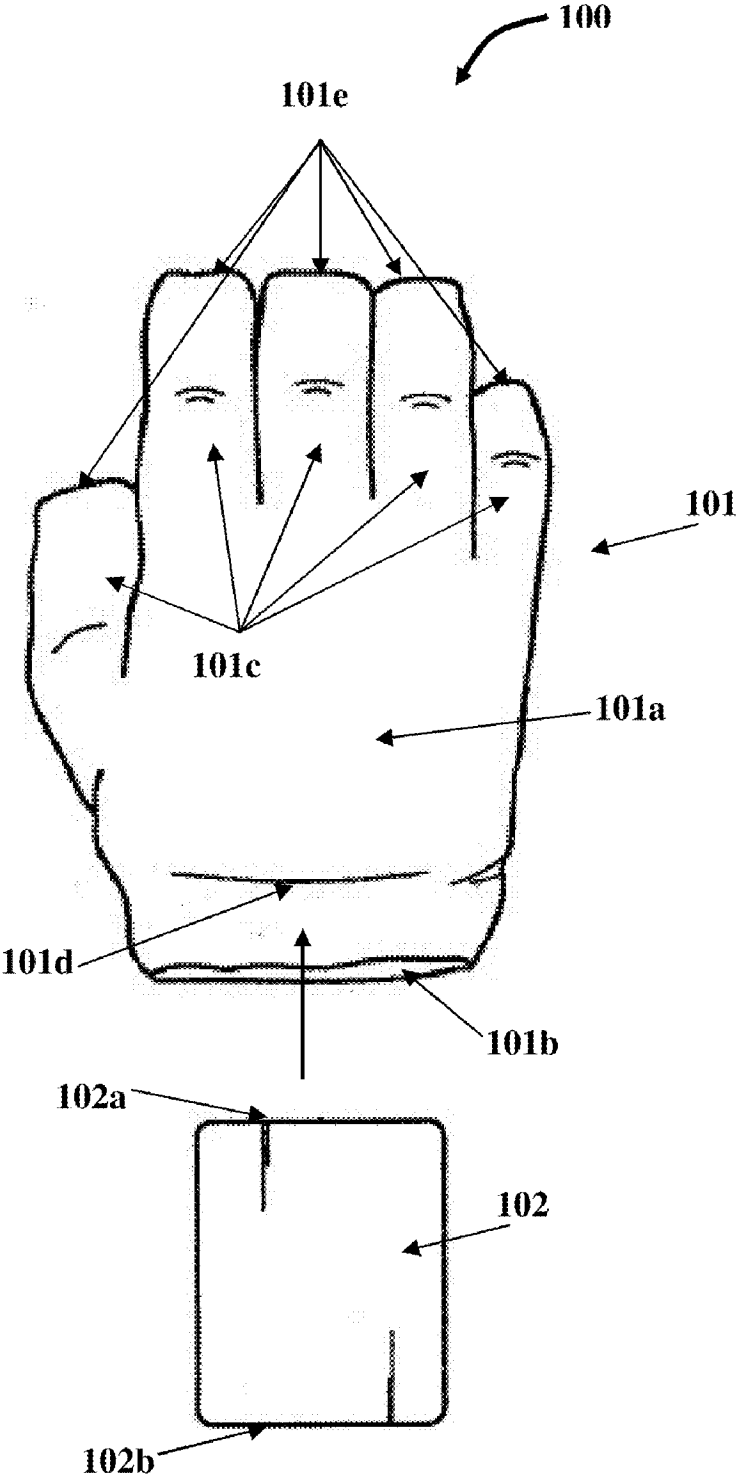


FIG. 1

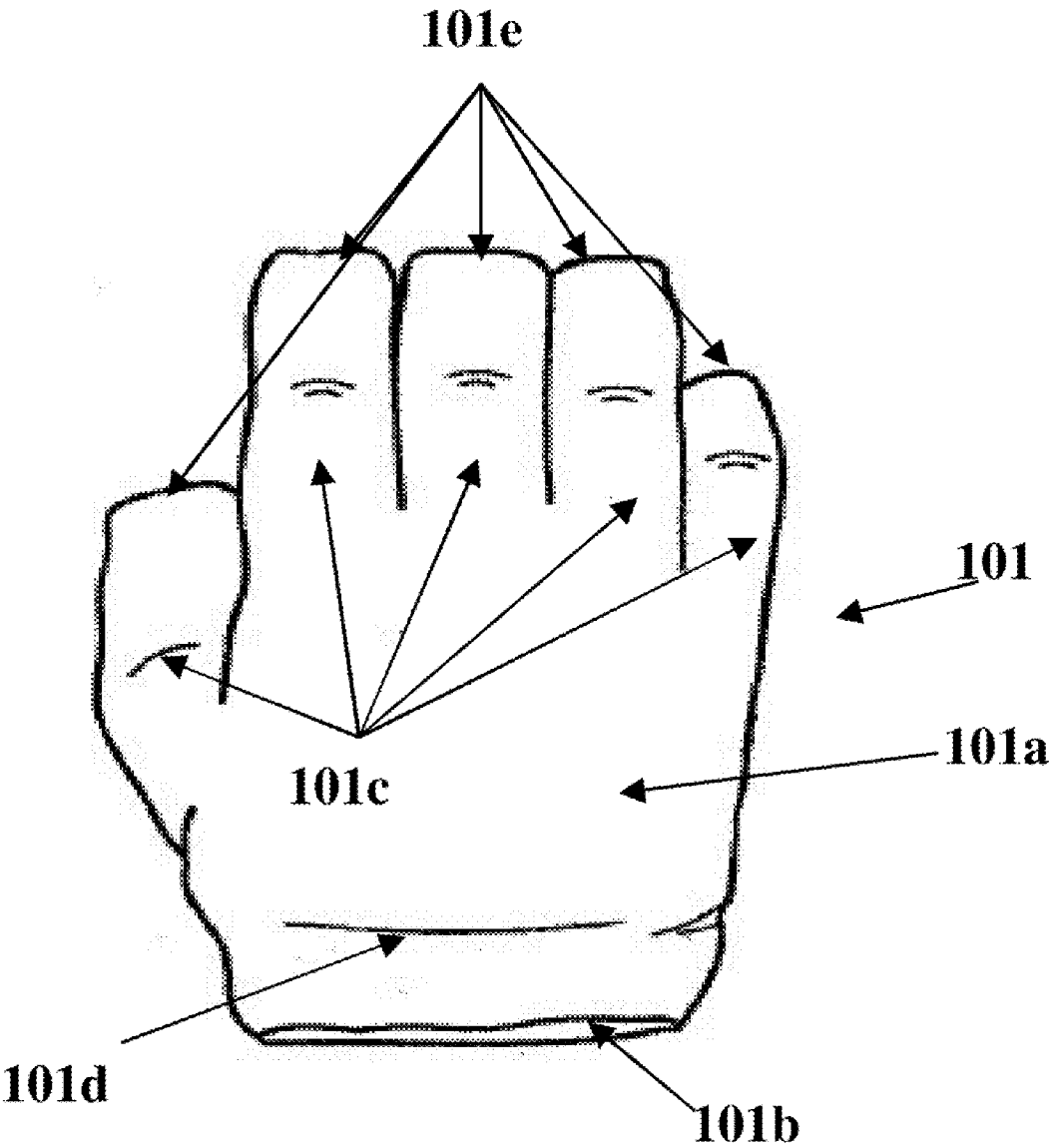


FIG. 2A

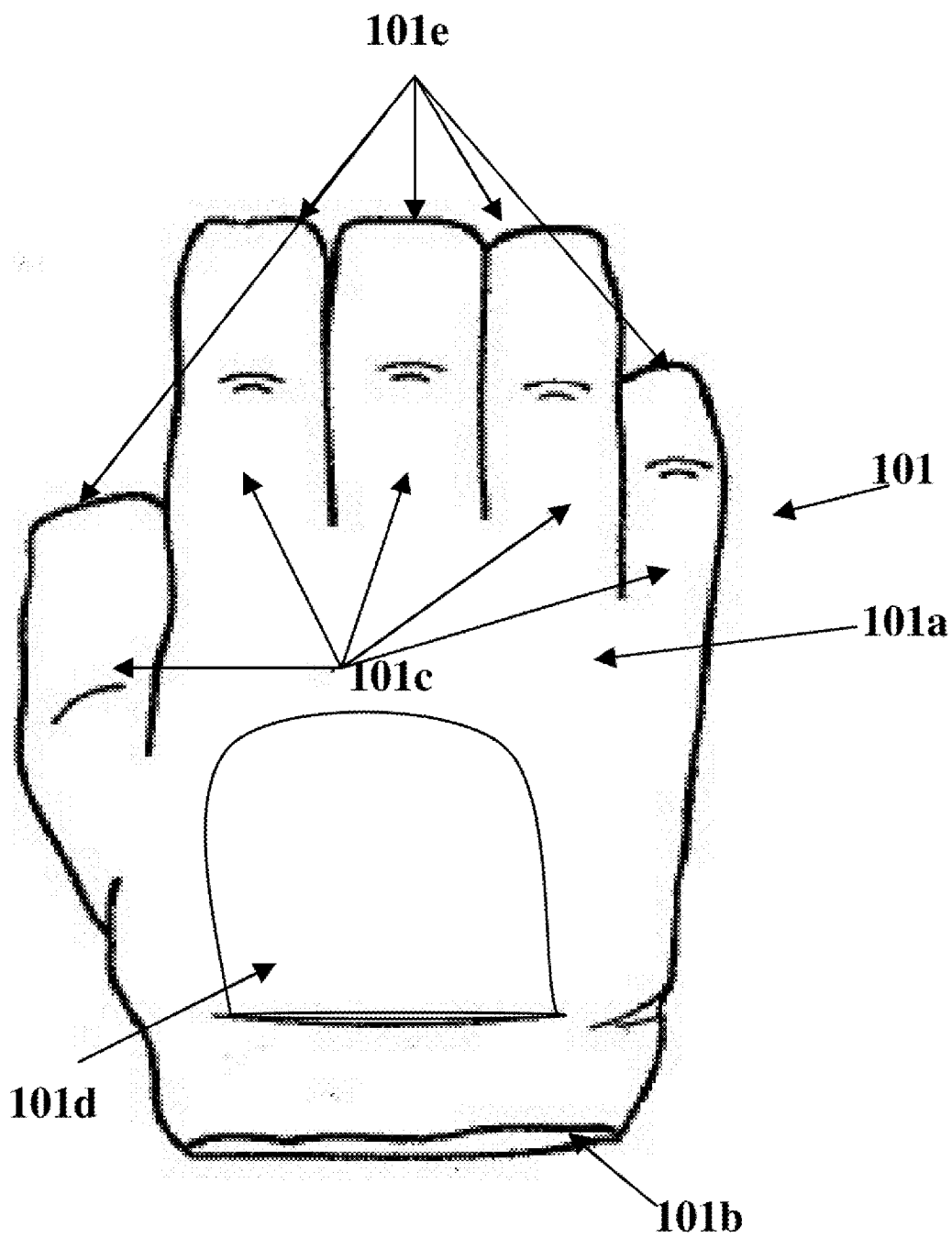


FIG. 2B

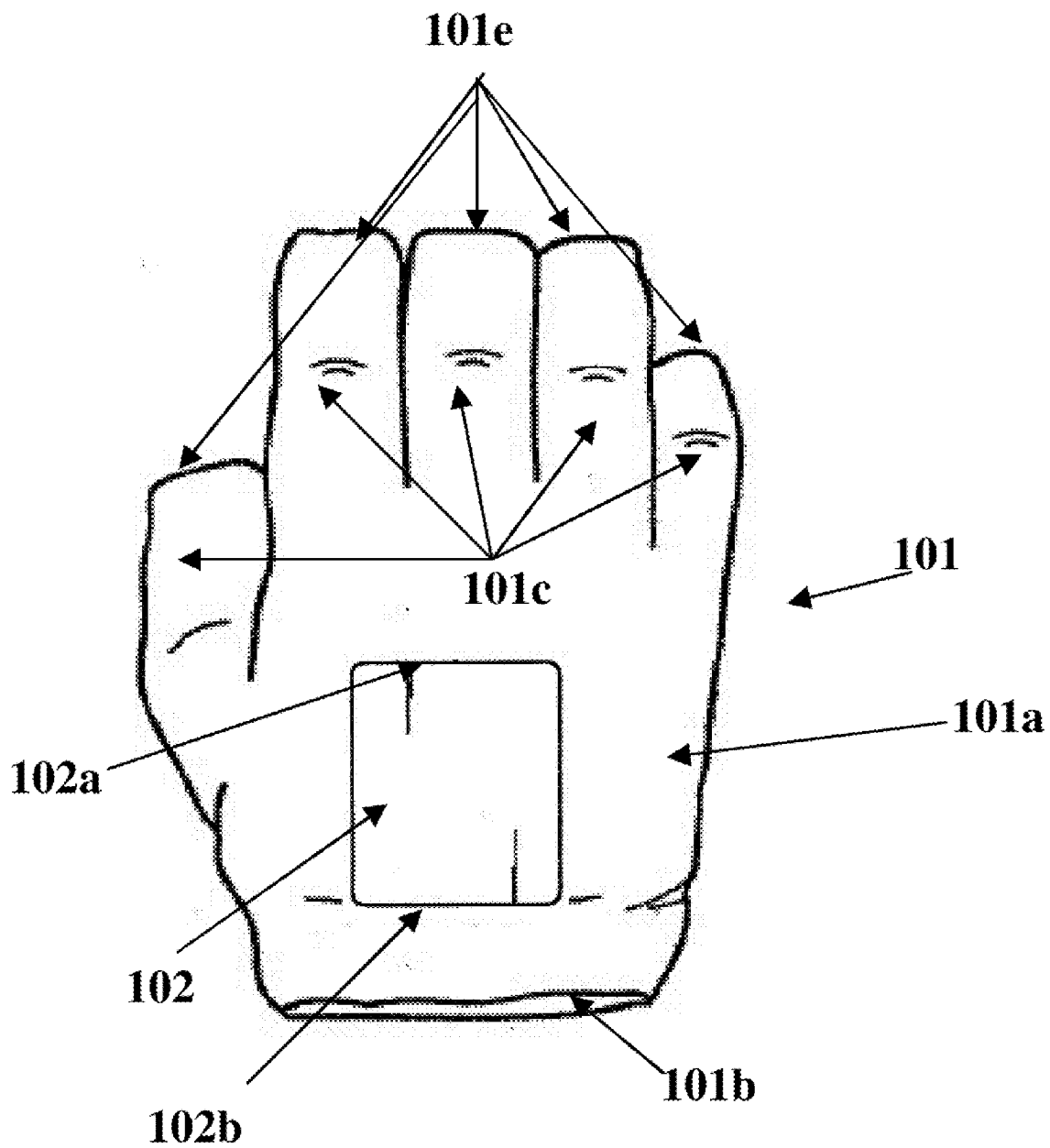


FIG. 2C

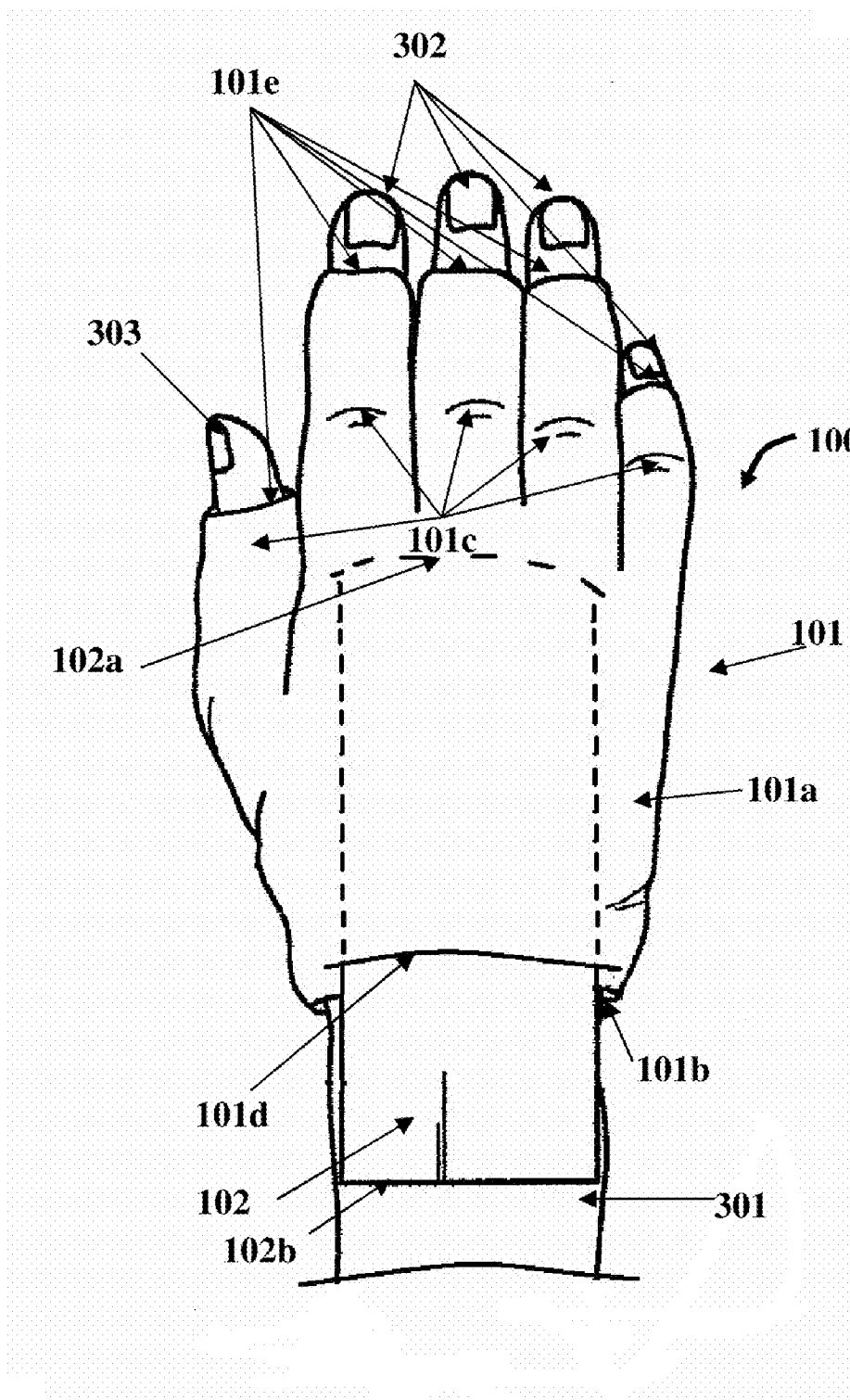


FIG. 3

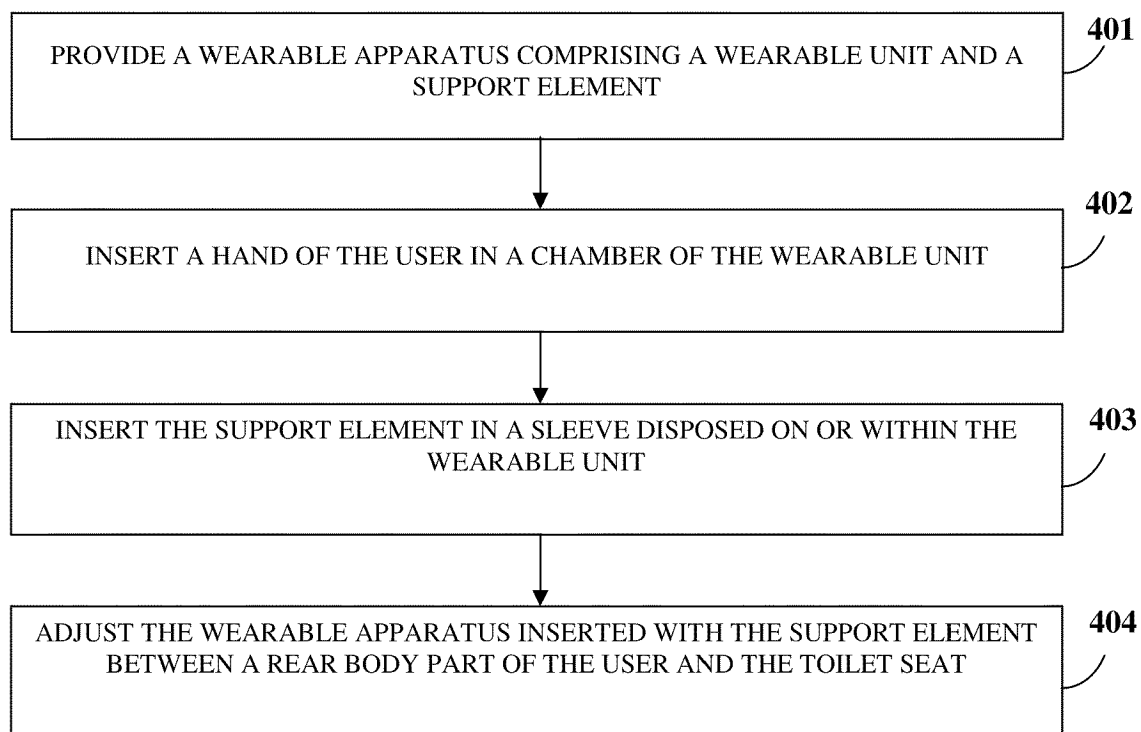


FIG. 4

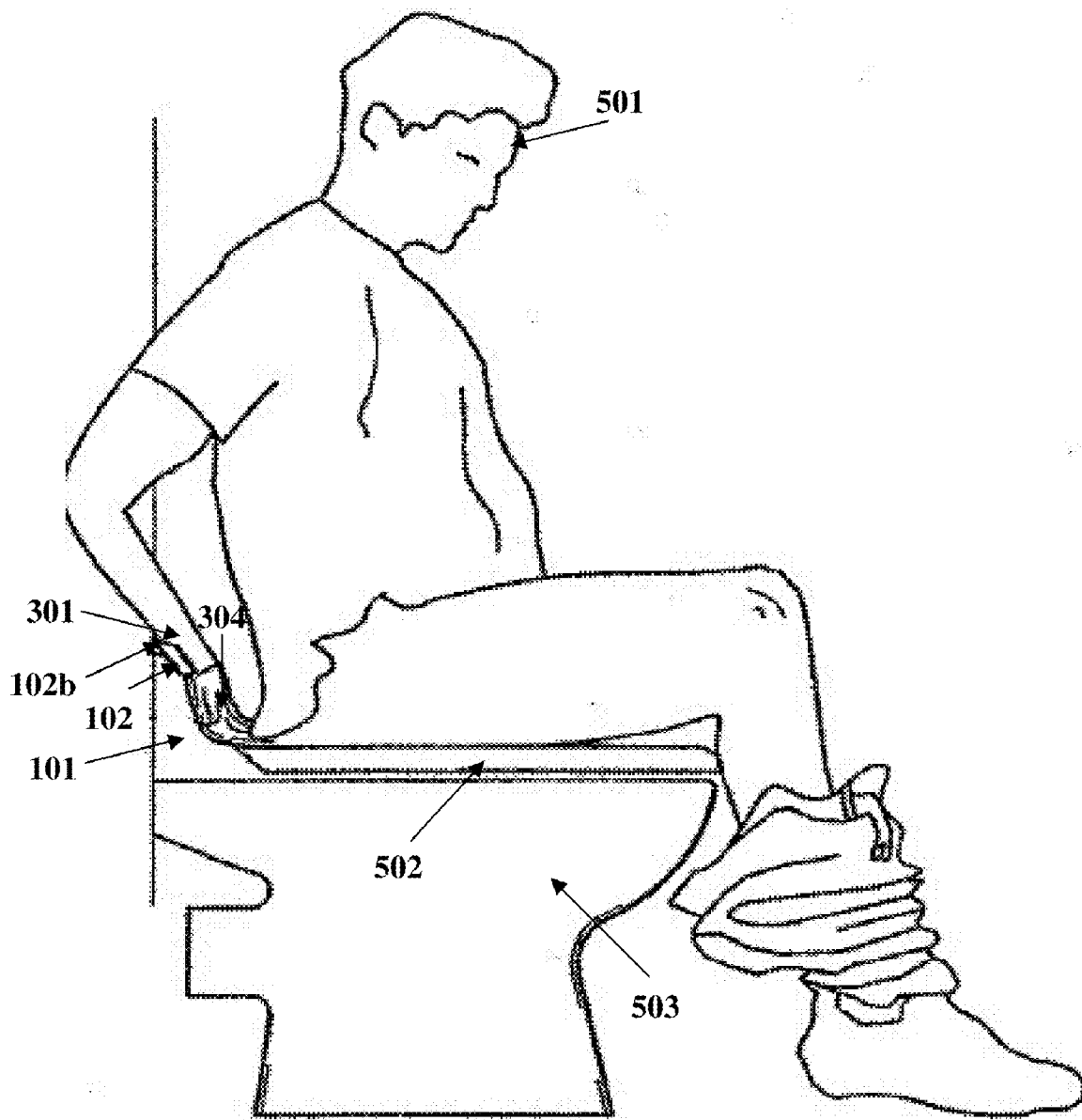


FIG. 5A

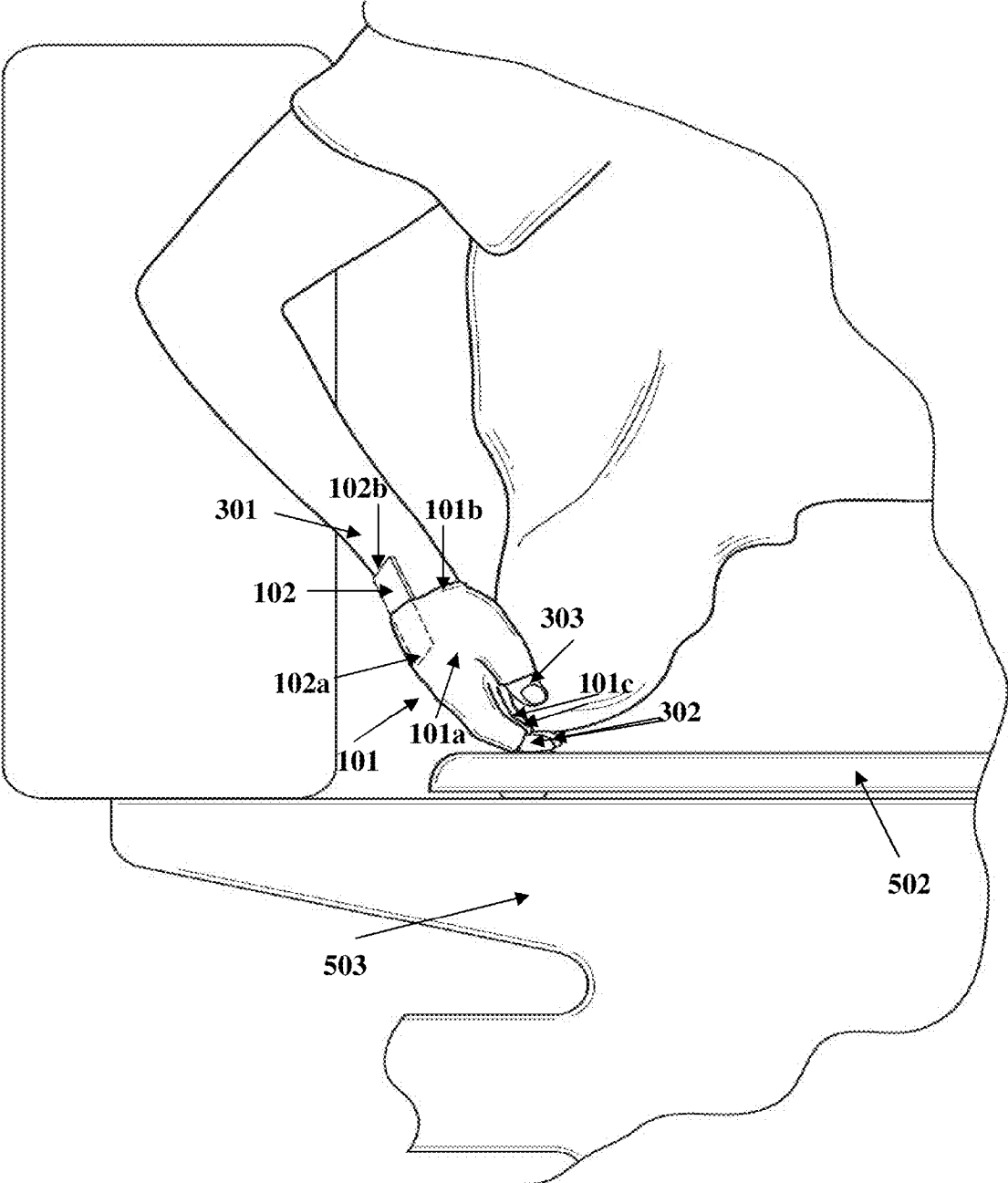


FIG. 5B

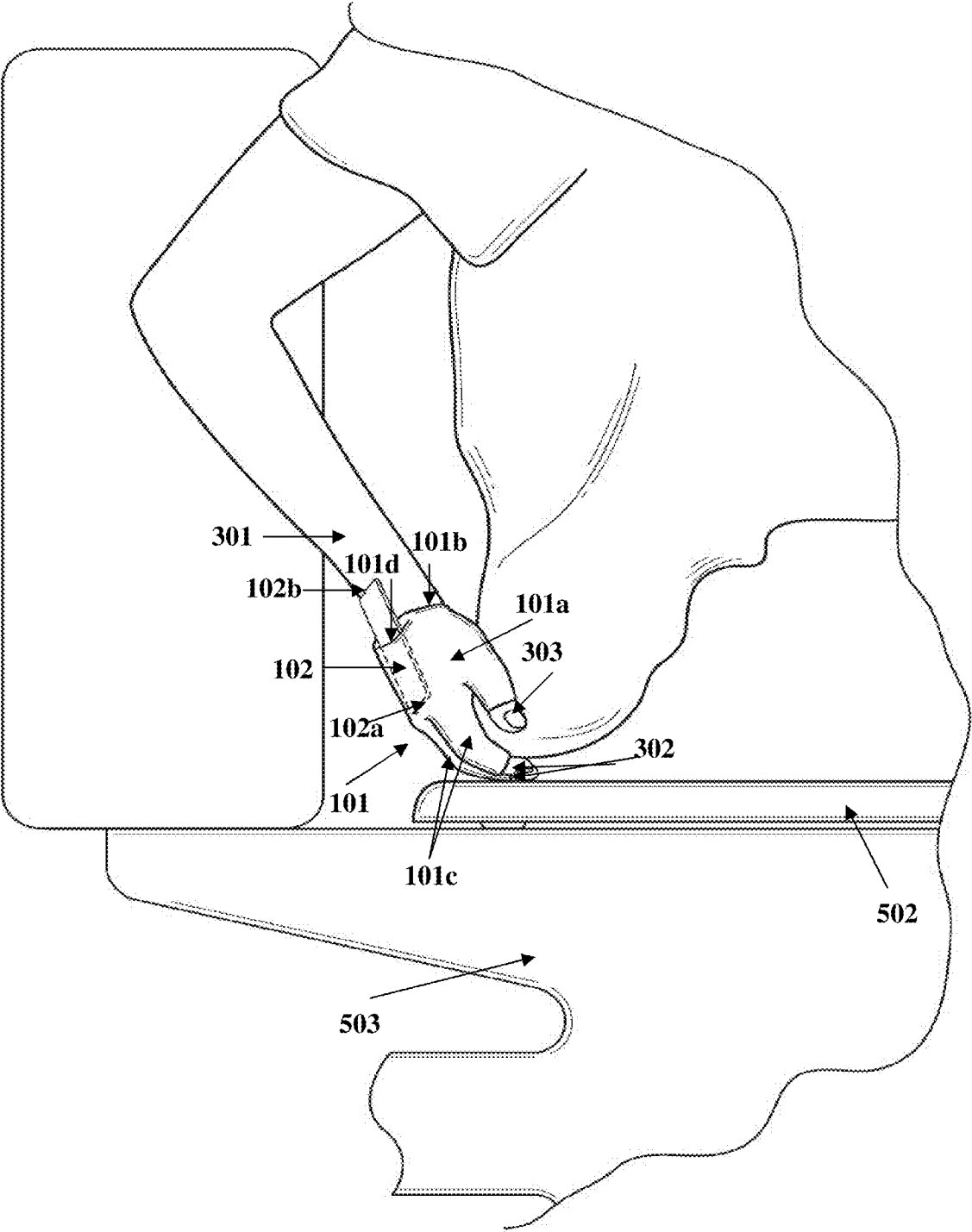


FIG. 5C

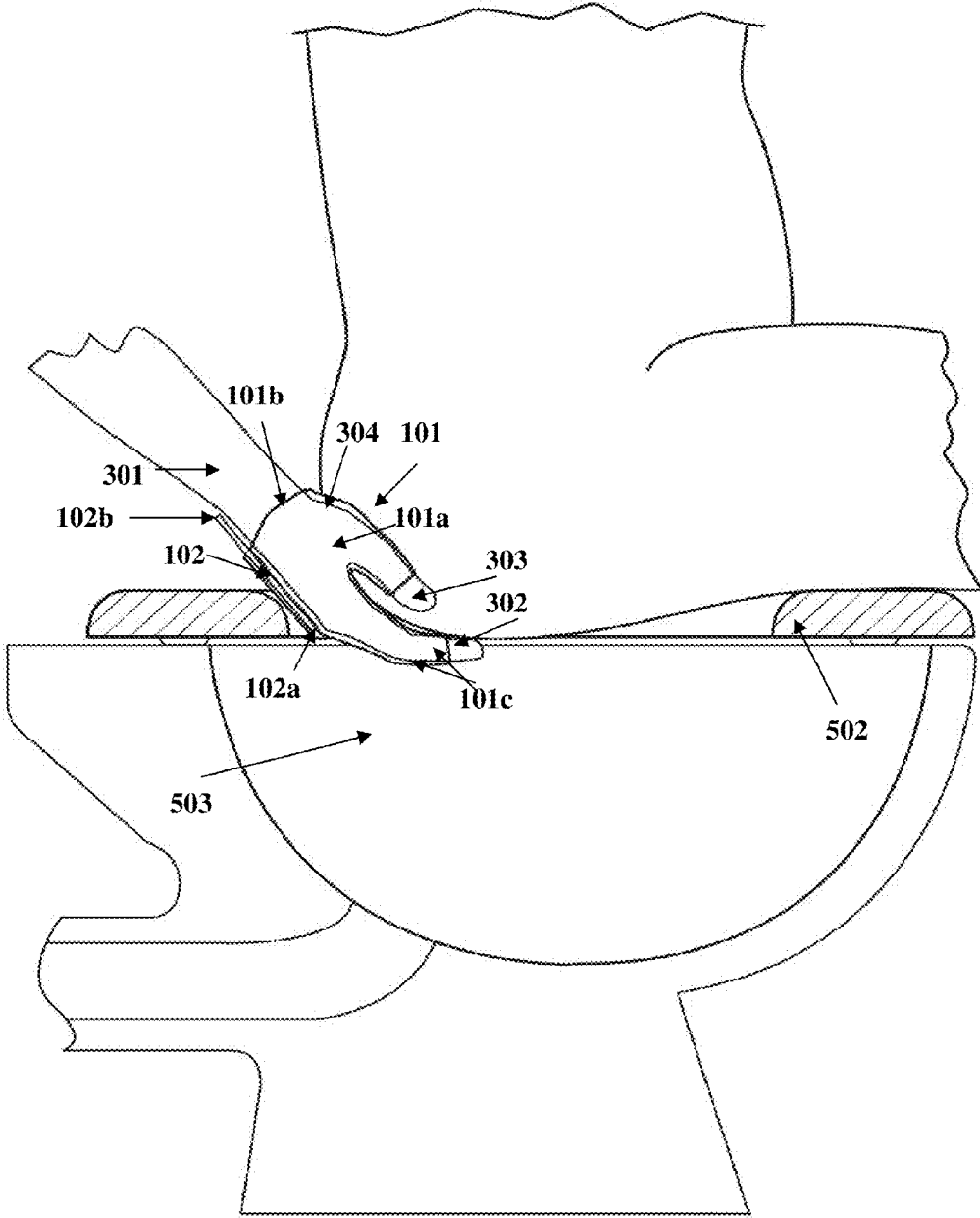


FIG. 5D

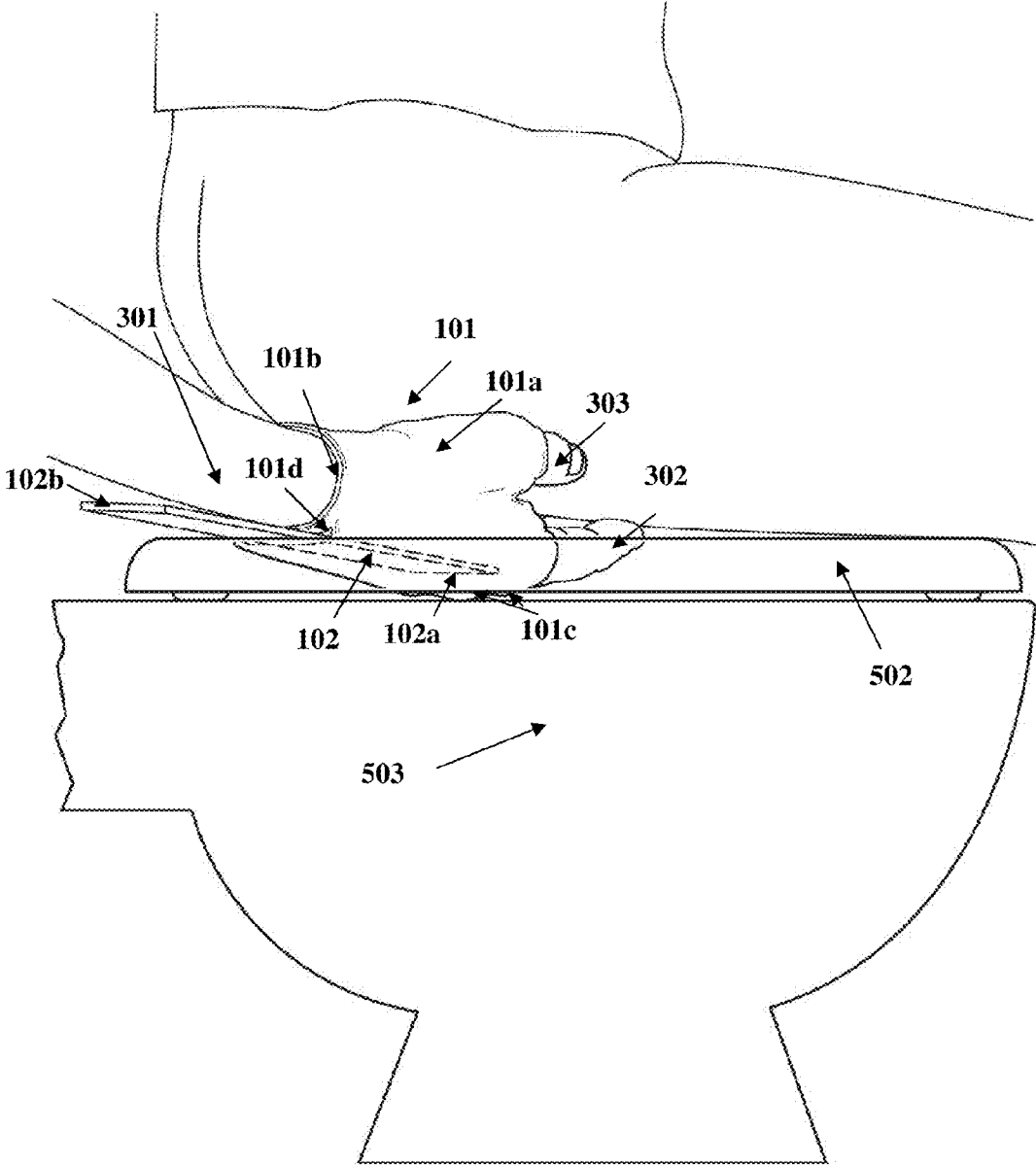


FIG. 5F

WEARABLE SUPPORT APPARATUS

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of provisional patent application No. 61/103,845 titled “Hand-D-ease Toilet Seat Glove—A one size fit all toilet seat glove with plastic card insert to be used to block discomfort and pain from toilet seat impression”, filed on Oct. 8, 2008 in the United States Patent and Trademark Office.

BACKGROUND

[0002] This invention, in general, relates to an aid in sanitary usage. More particularly, this invention relates to a wearable apparatus for supporting a user on surfaces of a toilet seat.

[0003] A toilet, in general, refers to a plumbing fixture and disposal system primarily intended for disposal of bodily wastes, for example, urine and fecal matter. The toilet is a bathroom fixture comprising a bowl usually with a detachable hinged seat and lid, and connected to a waste pipe, with a device for flushing the toilet with water. Due to the narrow rim of the toilet seat, the user of the toilet generally experiences discomfort and pain while sitting on the toilet seat. Furthermore, the toilet seat rim causes impressions of the toilet seat rim on the rear body part of the user in contact with the toilet seat. Placing the user’s hands by cupping the rear body part in contact with the toilet seat rim is inconvenient and unhygienic to the user and to other users of the toilet seat.

[0004] Hence, there is a need for a wearable apparatus that supports the user on surfaces of a toilet seat. Moreover, there is a need for a wearable apparatus that protects the user from injury, discomfort, and pain from toilet seat impressions.

SUMMARY OF THE INVENTION

[0005] This summary is provided to introduce a selection of concepts in a simplified form that are further described in the detailed description of the invention. This summary is not intended to identify key or essential inventive concepts of the claimed subject matter, nor is it intended for determining the scope of the claimed subject matter.

[0006] The wearable apparatus disclosed herein addresses the above stated needs for supporting a user on surfaces of a toilet seat. The wearable apparatus prevents discomfort or pain to the user of the toilet seat. The wearable apparatus is portable and hence can be easily carried by the user. The wearable apparatus can be washed, squeezed dry, reused or disposed off based on the user’s preferences.

[0007] The wearable apparatus disclosed herein comprises a wearable unit and a support element. The wearable unit is configured to conform to a hand of the user. The wearable unit comprises a chamber for accommodating the user’s hand. The chamber comprises finger sections with openings at extremities of the finger sections for inserting a thumb and other fingers of the user’s hand.

[0008] The wearable apparatus further comprises a sleeve disposed on or within the wearable unit for inserting the support element. In an embodiment, the sleeve extends inwardly within the chamber of the wearable unit. In this embodiment, the support element is inserted into the sleeve. In another embodiment, the sleeve is detachably disposed on an outer surface of the wearable unit. In another embodiment, the support element is molded on the outer surface of the

wearable unit. The support element is, for example, a plastic card. The support element supports the user on the surfaces of the toilet seat. A portion of the support element is extended and exposed outside the wearable unit. The extended portion of the support element supports and protects the user’s wrist and forearm when the user inserts the wearable apparatus between the rear body part and the toilet seat.

[0009] The inner surfaces of the chamber of the wearable unit comprise a padded material for cushioning the user’s hand. The wearable unit with the support element inserted into the sleeve cushions the user’s rear body part seated on the toilet seat. The padded material prevents discomfort or pain from being in contact with the surfaces of the toilet seat.

[0010] The wearable apparatus is made of a fluid impervious material and minimizes or eliminates the accumulation of microorganisms on the wearable apparatus when in use. The wearable apparatus inserted with the support element is adjusted between the user’s rear body part and the toilet seat for supporting the user on the surfaces of the toilet seat. The support element in the sleeve of the wearable apparatus reduces pressure from the toilet seat on the user’s rear body part and protects the user seated on the toilet seat from discomfort and pain from toilet seat impressions when the wearable apparatus is inserted between the user’s rear body part and the toilet seat.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] The foregoing summary, as well as the following detailed description of the invention, is better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, exemplary constructions of the invention are shown in the drawings. However, the invention is not limited to the specific methods and instrumentalities disclosed herein.

[0012] FIG. 1 exemplarily illustrates an embodiment of a wearable apparatus for supporting a user on surfaces of a toilet seat.

[0013] FIG. 2A exemplarily illustrates an embodiment of a wearable unit of the wearable apparatus comprising a sleeve for inserting a support element.

[0014] FIG. 2B exemplarily illustrates the wearable unit with a sleeve detachably disposed on an outer surface of the wearable unit.

[0015] FIG. 2C exemplarily illustrates the wearable unit comprising a support element molded on the outer surface of the wearable unit.

[0016] FIG. 3 exemplarily illustrates the user’s hand inserted into the wearable apparatus.

[0017] FIG. 4 illustrates a method of supporting a user on surfaces of a toilet seat.

[0018] FIGS. 5A-5F exemplarily illustrate a user employing the wearable apparatus while seated on a toilet seat.

DETAILED DESCRIPTION OF THE INVENTION

[0019] FIG. 1 exemplarily illustrates an embodiment of a wearable apparatus 100 for supporting a user on surfaces of a toilet seat. As used herein, the term “user” refers to any person using a toilet including, for example, an obese person, a disabled person, etc. The wearable apparatus 100 disclosed herein comprises a wearable unit 101 and a support element 102. A rear view of the wearable unit 101 is exemplarily illustrated in FIG. 1. The wearable unit 101 is, for example, a nylon knitted seamless glove. The wearable unit 101 is con-

figured to conform to a hand **304** of the user. The wearable unit **101** is worn by the user like an article of clothing, for example, a glove. In an embodiment, the wearable unit **101** covers the user's entire palm **302** and extends till the mid portions of the user's fingers **302** and **303** as exemplarily illustrated in FIG. 3. For purposes of illustration, the wearable unit **101** in the detailed description refers to a glove, however the scope of the wearable unit **101** is not limited to the glove, but may be extended to include any wearable item, for example, a mitten, a hand band, etc, that may be worn on the hands, fingers **302**, thumbs **303**, or any other suitable part of the user's body. The wearable unit **101** may be turned inside out for extended use from knit runs. The wearable apparatus **100** can be washed, squeezed dry, reused or disposed off based on the user's preferences.

[0020] The wearable unit **101** comprises a chamber **101b** for accommodating the user's hand **304**. The chamber **101b** comprises finger sections **101c** with openings at the extremities of the finger sections **101c** for inserting a thumb **303** and other fingers **302** of the user's hand **304**. The openings at the ends **101e** of the finger sections **101c** illustrated in FIGS. 1-3 allow the fingers **302** and **303** to pass through the finger sections **101c** and be partially exposed. The fingers **302** and **303** exposed outside the finger sections **101c** may be left uncovered and unobstructed by any fabric. The uncovered fingers **302** and **303** may be used more efficiently and accurately by the user to grasp an object, for example, disposable paper such as toilet paper for use as a wipe. In an embodiment, the opening through which the thumb **303** passes may be disposed on either side of the chamber **101b** of the wearable unit **101** for enabling the user to use the wearable unit **101** on either of the user's hands. The wearable unit **101** may also be manufactured for ergonomic use by a right handed person or by a left handed person. In an embodiment, the chamber **101b** comprises a thumb opening for inserting the user's thumb **303** and a second opening for inserting the other fingers **302**. A padded material is provided on the inner surfaces of the chamber **101b** for cushioning the user's hand **304**. The wearable unit **101** may be designed to have different shapes and sizes. The wearable unit **101** may be adapted to conform to the dimensions of the size of the user's hand **304**. The wearable unit **101** is compact and portable.

[0021] The wearable unit **101** is made of a fluid impervious material that can be used once and is easily disposable. The material used for the wearable unit **101** is, for example, transparent, translucent or opaque materials formed of a semi-rigid or flexible material. The material of the wearable unit **101** is impervious to fluids, for example, water, urine, waste fluid, flush water, spit, blood, fecal waste, etc.

[0022] The wearable apparatus **100** further comprises a sleeve **101d** on or within the wearable unit **101** for inserting a support element **102**. The sleeve **101d** holds and secures the support element **102**. The support element **102** is, for example, a plastic card. The support element **102** supports the user on the surfaces of the toilet seat when the support element **102** is inserted within the sleeve **101d** and when the wearable apparatus **100** is inserted between the user's rear body part and the toilet seat cover. In an embodiment, a portion of the support element **102** is extended and exposed outside the wearable unit **101**. The extended portion **102a** of the support element **102** supports and protects the user's wrist **301** and forearm **301** when the user inserts the wearable apparatus **100** between the user's rear body part and the toilet seat. For example, the extended portion **102a** of the support

element **102** protects the user's hand **304** from pressure of the rear edge of the toilet seat. The support element **102** may be completely inserted into the sleeve **101d** or variably extended depending on the extent of support required by the user. The support element **102** has different shapes, for example, a rectangular shape and is made of a flexible material, for example, plastic. The support element **102** is also made of, for example, transparent, translucent or opaque materials formed of a semi-rigid or flexible material. The support element **102** can be straightened out by bending for extended use.

[0023] In an embodiment, the sleeve **101d** extends inwardly within the chamber **101b** of the wearable unit **101**. The sleeve **101d** is exposed to the outer surface of the user's hand **304** accommodated within the chamber **101b**. The support element **102** is inserted into the sleeve **101d** in the chamber **101b**. The support element **102** can, for example, be moved in a plane substantially parallel to the upper surface of the user's hand **304** within the sleeve **101d**. FIG. 2A exemplarily illustrates an embodiment of the wearable unit **101** comprising the sleeve **101d** for inserting the support element **102**. In another embodiment, the sleeve **101d** is detachably disposed on the outer surface **101a** of the wearable unit **101**. FIG. 2B exemplarily illustrates the wearable unit **101** with the sleeve **101d** detachably disposed on the outer surface **101a** of the wearable unit **101**. In this embodiment, the sleeve **101d** appears as a pocket for inserting the support element **102**. In another embodiment, the support element **102** is directly molded on an outer surface **101a** of the wearable unit **101**. FIG. 2C exemplarily illustrates the wearable unit **101** comprising the support element **102** directly molded on the outer surface **101a** of the wearable unit **101**.

[0024] FIG. 3 exemplarily illustrates the user's hand **304** inserted into the wearable apparatus **100**. The user inserts the user's hand **304** into the chamber **101b** and inserts the first end **102a** of the support element **102** in the sleeve **101d**. As illustrated in FIG. 3, the second end **102b** of the inserted support element **102** extends outside the wearable unit **101** towards the user's forearm **301**. The extended second end **102b** provides additional support for the user's wrist and forearm **301** against the rim of the toilet seat. The wearable unit **101** with the support element **102** inserted into the sleeve **101d** explained in the detailed description of FIG. 1 and FIGS. 2A-2C, cushions the user's rear body part seated on the toilet seat. The wearable unit **101** and the support element **102** are portable, reusable, and disposable. The wearable unit **101** slides easily on the edges of the toilet seat and holds the support element **102** in place once adjusted on the upper surface of the user's hand **304** adjacent to the user's wrist. The support element **102** in the sleeve **101d** of the wearable apparatus **100** when inserted between the user's rear body part and the toilet seat cover protects the user from injury, discomfort, and pain from toilet seat impressions. The support element **102** in the sleeve **101d** of the wearable apparatus **100** when inserted between the user's rear body part and the toilet seat cover reduces pressure from the toilet seat on the user's rear body part, that is, the user's buttocks.

[0025] FIG. 4 illustrates a method of supporting a user **501** on surfaces of a toilet seat **503**. A wearable apparatus **100** as exemplarily illustrated in FIG. 1 is provided **401**. The wearable apparatus **100** comprises a wearable unit **101** and a support element **102** as explained in the detailed description of FIG. 1. A user **501** employing the wearable apparatus **100** while seated on a toilet seat **503** is exemplarily illustrated in FIGS. 5A-5F. A sleeve **101d** is disposed on or within the

wearable unit 101 as illustrated in FIGS. 2A-2B and as explained in the detailed description of FIGS. 2A-2B. The user's 501 hand 304 is inserted 402 in the chamber 101b of the wearable unit 101. The support element 102 is inserted 403 in the sleeve 101d disposed on or within the wearable unit 101. The support element 102 is positioned on the upper surface of the user's 501 hand 304 between the outer surface 101a of the wearable unit 101 and the user's 501 hand 304. The wearable apparatus 100 inserted with the support element 102 is adjusted 404 between the user's 501 rear body part and the toilet seat 503 for supporting the user 501 on the surfaces of the toilet seat 503. The user's 501 hand 304 wearing the wearable apparatus 100 cups the user's 501 buttocks and horizontally contacts the toilet seat cover 502 as exemplarily illustrated in FIGS. 5E-5F. The wearable apparatus 100 reduces pressure from the toilet seat cover 502 on the user's 501 buttocks. The support element 102 on the wearable apparatus 100 protects the user 501 from discomfort and pain from toilet seat impressions.

[0026] The user 501 places the user's 501 hand 304 inserted into the wearable apparatus 100 between the user's 501 rear body part and the toilet seat 503 for support. The support element 102 is movable in a plane substantially parallel to the upper surface of the user's 501 hand 304 with the glove and is adjusted to cover the upper surface of the user's 501 hand 304 that would come in contact with the toilet seat's 503 edge or rim when using the toilet. As illustrated in FIGS. 5A and 5B, the support element 102 is placed directly inside the chamber 101b of the wearable unit 101. As illustrated in FIGS. 5C-5F, the support element 102 is inserted in the sleeve 101d of the wearable unit 101. The user 501 cups the buttocks such that the support element 102 inserted into the sleeve 101d of the wearable unit 101 contacts the toilet seat cover 502 when the user 501 is seated on the toilet seat 503 as exemplarily illustrated in FIGS. 5E-5F. In an embodiment, the support element 102 retractable along a plane substantially parallel to the upper surface of the user's 501 hand 304 can be variably positioned within the sleeve 101d.

[0027] The user 501 may also use the wearable apparatus 100 in different positions, for example, an upward position, a downward position, etc. on the toilet seat 503, the toilet seat cover 502, a back support of the toilet seat 503, etc. to reduce pressure from other surfaces of the toilet seat 503. For example, for using the wearable apparatus 100 in the downward position on the toilet seat 503, the sleeve 101d of the wearable unit 101 may be disposed on a lower surface of the wearable unit 101. In this embodiment, the user 501 wears the wearable unit 101 on the hand 304 and inserts the support element 102 in the sleeve 101d provided in the lower surface of the wearable unit 101. The user 501 then places the hand 304 in the downward position on the toilet seat 503 with the user's 501 palm facing the toilet seat 503. In this embodiment, the upper surface of the user's 501 hand 304 comes in contact with the user's 501 rear body part. The inserted support element 102 reduces the pressure from the toilet seat 503 on the user's 501 buttocks and protects the user 501 seated on the toilet seat 503 from discomfort and pain from toilet seat impressions.

[0028] The foregoing examples have been provided merely for the purpose of explanation and are in no way to be construed as limiting of the present invention disclosed herein. While the invention has been described with reference to various embodiments, it is understood that the words, which have been used herein, are words of description and illustra-

tion, rather than words of limitation. Further, although the invention has been described herein with reference to particular means, materials and embodiments, the invention is not intended to be limited to the particulars disclosed herein; rather, the invention extends to all functionally equivalent structures, methods and uses, such as are within the scope of the appended claims. Those skilled in the art, having the benefit of the teachings of this specification, may effect numerous modifications thereto and changes may be made without departing from the scope and spirit of the invention in its aspects.

I claim:

1. A wearable apparatus for supporting a user on surfaces of a toilet seat, comprising:

- a wearable unit comprising a chamber configured to conform to a hand of said user;
- a sleeve disposed on or within said wearable unit for inserting a support element; and
- said support element for supporting said user on said surfaces of said toilet seat;

whereby said support element in said sleeve of said wearable apparatus reduces pressure from said toilet seat on a rear body part of said user and protects said user seated on said toilet seat from discomfort and pain from toilet seat impressions when said wearable apparatus is inserted between said rear body part of said user and said toilet seat.

2. The wearable apparatus of claim 1, wherein said sleeve extends inwardly within said chamber of said wearable unit, wherein said support element is inserted into said sleeve.

3. The wearable apparatus of claim 1, wherein said support element is molded on an outer surface of said wearable unit.

4. The wearable apparatus of claim 1, wherein said sleeve is detachably disposed on an outer surface of said wearable unit.

5. The wearable apparatus of claim 1, wherein said chamber comprises finger sections with openings at extremities of said finger sections for inserting a thumb and other fingers of said hand of said user.

6. The wearable apparatus of claim 1, further comprising a padded material provided on inner surfaces of said chamber for cushioning said hand of said user.

7. The wearable apparatus of claim 1, wherein said wearable unit with said support element inserted into said sleeve cushions said rear body part of said user seated on said toilet seat.

8. The wearable apparatus of claim 1, wherein a portion of said support element is extended and exposed outside said wearable unit, wherein said extended portion of said support element supports and protects wrist and forearm of said user when said user inserts said wearable apparatus between said rear body part and said toilet seat.

9. The wearable apparatus of claim 1, wherein said support element is a plastic card.

10. The wearable apparatus of claim 1, wherein said wearable unit and said support element are portable and disposable.

11. The wearable apparatus of claim 1, wherein said wearable unit is made of a fluid impervious material.

12. A method of supporting a user on surfaces of a toilet seat, comprising the steps of:

providing a wearable apparatus comprising:

- a wearable unit comprising a chamber configured to conform to a hand of said user;

a sleeve disposed on or within said wearable unit for inserting a support element; and
said support element for supporting said user on said surfaces of said toilet seat;
inserting said hand of said user in said chamber of said wearable unit;
inserting said support element in said sleeve disposed on or within said wearable unit; and
adjusting said wearable apparatus inserted with said support element between a rear body part of said user and said toilet seat for supporting said user on said surfaces of said toilet seat;
whereby said support element in said sleeve of said wearable apparatus reduces pressure from said toilet seat on said rear body part of said user and protects said user seated on said toilet seat from injury, discomfort, and pain from toilet seat impressions.

13. The method of claim **12**, wherein said sleeve extends inwardly within said chamber of said wearable unit, wherein said support element is inserted into said sleeve.

14. The method of claim **12**, wherein said support element is molded on an outer surface of said wearable unit.

15. The method of claim **12**, wherein said sleeve is detachably disposed on an outer surface of said wearable unit.

16. The method of claim **12**, further comprising the step of extending and exposing a portion of said inserted support element outside said wearable unit, wherein said extended portion of said inserted support element supports and protects wrist and forearm of said user when said user inserts said wearable apparatus between said rear body part and said toilet seat.

17. The method of claim **12**, wherein said support element is a plastic card.

* * * * *