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SINGLE PIECE GLOVE APPARATUS, ASSEMBLY, AND METHOD OF MAKING

(57) Methods, apparatuses, assemblies, and/or the like are provided. In various embodiments, a wearable assembly may include a single piece glove (200) including one or more layers of fabric. The one or more layers of fabric may define a first elongated side (202), a second elongated side (204), a hole (212) disposed between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer, a button mount region (214) defined between the second elongated side and the hole, the button mount region configured to engage a button assembly, a first opposed end (206), and a second opposed end (207). In some embodiments, the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end. In some embodiments, the second elongated side defines a concave portion (210) defined between the button mount region and the second opposed end.

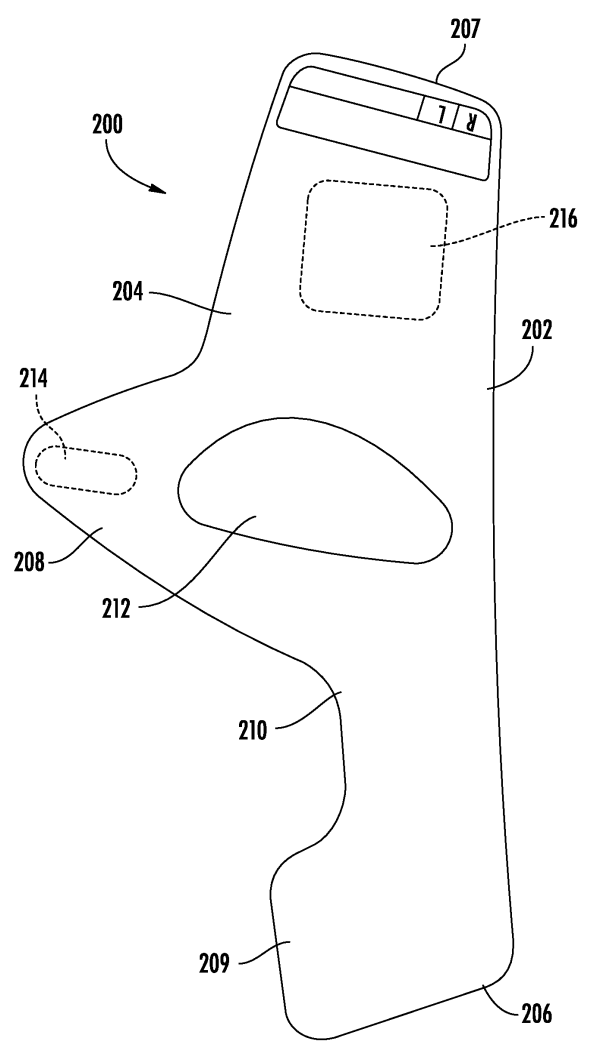


FIG. 4

Description

TECHNICAL FIELD

[0001] . The present disclosure relates generally to wearable devices. In particular, it relates to a single piece glove and wearable assembly with a device mount, as well as methods of making the same.

BACKGROUND

[0002] . In modern production, distribution, and industrial environments, wearable assemblies may enable technicians to utilize various user devices while keeping their hands free for performing other tasks. A user device may be attached to a wearable device, which may be worn by a technician working in one of the aforementioned environments. For example, a user device such as a scanner may be attached to a wearable assembly worn on a technician's hand, allowing the technician to access and use the user device while keeping the technician's hands free.

[0003] . However, wearable assemblies (particularly those worn on a technician's hands) may restrict a technician's fine motor skills preventing them from performing certain tasks, constrict the technician's digits (e.g., the thumb), cause discomfort to the technician's hand, cause a buildup of grime accumulation between the assembly and the hand, and easily wear down and tear after only limited use.

[0004] . Through applied effort, ingenuity, and innovation, Applicant has solved various problems relating to wearable assemblies by developing solutions embodied in the present disclosure, which are described in detail below.

SUMMARY

[0005] . In general, aspects of the present disclosure provide methods, apparatuses, systems, computing devices, computing entities, and/or the like.

[0006] . In accordance with various aspects of the present disclosure a single piece glove is provided. In some embodiments, the single piece glove includes one or more layers of fabric, which may be formed as a single piece of multi-layer material with or without other components (e.g., a mount, a wire, a button, etc.) attached thereto. In some embodiments, the one or more layers of fabric define a first elongated side; a second elongated side; a hole disposed between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer; a button mount region defined between the second elongated side and the hole, the button mount region configured to engage a button assembly; and a first opposed end and a second opposed end. In some embodiments, the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end. In some em-

bodiments, the second elongated side defines a concave portion defined between the button mount region and the second opposed end. In some embodiments, the button mount region is closer to the hole than the concave portion. In some embodiments, the first and second opposed ends are configured to be operatively connected to form the single piece glove around at least a portion of a hand of the wearer.

[0007] . In some embodiments, the second elongated side further defines at least one protrusion and at least one notch, wherein the at least one notch includes the concave portion.

[0008] . In some embodiments, the second elongated side further includes a proximal end and a distal end. In some embodiments, the at least one protrusion is located between the proximal end and the distal end of the second elongated side. In some embodiments, the at least one notch is located between the at least one protrusion and the distal end of the second elongated side.

[0009] . In some embodiments, the single piece glove is configured to cover less than half of a surface area of a palm of the wearer.

[0010] . In some embodiments, the single piece glove includes a hook-and-loop fastener configured to operatively connect the first and second opposed ends. In some embodiments, the hook-and-loop fastener includes a hook portion and a loop portion configured to be operatively attached to each other. In some embodiments, on the one hand, the first opposed end includes the hook portion and the second opposed end includes the loop portion or, on the other hand, the first opposed end includes the loop portion and the second opposed end includes the hook portion.

[0011] . In some embodiments, the single piece glove includes a button engaged with the button mount region and configured to be operable by the thumb of the wearer.

[0012] . In some embodiments, the single piece glove includes a mounting portion disposed between the hole and the first opposed end, the mounting portion configured to receive a mounting plate of a wearable device.

[0013] . In some embodiments, the one or more layers of fabric include one more materials selected from a group consisting of one or more of: neoprene, cotton, nylon, polyester, latex, nitrile, vinyl, mesh fabric, foam, carbon fiber, Kevlar, leather, wool, and various plant-based materials.

[0014] . In some embodiments, the one or more layers of fabric include at least a first layer of fabric and a second layer of fabric.

[0015] . In some embodiments, the single piece glove includes one or more wires and one or more wired connections operably connected to the button, wherein the one or more wires are disposed between the first layer and the second layer of fabric.

[0016] . In accordance with various aspects of the present disclosure, a wearable assembly is provided. In some embodiments, the single piece glove includes one or more layers of fabric. In some embodiments, the one

or more layers of fabric define a first elongated side; a second elongated side; a hole disposed between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer; a button mount region defined between the second elongated side and the hole, the button mount region configured to engage a button assembly; and a first opposed end and a second opposed end. In some embodiments, the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end. In some embodiments, the second elongated side defines a concave portion defined between the button mount region and the second opposed end. In some embodiments, the button mount region is closer to the hole than the concave portion. In some embodiments, the first and second opposed ends are configured to be operatively connected to form the single piece glove around at least a portion of a hand of the wearer. In some embodiments, the wearable assembly includes a wearable device configured to be operably connected to the single piece glove.

[0017] . In some embodiments, the second elongated side further defines at least one protrusion and at least one notch, wherein the at least one notch includes the concave portion.

[0018] . In some embodiments, the second elongated side further includes a proximal end and a distal end. In some embodiments, the at least one protrusion is located between the proximal end and the distal end of the second elongated side. In some embodiments, the at least one notch is located between the at least one protrusion and the distal end of the second elongated side.

[0019] . In some embodiments, the single piece glove further includes a hook-and-loop fastener configured to operatively connect the first and second opposed ends, wherein the hook-and-loop fastener includes a hook portion and a loop portion configured to be operatively attached to each other, and wherein, on the one hand, the first opposed end includes the hook portion and the second opposed end includes the loop portion or, on the other hand, the first opposed end includes the loop portion and the second opposed end includes the hook portion.

[0020] . In some embodiments, the single piece glove further includes a button engaged with the button mount region and configured to be operable by the thumb of the wearer.

[0021] . In some embodiments, the single piece glove further includes a mounting portion disposed between the hole and the first opposed end, wherein the wearable device further includes a mounting plate, and wherein the mounting portion of the single piece glove is configured to receive the mounting plate of the wearable device.

[0022] . In some embodiments, the one or more layers of fabric include one more materials selected from a group consisting of: neoprene, nylon, polyester, latex, nitrile, and vinyl.

[0023] . In some embodiments, the one or more layers

of fabric include at least a first layer of fabric and a second layer of fabric.

[0024] . In some embodiments, the single piece glove further includes one or more wires and one or more wired connections operably connected to the button, wherein the one or more wires are disposed between the first layer and the second layer of fabric.

[0025] . In accordance with various aspects of the present disclosure, a method of making a single piece glove is provided. In some embodiments, the method includes providing one or more layers of fabric to form a single piece glove. In some embodiments, the one or more layers of fabric include a first opposed end; a second opposed end; a first elongated side; and a second elongated side. In some embodiments, the method includes forming a hole between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer. In some embodiments, the one or more layers of fabric define a button mount region defined between the second elongated side and the hole, the button mount region configured to engage a button assembly. In some embodiments, the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end. In some embodiments, the second elongated side defines a concave portion defined between the button mount region and the second opposed end. In some embodiments, the button mount region is closer to the hole than the concave portion. In some embodiments, the first and second opposed ends are configured to be operatively connected to form the single piece glove around at least a portion of a hand of the wearer.

[0026] . The above summary is provided merely for purposes of summarizing some example aspects to provide a basic understanding of some aspects of the disclosure. Accordingly, it will be appreciated that the above-described aspects are merely examples. It will be appreciated that the scope of the disclosure encompasses many potential aspects in addition to those here summarized, some of which will be further described below.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S)

[0027] . Having thus described the disclosure in general terms, reference will now be made to the accompanying drawings, which are not necessarily drawn to scale, and wherein:

. FIG. 1 is an angled view of an example wearable assembly in accordance with various aspects of the present disclosure;

. FIG. 2 is a rear view of an example wearable assembly in accordance with various aspects of the present disclosure;

. FIG. 3 is a front view of an example wearable assembly in accordance with various aspects of the present disclosure;

- . FIG. 4 is top view of three example single-piece gloves in accordance with various aspects of the present disclosure;
- . FIG. 5 is a top view of an example single-piece glove in accordance with various aspects of the present disclosure; and
- . FIG. 6 is an example flow chart of an example method of making a single piece glove in accordance with various aspects of the present disclosure.

DETAILED DESCRIPTION OF SOME EXAMPLE ASPECTS

[0028] . Various aspects of the present disclosure now will be described more fully hereinafter with reference to the accompanying drawings, in which some, but not all aspects of the disclosure are shown. Indeed, this disclosure may be embodied in many different forms and should not be construed as limited to the aspects set forth herein; rather, these aspects are provided so that this disclosure will satisfy applicable legal requirements. The term "or" (also designated as "/") is used herein in both the alternative and conjunctive sense, unless otherwise indicated. The terms "illustrative" and "exemplary" are used to be examples with no indication of quality level. Like numbers may refer to like elements throughout. The phrases "in one aspect," "according to one aspect," and/or the like generally mean that the particular feature, structure, or characteristic following the phrase may be included in at least one aspect of the present disclosure and may be included in more than one aspect of the present disclosure (importantly, such phrases do not necessarily may refer to the same aspect).

Overview

[0029] . In modern production, distribution, and industrial environments, wearable assemblies may enable technicians to utilize various user devices while keeping their hands free for performing other tasks. Many individuals employed in a variety of occupations may be required to attach and un-attach handheld devices to a wearable mounting apparatus multiple times throughout the workday. Typical examples include workers in warehouses and other industrial centers. However, a similar requirement may apply to parcel deliverers. It will be understood that many other workers and professionals may have such requirements. A user device may be attached to a wearable device, which may be worn by a technician working in one of the aforementioned environments. For example, a user device such as a scanner may be attached to a wearable assembly such as a glove, which may then be worn by a technician in a distribution center, thereby enabling the technician to scan packages while keeping his or her hands free for performing other tasks.

[0030] . As will be described in greater detail in this disclosure with reference to the various figures, a wearable assembly is provided according to various embod-

iments. The wearable assembly may include a single piece glove made of one or more layers of fabric (such as neoprene or nylon). The layers may be wrapped around a technician's hand and joined at two opposed ends by one or more fasteners (such as hook-and-loop fasteners) to form a single piece glove worn by the technician. As used herein, the term "single piece glove" refers to the structure of the glove being made of one or more individual portions of fabric, with or without other materials, integrated as a single unit. The "single piece glove" may include multiple layers of fabric stitched, welded, or otherwise attached to each other from separate portions. For example, the single piece glove may be attached and detached by engaging or disengaging fasteners (e.g., hook and loop fasteners) at either end of the glove and without requiring the glove to separate into multiple pieces. The "single piece glove" may further include other components (e.g., a mount, a wire, a button, etc.) attached thereto, which components may be removable. The one or more layers of fabric may have a notch and a protrusion on one elongated side, as well as a hole configured to receive a thumb of a technician. The one or more layers may be configured to cover less of the surface area of the technician's palm than traditional gloves when formed into the shape of a single piece glove (e.g., less than half of the technician's palm). For example, when the one or more layers of fabrics are attached around a technician's hand, a single, thin strap-like portion of the one or more layers of fabric only may cross the technician's palm, with an additional portion wrapped about the wrist, leaving the rest of the palm uncovered. For example, in some embodiments, the thin-strap may extend along the crease from the base of the user's index finger to the heel of the palm, following the natural creases in the user's palm and allowing the user full range of motion of their hand. In some embodiments, the glove may leave some or all of the base of the user's thumb and/or the upper palm adjacent the user's pinky finger exposed. In at least this way, the wearable device will not unnecessarily constrain the technician from performing various other tasks, such as lifting objects or typing on a keyboard. Furthermore, less palm coverage by the one or more layers of fabric may reduce buildup of dirt, sweat, grime, and other contaminants between the technician's hand and the glove.

[0031] . In some embodiments, a user device (such as a scanner) may be attached to the wearable device by a mounting plate configured to engage with a mounting portion on the one or more layers of fabric. Wires and other various electronics may be positioned between the layers of fabric and operatively connect the user device to one or more buttons disposed on the layers of fabric for easy access by a technician. In some embodiments, the wearable device may be in wired and/or wireless communication with a handheld device that may also be used by the technician. For example, the wearable device may be a scanner and the handheld device may be a tablet or other display device; when a technician scans an ob-

ject using the scanner attached to the wearable assembly, information about the scanned object may be displayed on the tablet or other display device.

[0032] . The various embodiments of the wearable assembly and the single piece glove will now be described in greater detail in reference to the various figures included with this disclosure.

Example Wearable Assemblies and Single Piece Gloves

[0033] . As shown in FIGS. 1-3, a wearable assembly 100 is provided. According to various embodiments, the wearable assembly 100 may be configured to be worn on a human hand, for example, as shown in at least FIGS. 1-3. In some embodiments, the wearable assembly may include one or more layers of fabric 200, which will be described in greater detail with reference to FIGS. 4 and 5. In some embodiments, the wearable assembly 100 may include a wearable device 102 that is configured to be operably attached to the one or more layers of fabric 200. In some embodiments, the wearable device 102 may be a scanner, but it will be understood that the wearable device 102 may be a variety of devices configured to be connected to a wearable assembly.

[0034] . In some embodiments, the wearable assembly 100 will be configured to cover less of the palm (e.g., less than half the palm) of the operator wearing the wearable assembly 100 (as shown in at least FIG. 3) than a traditional glove.

[0035] . In some embodiments, the wearable assembly 100 may include a mounting plate 104 configured to receive the wearable device 102. In some embodiments, the mounting plate 104 may be configured to be attached to a mounting portion, as will be described in greater detail later in the disclosure. In some embodiments, the mounting plate 104 may have a slot that provides a measure of protection to the exterior of the wearable device 102.

[0036] . Referring now to FIG. 3, when the single piece glove is assembled and wrapped around an individual's hand, the single piece glove may include a single, thin strap-like portion 106 of the one or more layers of fabric only may cross the technician's palm, with an additional, wrist portion 108 wrapped about the wrist, leaving the rest of the palm uncovered.

[0037] . In some embodiments, a button assembly 300 may be operably connected to the wearable assembly 100. In some embodiments, the button assembly 300 may be configured to interact with the wearable device 102. For example, one or more wires may be disposed between the one or more layers of the fabric, or otherwise connected to the glove, and configured to make one or more electrical connections between the button assembly 300 and the wearable device 102. In some embodiments, pressing on the button assembly 300 may complete an electrical circuit to send a signal through the one or more electrical connections such that the button assembly 300 actuates the wearable device 102 (e.g.,

causes the wearable device to activate an image sensor, scan a code, or otherwise perform one or more functions). In some embodiments, the button assembly 300 may be configured such that pressing the button in different ways may activate different functions on the wearable device 102; for example, pressing the button assembly 300 one time and without holding down the assembly for a sustained period may activate one function, while pressing the button assembly 300 a second time while holding down the assembly for more than three seconds may activate a second function. A technician wearing the wearable assembly 100 may then simply operate the button assembly 300 to operate the wearable device 102, allowing the rest of the technician's hand to remain unoccupied while still operating the wearable device 102. In some embodiments, the button assembly 300 may be positioned such that it is easily accessible by the thumb of the person wearing the wearable assembly 100.

[0038] . Referring now to FIG. 4, an example embodiment depicting one or more layers of fabric 200 are provided. In some embodiments, the one or more layers of fabric 200 include a first elongated side 202 and a second elongated side 204. In some embodiments, the one or more layers of fabric 200 may also include a first opposed end 206 and a second opposed end 207. In some embodiments, the first elongated side and the second elongated side each extend between respective distal ends at the first opposed end 206 and proximal ends at the second opposed end 207. In some embodiments, the second elongated side 206 may include a protrusion 208 and a notch 210. The protrusion 208 may include the button mount region 214 and may be disposed between the proximal end of the second elongated side 204 and the notch 210. In some embodiments, the notch 210 may be defined between the protrusion 208 and a second protrusion 209 defined by the second elongated side 204. In some embodiments, the second protrusion 209 may bound an attachment region for joining the ends of the glove (e.g., comprising a loop section or a hook section for engaging a reciprocal hook section or loop section at the second opposed end 207).

[0039] . In some embodiments, the one or more layers of fabric 200 may include a hole 212 that is positioned between the first and second elongated sides 202, 204. In some embodiments, the hole 212 may be configured to receive the thumb of the wearer of the single piece glove. In some embodiments, hole may be shaped specifically to a wearer's thumb to ensure a comfortable fit. In some embodiments, the opening may be enlarged to fit larger thumb sizes of potential wearers. In some embodiments, the material around the hole 212 may be configured not to fold around the thumb of the wearer when the wearer flexes his or her hand while wearing the single piece glove, thereby avoiding damaging the single piece glove or discomfort for the user.

[0040] . In some embodiments, the opposed ends 206 and 207 may be configured to be operatively connected to form a single piece glove. In some embodiments, the

two ends may be operatively connected by a hook-and-loop fastener; that is, in some embodiments, a hook may be disposed on the first opposed end 206 and a corresponding loop may be disposed on the second opposed end 207, or the hook may be disposed on the second opposed end 207 while the loop may be disposed on the first opposed end 206. It will be understood that other fastening mechanisms may be used to connect the opposed ends 206, 207. In some embodiments, the fastening mechanisms may include straps, buttons, or various adhesives. In some embodiments, these fastening mechanisms may be used exclusively or combined to operatively connect the opposed ends 206, 207 and form a single piece glove.

[0041] . In some embodiments, the one or more layers of fabric 200 may define a button mount region 214 that may be configured to engage the button assembly 300. In some embodiments, the button assembly 300 may be snap fit into the button mount region 214, adhered to the button mount region, sewn to the button mount region, welded to the button mount region, inserted through a hole at the button mount region, or otherwise connected therewith. In some embodiments, the button assembly 300 may be configured to be removed if there is need for maintenance on the assembly 100 or if wires or other electronic components need to be run through the button mount region 214 into the one or more layers of fabric of the assembly 100.

[0042] . In some embodiments, the one or more layers of fabric 200 may define a mounting portion 216 that may be configured to receive a mounting plate from a wearable device 102 of the wearable assembly 100. In some embodiments, the mounting portion 216 may engage a plate (e.g., plastic) that is attached to the one or more layers of fabric 200 of the glove and then the wearable device will have its own plastic engagement section that snaps into the plate as shown in FIG. 2. In some embodiments, the plate may be snap fit into the mounting portion 216, adhered to the mounting portion, sewn to the mounting portion, welded to the mounting portion, inserted through a hole at the mounting portion, or otherwise connected therewith.

[0043] . Referring now to FIG. 5, a "top" layer and "bottom" layer of the one or more layers of fabric 200 are shown, according to various embodiments. It will be understood that these sides are mirrors of one another; that is, the top and bottom layers are substantially identical at least in shape, just mirrors of each other in the depicted orientations. The description given in reference to FIG. 4 similarly applies to FIG. 5 for each of the top and bottom layers. However, certain lead lines and numerals are omitted from FIG. 5 to instead highlight other features of the disclosure. In some embodiments, the one or more layers of fabric 200 may define different portions for the fabric having different properties and/or compositions. In some embodiments, the first portions 218 may have a standard fabric thickness designed for non-sensitive areas of a wearer's hand (e.g., non-wear points on the

hand). In some embodiments, the second portions 220 may have a softer fabric thickness designed for sensitive areas of a wearer's hand (e.g., areas of high potential wear-and-tear). As shown in FIG. 5, according to various embodiments, the second, softer fabric portions 220 may be defined around the thumb hole 212, along the first elongated side, the first and second opposed sides 206, 207, and the notch 210. It will be understood that the positioning of the first and second areas of fabric 218, 220 may vary according to the needs of the user and depending on which areas are determined to be more or less sensitive to wear while in use. In some embodiments, the second portions 220 may include neoprene or similar material. In some embodiments, the second portions 220 on the top side may correspond to the second portions 220 on the bottom side, and similarly the first portions 218 on the top side may correspond to the first portions 218 on the bottom side. However, in other embodiments, the first and/or second portions 218, 220 of the sides may not be symmetrically disposed on the one or more layers of fabric of the single piece glove.

Example Methods of Making a Single Piece Glove

[0044] . In some embodiments, the top layer and bottom layer illustrated in FIG. 5 may be manufactured by cutting each of the layers out of at least one type of fabric. The neoprene or other soft and/or cushioning material may be disposed between the top and bottom layers of fabric at the positions indicated (e.g., sandwiched between layers). In some embodiments, heat, pressure, adhesive, and/or stitching may be applied to the sandwiched layers to fix the top layer and the bottom layer with the neoprene or other material therebetween. For example, a bonding material may be disposed at the joints between the layers and/or neoprene, which bonding material may be heated and compressed to fuse the glove into a single piece. In some embodiments, the bonding material may be nylon pongee. Before or after such affixation, the hole and/or any other features of the glove may be formed (e.g., by cutting the fabric).

[0045] . According to various embodiments, and as shown in at least FIG. 6, there is provided a method 300 of making a single piece glove. The steps of the method 300 are described in reference to the system, assemblies, and components as previously described. However, it will be understood that the method 300 may include a step 302 of providing one or more layers of fabric to form a single piece glove. In some embodiments, the method 300 may include a step 304 of forming a hole between the first elongated side and the second elongated side. In some embodiments, the method 300 may include additional steps, such as attaching one or more opposed ends by means of a fastener, such as a hook and loop fastener. In some embodiments, an additional step may include attaching a wearable device to a wearable mount portion on the one or more layers of fabric.

[0046] . Many modifications and other aspects of the

disclosure set forth herein will come to mind to one skilled in the art to which this disclosure pertains having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Therefore, it is to be understood that the disclosure is not to be limited to the specific aspects disclosed and that modifications and other aspects are intended to be included within the scope of the appended claims. Although specific terms are employed herein, they are used in a generic and descriptive sense only and not for purposes of limitation.

Claims

1. A single piece glove comprising:
one or more layers of fabric, the one or more layers of fabric defining:

a first elongated side;
a second elongated side;
a hole disposed between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer;
a button mount region defined between the second elongated side and the hole, the button mount region configured to engage a button assembly;
a first opposed end;
a second opposed end,
wherein the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end, wherein the second elongated side defines a concave portion defined between the button mount region and the second opposed end, wherein the button mount region is closer to the hole than the concave portion, and wherein the first and second opposed ends are configured to be operatively connected to form the single piece glove around at least a portion of a hand of the wearer.

2. The single piece glove of claim 1, wherein the second elongated side further defines at least one protrusion and at least one notch, wherein the at least one notch comprises the concave portion.

3. The single piece glove of claim 2, wherein

the second elongated side further comprises a proximal end and a distal end;
wherein the at least one protrusion is located between the proximal end and the distal end of the second elongated side,
wherein the at least one notch is located between the at least one protrusion and the distal end of the second elongated side.

4. The single piece glove of claim 1, further comprising a hook-and-loop fastener configured to operatively connect the first and second opposed ends, wherein the hook-and-loop fastener comprises a hook portion and a loop portion configured to be operatively attached to each other, and wherein, on the one hand, the first opposed end comprises the hook portion and the second opposed end comprises the loop portion or, on the other hand, the first opposed end comprises the loop portion and the second opposed end comprises the hook portion.

5. The single piece glove of claim 1, further comprising a button engaged with the button mount region and configured to be operable by the thumb of the wearer.

6. The single piece glove of claim 1, further comprising a mounting portion disposed between the hole and the first opposed end, the mounting portion configured to receive a mounting plate of a wearable device.

7. The single piece glove of claim 1, wherein the one or more layers of fabric comprise at least a first layer of fabric and a second layer of fabric.

8. The single piece glove of claim 7, further comprising one or more wires and one or more wired connections operably connected to the button, wherein the one or more wires are disposed between the first layer and the second layer of fabric.

9. A wearable assembly comprising:

a single piece glove comprising:
one or more layers of fabric, the one or more layers of fabric defining:

a first elongated side;
a second elongated side;
a hole disposed between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer;
a button mount region defined between the second elongated side and the hole, the button mount region configured to engage a button assembly;
a first opposed end;
a second opposed end,
wherein the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end,
wherein the second elongated side defines a concave portion defined between the button mount region and the second opposed end,

wherein the button mount region is closer to the hole than the concave portion, and wherein the first and second opposed ends are configured to be operatively connected to form the single piece glove around at least a portion of a hand of the wearer; and

a wearable device configured to be operably connected to the single piece glove.

10. The wearable assembly of claim 9, wherein the second elongated side further defines at least one protrusion and at least one notch, wherein the at least one notch comprises the concave portion.

11. The wearable assembly of claim 10, wherein

the second elongated side further comprises a proximal end and a distal end; wherein the at least one protrusion is located between the proximal end and the distal end of the second elongated side, wherein the at least one notch is located between the at least one protrusion and the distal end of the second elongated side.

12. The wearable assembly of claim 9, wherein the single piece glove further comprises a hook-and-loop fastener configured to operatively connect the first and second opposed ends, wherein the hook-and-loop fastener comprises a hook portion and a loop portion configured to be operatively attached to each other, and wherein, on the one hand, the first opposed end comprises the hook portion and the second opposed end comprises the loop portion or, on the other hand, the first opposed end comprises the loop portion and the second opposed end comprises the hook portion.

13. The wearable assembly of claim 9, wherein the single piece glove further comprises a button engaged with the button mount region and configured to be operable by the thumb of the wearer.

14. The wearable assembly of claim 9, wherein the single piece glove further comprises a mounting portion disposed between the hole and the first opposed end, wherein the wearable device further comprises a mounting plate, and wherein the mounting portion of the single piece glove is configured to receive the mounting plate the wearable device.

15. A method of making a single piece glove, the method comprising:
providing one or more layers of fabric to form a single piece glove, the one or more layers of fabric comprising:

a first opposed end;
a second opposed end;
a first elongated side; and
a second elongated side; the method further comprising:

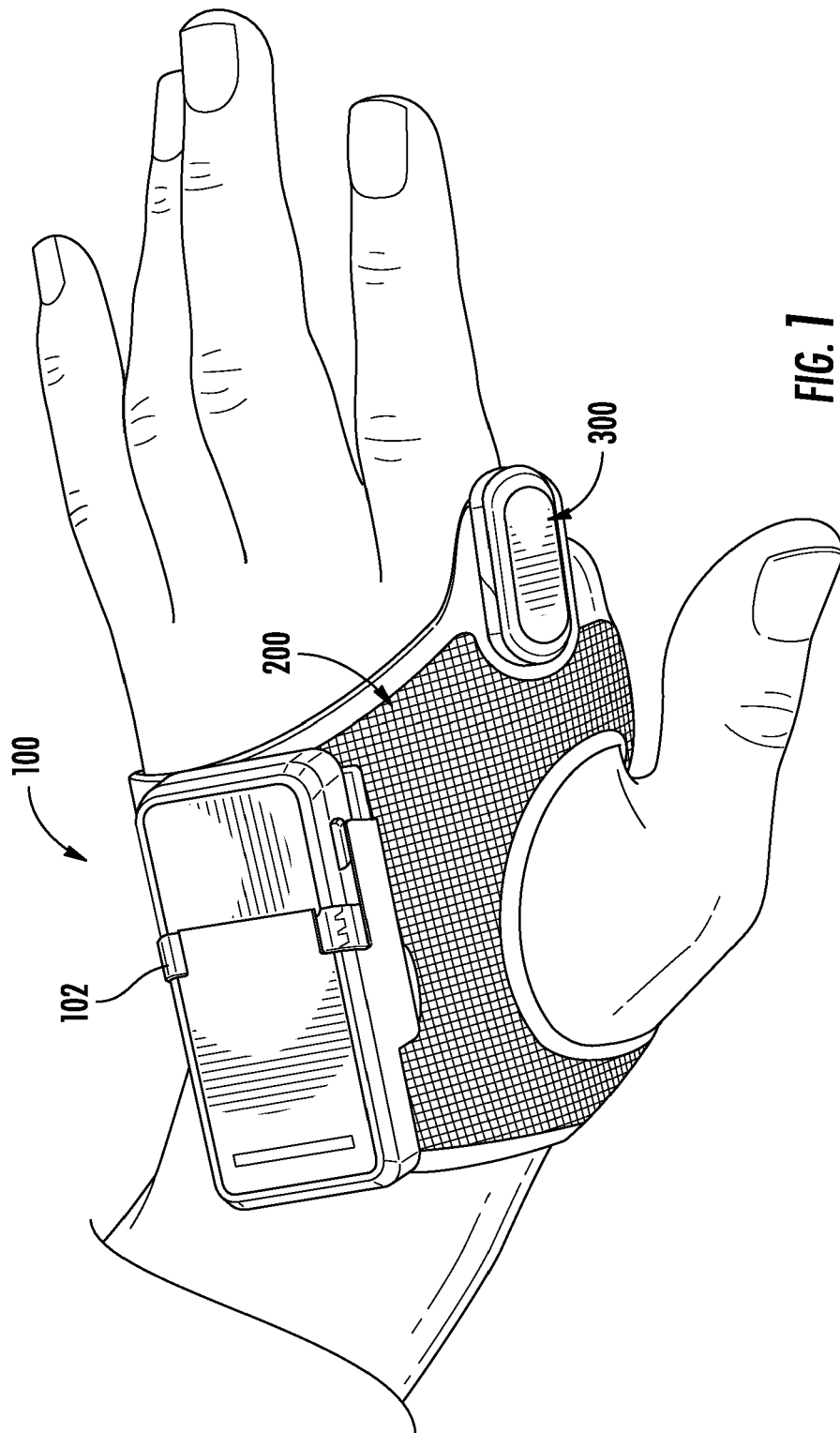
forming a hole between the first elongated side and the second elongated side, the hole being configured to receive a thumb of a wearer;

wherein the one or more layers of fabric define a button mount region defined between the second elongated side and the hole, the button mount region configured to engage a button assembly,

wherein the first elongated side and the second elongated side each extend between the first opposed end and the second opposed end,

wherein the second elongated side defines a concave portion defined between the button mount region and the second opposed end,

wherein the button mount region is closer to the hole than the concave portion, and wherein the first and second opposed ends are configured to be operatively connected to form the single piece glove around at least a portion of a hand of the wearer.



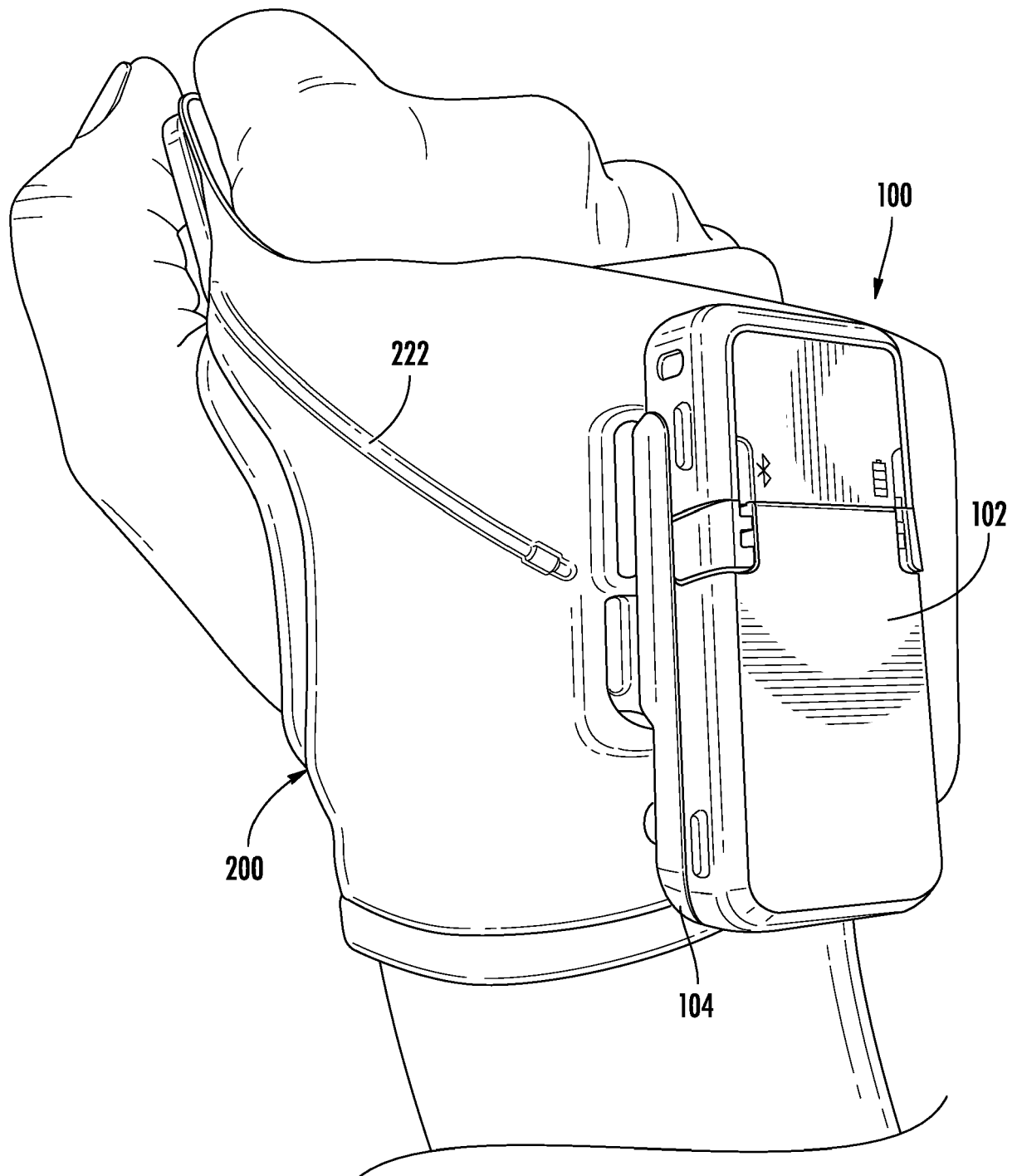


FIG. 2

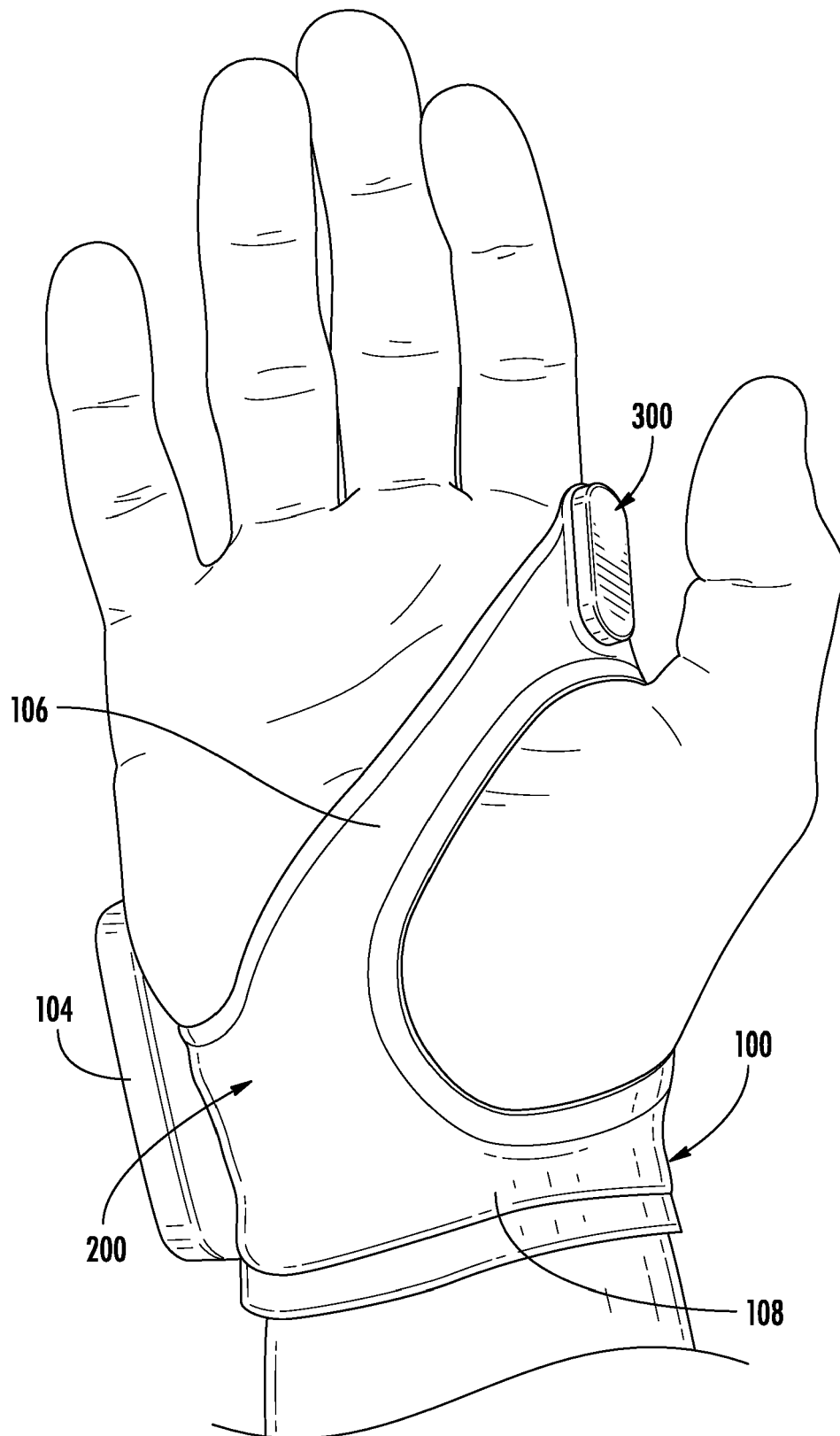


FIG. 3

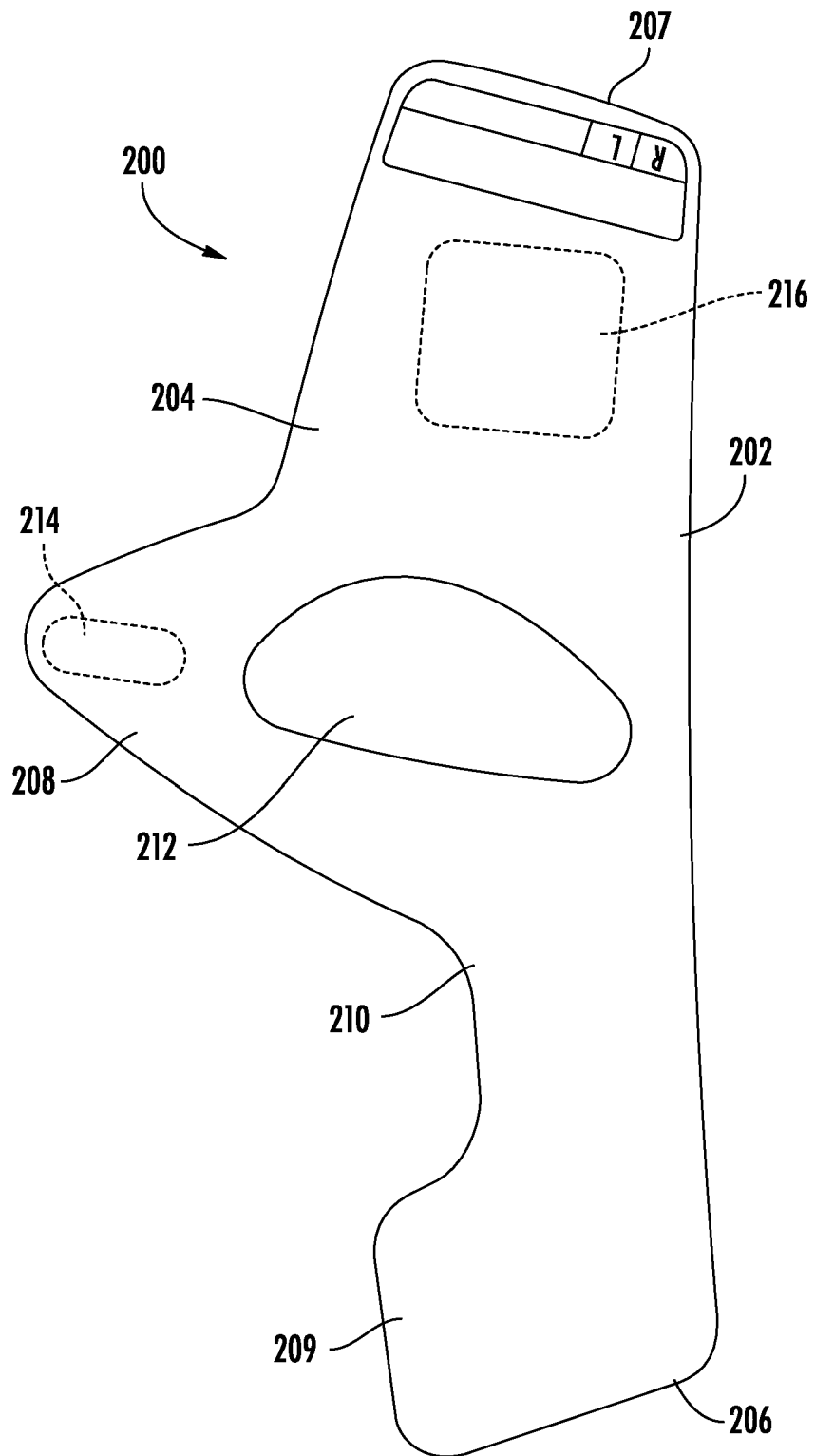
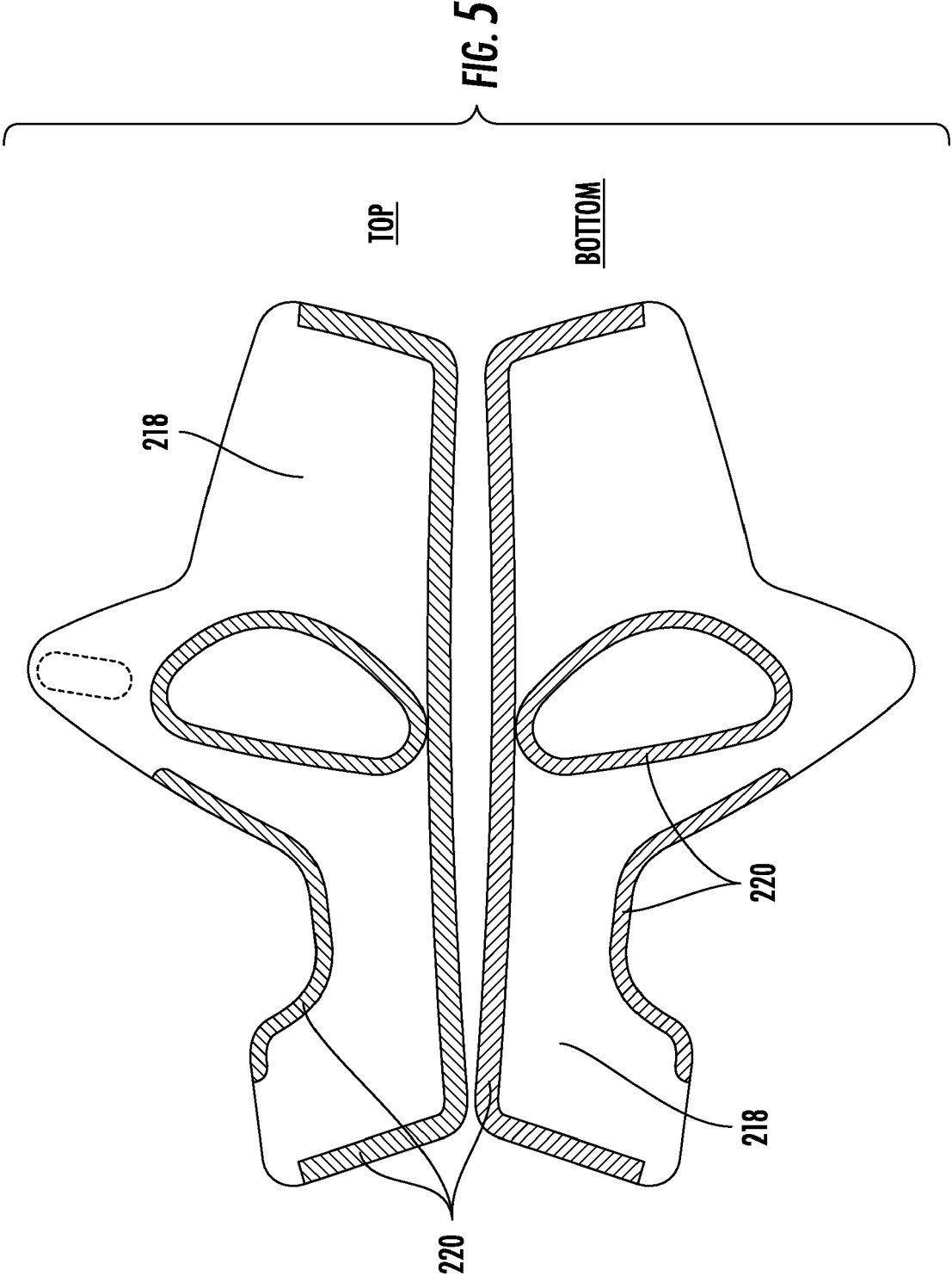


FIG. 4



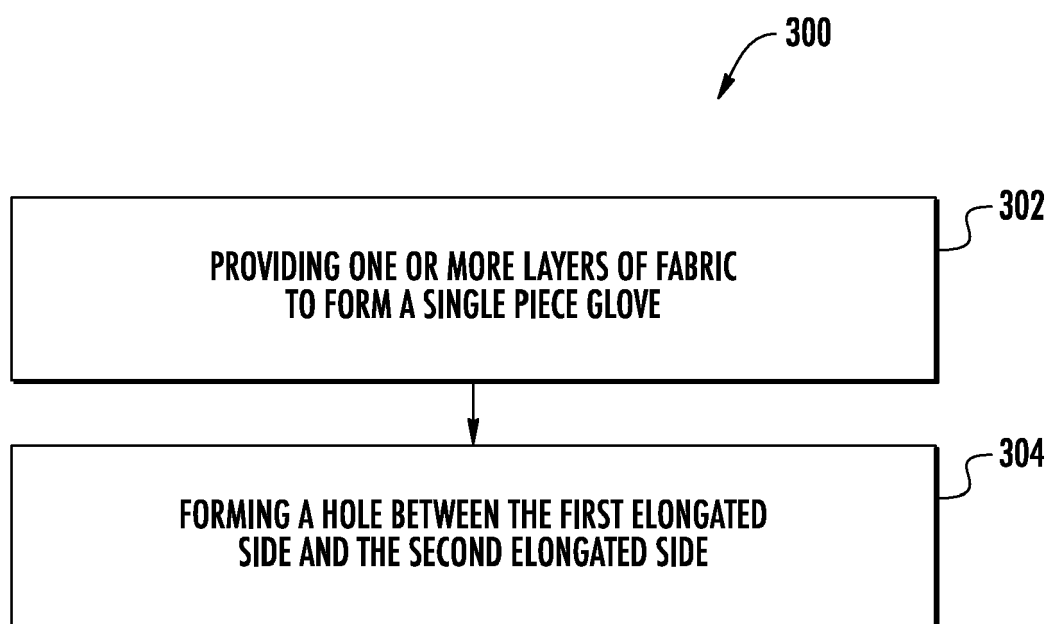


FIG. 6



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**ANNEX TO THE EUROPEAN SEARCH REPORT
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