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(54) **GARMENT WITH ADJUSTABLE FEATURES**

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Description

FIELD OF THE INVENTION

[0001] Aspects herein are directed to garments with adjustable features including removable thermal insulation inserts.

BACKGROUND OF THE INVENTION

[0002] Traditional all-weather garments generally have a set of static features that provide a fixed level of warmth and/or protection from the elements. While this may be suitable when a wearer is at rest, the options for when the wearer begins exercising are to remove the all-weather garment which may expose the wearer to cold temperatures, or continue wearing the all-weather garment which may cause the wearer to overheat.

[0003] US 5 111 810 A relates to a therapeutic thermal wrap kit to be used for treatment of body discomfort, such as muscle and/or ligament stress (e.g., tennis elbow, tendonitis of the knee, chronic sore shoulder, etc.). KR100949371B1 relates to garments with pockets, wherein thermally insulating inserts are removably inserted in the pockets. This document discloses a garment with the features of the preamble of claim 1.

BRIEF DESCRIPTION OF THE DRAWING

[0004] Examples of aspects herein are described in detail below with reference to the attached drawing figures, wherein:

FIG. 1 illustrates a front view of an example upper-body garment with adjustable features in accordance with aspects herein;

FIG. 2 illustrates a back view of the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 3 illustrates a side view of the example upper-body garment of FIG. 1 with a sleeve in a raised position in accordance with aspects herein;

FIG. 4 illustrates a view of an inner-facing surface of the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 5 illustrates an isolated view of a thermal insulation insert in accordance with aspects herein;

FIG. 6 illustrates a cross-section view of the thermal insulation insert of FIG. 5 in accordance with aspects herein;

FIG. 7 illustrates the thermal insulation insert of FIG. 5 in a folded or rolled configuration in accordance with aspects herein;

FIG. 8 illustrates a wearer decoupling a sleeve from the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 9 illustrates the wearer storing the decoupled sleeve in a pocket located at a side portion of the

upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 10 illustrates the wearer decoupling a hood from the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 11 illustrates the wearer positioning the hood in a pocket located on the inner-facing surface of the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 12 illustrates the wearer removing a thermal insulation insert from a pocket located on the inner-facing surface of the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 13 illustrates the wearer folding the removed thermal insulation insert in accordance with aspects herein;

FIG. 14 illustrates the wearer stowing the folded thermal insulation insert in a removable pocket located on a front aspect of the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 15 illustrates the wearer removing the pocket containing the stowed thermal insulation insert in accordance with aspects herein;

FIG. 16 illustrates the wearer opening a vent structure located at a central back portion of the example upper-body garment of FIG. 1 in accordance with aspects herein;

FIG. 17 illustrates the wearer stowing the example upper-body garment of FIG. 1 in a pocket located on the garment in accordance with aspects herein;

FIG. 18 illustrates the pocket containing the stowed garment of FIG. 17 in accordance with aspects herein;

FIG. 19 illustrates an example lower-body garment having removable thermal insulation inserts in accordance with aspects herein; and

FIG. 20 illustrates a flow diagram of an example method of using a garment having removable thermal insulation inserts in accordance with aspects herein.

DETAILED DESCRIPTION OF THE INVENTION

[0005] The subject matter of the present invention is described with specificity herein to meet statutory requirements. However, the description itself is not intended to limit the scope of this disclosure. Rather, the inventors have contemplated that the claimed or disclosed subject matter might also be embodied in other ways, to include different steps or combinations of steps similar to the ones described in this document, in conjunction with other present or future technologies. Moreover, although the terms "step" and/or "block" might be used herein to connote different elements of methods employed, the terms should not be interpreted as implying any particular order among or between various steps herein disclosed unless and except when the order of individual steps is explicitly stated.

[0006] Traditional all-weather garments generally have a set of static features that provide a fixed level of insulation and/or protection from the elements. While this may be suitable when a wearer is at rest, the options for when the wearer begins exercising are to remove the all-weather garment which may expose the wearer to cold temperatures, or continue wearing the all-weather garment which may cause the wearer to overheat. Aspects herein are directed to an all-weather garment that includes a set of features that can be adjusted or manipulated to provide varying levels of warmth and/or protection from the elements enabling the garment to be worn over a wide range of weather and/or temperature conditions. In one example aspect, the garment may include one or more removable thermal insulation inserts. The inserts may be positioned within pockets located on the inner-facing surface of the garment when additional warmth and/or insulation is needed. When no longer needed, the inserts can be removed, folded, and stowed within, for instance, an optional detachable pocket structure located on the garment until needed again.

[0007] It is contemplated herein that the all-weather garment may take the form of an upper-body garment such as a jacket or coat. In this aspect, additional features that can be adjusted or manipulated include a hood that can be partially detached from a torso portion of the upper-body garment and stowed within a pocket located adjacent to a neck opening of the torso portion. The ability to stow the hood when not in use, as opposed to letting the hood hang freely may minimize distractions when the wearer is exercising. Additionally, configuring the hood to be partially detached, instead of fully detached, prevents inadvertent misplacement of the hood. The all-weather garment also includes sleeves that can be partially unzipped from the torso portion and stowed within pockets located inferior to the sleeve openings and positioned on an outer-facing surface of the garment. Similar to the hood, configuring the sleeves to be partially detached, instead of fully detached, prevents inadvertent misplacement of the sleeves. As well, positioning the pockets used to stow the sleeves on an outer-facing surface of the garment prevents the sleeves from contacting the wearer when stowed which may be useful if the sleeves are wet from precipitation. Yet another feature is a vent structure that can be opened and closed and is located at a central back region of the upper-body garment. The central back region of a wearer is known to be a high heat producing area based on, for example, heat and/or sweat maps of human bodies, so positioning a vent structure in this location facilitates the rapid removal of heat generated by the wearer. When the wearer no longer needs the protection and/or warmth of the upper-body garment, the garment can be folded and stowed within a pocket located on the garment. Each of these features can be used alone or in various combinations to provide an optimal level of protection and/or warmth to the wearer.

[0008] The term "garment" as used throughout this disclosure may encompass, for example an upper-body

garment (e.g., jacket, coat, pullover, shirt, vest, and the like) or a lower-body garment (e.g., short, pant, leggings, capri, and the like). Positional terms used when describing the garment such as front, back, sides, inner-facing surface, outer-facing surface, upper or superior, lower or inferior, and the like are with respect to the garment being worn as intended by a wearer standing upright. As such, the front of an upper-body garment is configured to cover a front upper torso area and/or front arm areas of a wearer, and the front of a lower-body garment is configured to cover a front lower torso area and front leg areas of a wearer. The back of the upper-body garment is configured to cover a back upper torso area and/or back arm areas of a wearer, and the back of the lower-body garment is configured to cover a back lower torso area and back leg areas of a wearer. The sides of the upper-body garment are configured to cover side torso areas of a wearer, and the sides of the lower-body garment are configured to cover the lateral sides of a wearer's legs. The inner-facing surface of a garment is configured to be positioned facing toward a wearer's body surface, and the outer-facing surface of the garment is configured to face away from the inner-facing surface of the garment and toward an external environment. The term "inner-most-facing layer" means the layer of a garment that is positioned closest to a wearer's body surface compared to other layers of the garment when the garment is in an as-worn configuration. The term "outermost-facing layer" means the layer of a garment that is positioned to be in direct contact with the external environment and/or is furthest away from the wearer's body surface compared to other layers of the garment. The term upper or superior means located closer to a neck opening of an upper-body garment or a waist opening of a lower-body garment. The term lower or inferior means located closer to a waist opening of an upper-body garment or leg openings of a lower-body garment.

[0009] The term "thermally insulating fill material" encompasses materials used to provide insulation and may include down, loose fibers including natural fibers and/or synthetic (e.g., polyester) fibers, nonwoven sheets including sheets formed from natural fibers and/or synthetic fibers, fluids such as air, gas, or liquids, and the like. The term "removably coupled" as used herein means the ability of a structure to be repeatedly coupled to and decoupled from another structure. The term "removably attached" as used herein means the ability of a structure to be repeatedly attached and detached from another structure using technologies such as hook-and-loop fasteners, slider mechanisms, releasable adhesives, snaps, buttons, and the like. The term "reversible closure mechanism" as used herein mean a structure, such as a zipper or other type of slider mechanism, that can be used to repeatedly open and close another structure such as, for example, a pocket. The term "removably position" means the ability to repeatedly position and remove a structure, such as a thermal insulation insert, from another structure such as a pocket. The term

"about" as used herein means within $\pm 10\%$ of an indicated value.

[0010] Unless otherwise noted, all measurements provided herein are measured when the garment is at standard ambient temperature and pressure (25 degrees Celsius or 298.15 K and 1 bar) and is in a resting (e.g., un-stretched) state.

[0011] FIGs. 1 and 2 respectively depict front and back views of an example upper-body garment 100 having adjustable features. The upper-body garment 100 is shown in the form of a jacket or coat, but it is contemplated herein that the upper-body garment 100 may also be in the form of a shirt, a pullover, a vest, and the like. In example aspects, one or more textile layers of the garment 100 may be formed from a woven material. For example, an outer-facing textile layer including an outermost-facing textile layer of the garment 100 may be formed of a tightly woven material to impart a degree of wind resistance to the garment 100. In some aspects, the woven material may have water-resistant or water-repellant features based on, for example, the application of a durable water repellant (DWR) finish to the woven material. It is contemplated herein that the garment 100 may be formed from other types of textiles including knit layers, nonwoven layers, mesh layers, and the like.

[0012] The garment 100 includes a front torso portion 110 (shown in FIG. 1) and a back torso portion 112 (shown in FIG. 2) that together define a neck opening 114 to which a hood 115 extends, and a waist opening 116 opposite the neck opening 114. The garment 100 further includes a first sleeve 118 and a second sleeve 120. The front torso portion 110, in example aspects, may include a front right torso portion 110a and a front left torso portion 110b that are reversibly coupled to each other using, for instance, a closure mechanism 122 such as a zipper.

[0013] With respect to FIG. 1, the garment 100 may further include a pocket 124 located on an upper aspect of the front right torso portion 110a. This location is just one example, and it is contemplated herein that the pocket 124 may be positioned at other locations on the front right torso portion 110a or the front left torso portion 110b. As explained further below, in one example the pocket 124 may be used to stow thermal insulation inserts when not in use. In example aspects, the pocket 124 may be removably attached to the front right torso portion 110a using, for example, hook-and-loop fasteners, snaps, buttons, adhesives, and the like.

[0014] The garment 100 may also include pocket 126 located on a lower aspect of the front left torso portion 110b. It is contemplated herein that the pocket 126 may alternatively be located on a lower aspect of the front right torso portion 110a. The pocket 126 includes one or more reversible closure mechanisms, such as zippers, that allow access to an interior of the pocket 126 when open. As explained further below, in one example aspect, the garment 100 may be folded and stowed within the pocket 126 when not in use. As such, the pocket 126 may be sized to adequately accommodate the stowed garment

100.

[0015] With respect to the hood 115, the base of the hood 115 may be at least partially attached to the neck opening 114 using a first reversible closure mechanism 128 and a second reversible closure mechanism 130 positioned respectively on the left and right aspects of the base of the hood 115. Each of the first and second reversible closure mechanisms 128 and 130 includes a slider pull that is positioned in the front when the first and second reversible closure mechanisms 128 and 130 are in a closed state and the hood 115 is fully attached to the neck opening 114. As explained below, the hood 115 may be partially detached from the neck opening 114 by tensioning the slider pulls toward the back torso portion 112 of the garment 100.

[0016] With respect to FIG. 2, the back torso portion 112 of the garment 100 includes a vent structure 129 located along a vertical midline of the garment 100. The vent structure 129, in one example aspect, is formed between opposing edges of two back panels, such as back panel 112a and back panel 112b that form, at least in part, the back torso portion 112. A reversible closure mechanism 131 reversibly couples the back panel 112a to the back panel 112b along the vertical midline. When in an open state, a portion of the back panel 112a is decoupled from a portion of the back panel 112b to form an open communication path between an exterior of the garment 100 and an interior of the garment 100, thus allowing heat produced by a wearer to dissipate. When in a closed state, the portion of the back panel 112a is coupled to the portion of the back panel 112b. Positioning the vent structure 129 along the vertical midline of the back torso portion 112 may be based on heat maps of a human body that indicate that the central back torso area of a human is a high heat producing area.

[0017] FIG. 3 depicts a side view of the garment 100 with the second sleeve 120 in a raised position to better illustrate features associated with the side of the garment 100. A view of the other side of the garment 100 would be similar. A pocket 312 is shown on the side of the garment 100, where the pocket 312 extends vertically from an area adjacent (e.g., from about 0.5 cm to about 15 cm) to an inferior edge of the second sleeve 120 where it attaches to the front and back torso portions 110 and 112 of the garment 100 to an area adjacent (e.g., from about 0.2 cm to about 15 cm) to the waist opening 116 of the garment 100. The pocket 312 may be formed by positioning an outer panel of material adjacent to an inner panel of material. In example aspects, the inner panel of material may be a mesh material as shown in FIG. 3 to facilitate ventilation in this area. The pocket 312 includes a pocket opening 314 positioned adjacent (e.g., from about 0.5 cm to about 15 cm) to the inferior edge of the second sleeve 120, where the pocket opening 314 provides access to the pocket 312. The pocket opening 314, in example aspects, may include an elastic band to help tension the pocket opening 314 to a semi-closed state when not in use and minimize distractions to a

wearer. A similar pocket may be located on the opposite side of the garment 100 and may be positioned similarly to the pocket 312. As explained further below, the pocket 312 may be used to stow the second sleeve 120 when the second sleeve 120 is not in use. Positioning the pocket 312 such that it is located on an outer-facing surface of the garment 100 may be useful when stowing sleeves that may be wet with precipitation or snow thereby preventing the moisture from contacting the wearer as may happen if the pocket 312 were located on the inner-facing surface of the garment 100.

[0018] FIG. 3 further depicts a reversible closure mechanism 316, such as a zipper that extends partially around the circumference of the proximal end of the second sleeve 120 where the second sleeve 120 is joined to the front and back torso portions 110 and 112. More particularly, the reversible closure mechanism 316 includes a first end positioned on a back aspect of the proximal end of the second sleeve 120 and a second end positioned on a front aspect of the proximal end of the second sleeve 120. An intervening portion of the reversible closure mechanism 316 extends around a superior aspect of the proximal end of the second sleeve 120. In example aspects, a slider pull may be positioned at the first end of the reversible closure mechanism 316 when the reversible closure mechanism 316 is in a closed state, and the slider pull may be positioned at the second end of the reversible closure mechanism when the reversible closure mechanism 316 is in a fully open state although an opposite configuration is contemplated herein. In example aspects, the reversible closure mechanism 316 does not extend entirely around the circumference of the proximal end of the second sleeve 120 such that the second sleeve 120 remains permanently attached to the front and back torso portions 110 and 112 at an inferior portion 121 of the proximal end of the second sleeve 120. The permanent attachment of the inferior portion 121 may be through stitching, bonding, welding, adhesives, and the like. A similar reversible closure mechanism may be associated with the first sleeve 118. The reversible closure mechanism 316 may be used to partially detach the second sleeve 120 from the front and back torso portions 110 and 112 before stowing the second sleeve 120 in the pocket 312. FIG. 3 additionally depicts a reversible closure mechanism 310, such as a zipper, on the pocket 126, where the reversible closure mechanism 310 may be used to open and close the pocket 126.

[0019] FIG. 4 illustrates a view of an inner-facing surface of the garment 100. First with respect to the hood 115, the hood 115 includes the first reversible closure mechanism 128 positioned at a left aspect of the base of the hood 115 and additionally includes the second reversible closure mechanism 130 positioned at the right aspect of the base of the hood 115. The first and second reversible closure mechanisms 128 and 130 are shown in an open state with the respective slider pulls positioned at a back aspect of the hood 115. In the open state, the base of the hood 115 is partially detached from the neck

opening 114. A remaining portion 412 of the hood 115 at a central back aspect of the hood 115 is permanently attached to the neck opening 114 by way of, for example, stitching, bonding, adhesives, and the like. A pocket 410 is located on the inner-facing surface of the back torso portion 112 of the garment 100 where the pocket 410 has a pocket opening 411 that aligns or is coincident with the neck opening 114. A lower edge of the pocket 410 may be spaced from the pocket opening 411 by a distance of from about 10 cm to about 30 cm. The pocket 410 may be used to stow the hood 115 when not in use as explained further below.

[0020] The inner-facing surface of the garment 100 includes a series of pockets 414, 416, 418, and 420 sized and configured to respectively house thermal insulation inserts 424, 426, 428, and 430. The pocket 414 is positioned on the inner-facing surface of the front right torso portion 110a, the pocket 416 is positioned on the inner-facing surface of the back panel 112b, the pocket 418 is positioned on the inner-facing surface of the back panel 112a, and the pocket 420 is positioned on the inner-facing surface of the front left torso portion 110b. An innermost-facing layer of the pockets 414, 416, 418, and 420 may be formed from a mesh material 422, a portion of which is shown for each of the pockets. Forming the innermost-facing layer of the pockets 414, 416, 418, and 420 from the mesh material 422 facilitates that transfer or passage of heated air produced by a wearer to the thermal insulation inserts 424, 426, 428, and 430 which help to store or trap the heated air.

[0021] The pocket 414 includes a pocket opening 413, the pocket 416 includes a pocket opening 415, the pocket 418 includes a pocket opening 417, and the pocket 420 includes a pocket opening 419. Each of the pocket openings 413, 415, 417 and 419 is located superior to a bottom edge of the respective pockets 414, 416, 418, and 420 and generally adjacent (e.g., from about 10 cm to about 40 cm) to the neck opening 114. As shown in the magnified view of the pocket opening 413, each of the pocket openings 413, 415, 417, and 419 may include a loop structure 432 secured to a textile edge forming the respective opening. The loop structure 432 may be used to receive a strap associated with the thermal insulation inserts 424, 426, 428, and 430 to help secure the thermal insulation inserts 424, 426, 428, and 430 and prevent them from shifting or displacing downward when positioned within the pockets 414, 416, 418, and 420. The positioning of the pockets 414, 416, 418, and 420 is illustrative and it is contemplated herein that the garment 100 may include additional pockets of various sizes and shapes and located at different portions of the garment 100 including the first and second sleeves 118 and 120 and the hood 115, where the additional pockets may be used to house various sizes and shapes of thermal insulation inserts.

[0022] FIG. 5 depicts an isolated view of the thermal insulation insert 424, and FIG. 6 depicts a cross-section of the thermal insulation insert 424 taken along cut line

6-6. The description provided for the thermal insulation insert 424 also applies to the thermal insulation inserts 426, 428, and 430. The thermal insulation insert 424 includes a first end 510, a second end 512, a first side 514 extending between the first end 510 and the second end 512, and a second side 516 extending between the first end 510 and the second end 512, where the second side 516 is opposite the first side 514. In example aspects, the thermal insulation insert 424 may be generally rectangular shaped such that the first side 514 and the second side 516 have a greater length than the first end 510 and the second end 512. However, it is contemplated herein that the thermal insulation inserts may have different sizes and shapes than that shown where the size and shape of a particular thermal insulation insert may be based upon a desired positioning of the thermal insulation insert in the garment 100. For instance, a thermal insulation insert configured to be positioned in the hood 115 to cover an ear area of a wearer may be generally circular in shape while thermal insulation inserts configured to be positioned adjacent to torso portions of a wearer may have the rectangular shape of the insert 424.

[0023] The cross-section of the thermal insulation insert 424 shown in FIG. 6 illustrates that the thermal insulation insert 424 includes a first textile layer 526 that forms a first surface of the thermal insulation insert 424, a second textile layer 528 that forms a second opposite surface of the thermal insulation insert 424 and a thermally insulating fill material 530 positioned within a space formed between the first textile layer 526 and the second textile layer 528. In example aspects, the first and second textile layers 526 and 528 may comprise a tightly woven construction to help prevent the fibers and/or down of the thermally insulating fill material 530 from penetrating the first and second textile layers 526 and 528. Other constructions such as knit or nonwoven constructions are contemplated herein. In further example aspects, the first and second textile layers 526 and 528 may be formed from a lightweight fabric (e.g., from about 30 grams per square meter (gsm) to about 150 gsm) or an ultra-lightweight fabric (e.g., from about 10 gsm to about 100 gsm) to allow for easy folding or rolling of the thermal insulation insert 424. The first and second textile layers 526 and 528 may comprise separate layers in one example aspect, where the separate layers are attached to each other at, for instance, the sides and ends of the thermal insulation insert 424. It is alternatively contemplated that the first and second textile layers 526 and 528 may integrally extend from each other to form a generally seamless construction for the thermal insulation insert 424.

[0024] A closure mechanism, referenced generally by the numeral 518 is positioned at the first end 510 of the thermal insulation insert 424. It is contemplated herein that the closure mechanism 518 may be positioned at other locations on the thermal insulation insert 424 including, for example, the second end 512. In example aspects, the closure mechanism 518 includes a male component 520, a female component 522 complemen-

tary to the male component 520, and a strap 524 extending between the male component 520 and the female component 522. In example aspects, the male component 520 may be located at a first end of the strap 524 that is attached to for instance, the first textile layer 526 of the thermal insulation insert 424, and the female component 522 may be located at the second free end of the strap 524, although an opposite configuration is contemplated herein. The male component 520 and the female component 522 may include any number of complementary fastening systems including, for example, a stud of a snap and a socket of a snap, a hook component of a hook-and-loop fastening system and a loop component of the hook-and-loop fastening system, a button and a receiving slit, and the like.

[0025] In one aspect, the closure mechanism 518 may be used to secure the thermal insulation insert 424 to the loop structure 432 positioned at the pocket opening 413 when the thermal insulation insert 424 is positioned within the pocket 414. In another aspect, and as shown in FIG. 7, the thermal insulation insert 424 may be folded or rolled (e.g., the second end 512 may be rolled toward the first end 510), and the strap 524 may be positioned to extend around a circumference of the rolled thermal insulation insert 424. In this configuration, the male component 520 is mated to the female component 522 to maintain the thermal insulation insert 424 in a rolled form. As explained further below, the rolled or folded thermal insulation insert 424 may then be stowed within, for example, the pocket 124 of the upper-body garment 100.

[0026] FIGs. 8-18 depict various ways in which the upper-body garment 100 may be manipulated and/or adjusted to attain a desired level of protection from the elements and/or to provide a desired level of warmth. FIGs. 8-9 depict a wearer 810 removing the second sleeve 120 of the upper-body garment 100 and stowing the second sleeve 120 in the pocket 312. For example, FIG. 8 illustrates the wearer 810 beginning to remove his arm from the second sleeve 120 after partially uncoupling the proximal end of the second sleeve 120 by using the reversible closure mechanism 316. In one example, the wearer 810 may grasp the slider pull positioned at the first end of the reversible closure mechanism 316 and exert tension on the slider pull over a superior aspect of the proximal end of the second sleeve 120 and toward a front aspect of the proximal end of the second sleeve 120 to partially detach the proximal end of the second sleeve 120 from the front and back torso portions 110 and 112. The second sleeve 120 remains attached to the front and back torso portions 110 and 112 at the inferior portion 121 of the proximal end of the second sleeve 120. Once partially detached, and as shown in FIG. 9, the wearer 810 may insert the second sleeve 120 into the pocket 312 located on the outer-facing surface of the garment 100.

[0027] Partially detaching and stowing the first and second sleeves 118 and 120 enables the wearer 810 to convert the upper-body garment 100 from a jacket configuration to a vest configuration which may be more

suitable for warmer weather conditions. Maintaining a permanent attachment between the inferior portion 121 of the proximal end of the first and second sleeves 118 and 120 and the front and back torso portions 110 and 112 prevents inadvertent misplacement of the first and second sleeves 118 and 120, and positioning the pocket 132 on the outer-facing surface of the upper-body garment 100, as opposed to the inner-facing surface of the garment 100 prevents any moisture that may be present on the first and second sleeves 118 and 120 from contacting the wearer's torso.

[0028] FIGs. 10 and 11 depict the wearer 810 partially detaching and stowing the hood 115. In FIG. 10, the wearer 810 partially detaches the right and left aspects of the base of the hood 115 by grasping, for instance, slider pulls associated with the first and second reversible closure mechanisms 128 and 130 and pulling the slider pulls in a front-to-back direction. As mentioned, a portion 412 of the base of the hood 115 remains permanently attached to a back aspect of the neck opening 114. FIG. 11 depicts the wearer 810 tucking the hood 115 into the pocket 410 located on an inner-facing surface of the garment 100, where the pocket opening 411 is generally aligned with the neck opening 114 of the garment 100. Being able to easily stow the hood 115 in the pocket 410, as opposed to letting the hood 115 drape over the outer-facing surface of the back torso portion 112 of the garment 100, prevents the hood 115 from becoming a distraction when no longer worn.

[0029] FIGs. 12-15 depict the wearer removing and stowing the thermal insulation insert 424 from the pocket 414. In FIG. 12, the wearer 810 grasps the first end 510 of the thermal insulation insert 424 and begins pulling the insert 424 out of the pocket 414. This may occur after the wearer 810 decouples the closure mechanism 518 of the thermal insulation insert 424 from the loop structure 432 positioned at the pocket opening 413. In FIG. 13, the wearer 810 rolls or folds the thermal insulation insert 424. For instance, the wearer 810 may roll the second end 512 of the insert 424 toward the first end 510 so that after the rolling is completed, the first end 510 and the second end 512 are adjacent to each other or are positioned next to each other. After rolling, the wearer may wrap the strap 524 around the thermal insulation insert 424 and couple the male component 520 and the female component 522 together to maintain the insert 424 in a rolled state.

[0030] FIG. 14 depicts the wearer 810 optionally positioning the rolled thermal insulation insert 424 in the pocket 124. This may be done while the pocket 124 is still attached to the garment 100, or it may be done after the wearer 810 has detached the pocket 124 from the garment 100. The pocket 124 may include a reversible closure mechanism 1512, such as a zipper, to securely maintain the thermal insulation insert 424 within the pocket 124 after being stowed. The pocket 124 is sized to stow a number of inserts. For instance, the pocket 124 may be sized to stow all of the thermal insulation inserts 424, 426, 428, and 430. FIG. 15 depicts the wearer 810

optionally removing the pocket 124 from the garment 100. In example aspects, the pocket 124 may be removably attached to the garment 100 by a coupling system 1510 such as, for instance, a hook-and-loop system, a releasable adhesive, a slider mechanism, and the like. The ability of the wearer 810 to remove some or all of the thermal insulation inserts 424, 426, 428, and 430 from the garment 100 enables the wearer 810 to provide a customized level of insulation to the garment 100 in areas where it is needed.

[0031] When the wearer 810 wishes to increase the insulation level of the garment 100, the wearer may remove the thermal insulation insert 424 from the pocket 124, decouple the male and the female components 520 and 522 of the closure mechanism 518, and unfold or unroll the thermal insulation insert 424 so that the first end 510 is spaced apart from the second end 512 by an entire length of the first and second sides 514 and 516 of the thermal insulation insert 424, such as seen in FIG. 5. The wearer 810 may then position the thermal insulation insert 424 within the pocket 414 and couple the closure mechanism 518 to the loop structure 432.

[0032] FIG. 16 depicts the wearer 810 opening the vent structure 129 to provide an open communication path from an interior of the upper-body garment 100 to an exterior of the upper-body garment 100. In example aspects, the wearer 810 may grasp a slider pull associated with the reversible closure mechanism 131 and pull in a downward direction to open the vent structure 129. Alternatively, the reversible closure mechanism 131 may be configured such that the wearer 810 may exert the pull in an upward direction to open the vent structure 129. The wearer 810 may open the vent structure 129 as needed to vent the garment 100 and cool the wearer 810.

[0033] FIGs. 17 and 18 depict the wearer 810 stowing the garment 100. In example aspects, and as shown in FIG. 17, the wearer 810 may doff the upper-body garment 100 and invert the pocket 126 while positioning the garment 100 within the inverted pocket 126. FIG. 18 depicts the pocket 126 with the stowed garment 100. The pocket 126 includes the reversible closure mechanism 310 so that the stowed garment 100 may remain securely within the pocket 126.

[0034] It is contemplated herein that features described for the upper-body garment 100 may be applied to, for instance, a lower-body garment such as a pant or short. FIG. 19 depicts a front view of a lower-body garment 1900 that includes a lower torso portion 1910 having a waist opening 1912, a first leg portion 1914 having a first leg opening 1916, and a second leg portion 1918 having a second leg opening 1920.

[0035] In example aspects, the lower-body garment 1900 may include a first pocket 1922 and a second pocket 1924 positioned on an inner-facing surface of the lower-body garment 1900 as indicated by the dashed lines. The first and second pockets 1922 and 1924 are shown positioned over an anterior thigh area of the lower-body garment 1900. The first pocket 1922 may be used to

house a first removable thermal insulation insert 1926, and the second pocket 1924 may be used to house a second removable thermal insulation insert 1928. Similar to the system described with respect to the garment 100, the first and second thermal insulation inserts 1926 and 1928 may include a fastening mechanism that reversibly couples the first and second thermal insulation inserts 1926 and 1928 to a loop structure associated with each of the first and second pockets 1922 and 1924 as shown. The first and second thermal insulation inserts 1926 and 1928 may be removed when less insulation/warmth is desired, folded or rolled, and stowed within, for example, a detachable pocket structure 1930 located on the lower-body garment 1900. The location of the first and second pockets 1922 and 1924 and the associated first and second thermal insulation inserts 1926 and 1928 is illustrative only, and it is contemplated herein that the lower-body garment 1900 may include additional pockets and/or thermal insulation inserts positioned at other locations on the garment 1900. Additionally, the location of the detachable pocket structure 1930 is illustrative only and other locations of the pocket structure 1930 on the lower-body garment 1900 are contemplated herein.

[0036] FIG. 20 illustrates a flow diagram of an example method 2000 of using, for example, the upper-body garment 100 or the lower-body garment 1900. At a step 2010, a thermal insulation insert, such as the thermal insulation insert 424 is removed from a pocket, such as the pocket 414, located on an inner-facing surface of the garment. At a step 2012, the thermal insulation insert is folded or rolled so that a first end of the insert is positioned adjacent to a second end of the insert. At a step 2014, a strap, such as the strap 524, of a closure mechanism, such as the closure mechanism 518, that is positioned at one of the first end or the second end of the thermal insulation insert is manipulated so that it encircles the folded thermal insulation insert. At a step 2016, a male component of the closure mechanism, such as the male component 520 is secured to a female component of the closure mechanism, such as the female component 522. The method 2000 may include additional steps such as stowing the folded thermal insulation insert within a pocket, such as the pocket 124, positioned on the garment, and, optionally, detaching the pocket from the garment.

[0037] The method 2000 may be executed when a wearer wishes to decrease the level of warmth and/or insulation of the garment. When the wearer wishes to increase the level of warmth and/or insulation of the garment, the wearer may release the male component from the female component of the folded thermal insulation insert's closure mechanism, unfold the thermal insulation insert so that the first end and the second end of the insert are spaced apart from one another by an entire length of the thermal insulation insert, and position the unfolded thermal insulation insert within the pocket located on the inner-facing surface of the garment. The wearer may additionally extend the strap of the closure mechanism through the loop structure positioned at the

pocket opening of the pocket and mate the male and female components of the closure mechanism so that the insert does not shift or settle within the pocket.

[0038] Aspects of the present disclosure have been described with the intent to be illustrative rather than restrictive. Alternative aspects will become apparent to those skilled in the art that do not depart from its scope. A skilled artisan may develop alternative means of implementing the aforementioned improvements without departing from the scope of the claims.

[0039] It will be understood that certain features and subcombinations are of utility and may be employed without reference to other features and subcombinations and are contemplated within the scope of the claims. Not all steps listed in the various figures need be carried out in the specific order described.

Claims

1. A garment (100; 1900) comprising: a pocket (414, 416, 418, 420; 1922, 1924) positioned on the garment (100; 1900); and a thermal insulation insert (424, 426, 428, 430; 1926, 1928) removably positioned within the pocket (414, 416, 418, 420; 1922, 1924), the thermal insulation insert (424, 426, 428, 430; 1926, 1928) comprising: a first textile layer (526); a second textile layer (528) secured to the first textile layer (526) to form the thermal insulation insert (424, 426, 428, 430; 1926, 1928), the thermal insulation insert (424, 426, 428, 430; 1926, 1928) having a first end (510) and a second end (512) opposite the first end (510); a thermally insulating fill material (530) contained within a space between the first textile layer (526) and the second textile layer (528); **characterised in that** the thermal insulation insert (424, 426, 428, 430, 1926, 1928) has a closure mechanism (518) positioned at one of the first end (510) or the second end (512) of the thermal insulation insert (424, 426, 428, 430; 1926, 1928), the closure mechanism (518) comprising a male component (520), a female component (522), and a strap extending between the male component (520) and the female component (522).
2. The garment (100; 1900) according to claim 1, wherein the pocket (414, 416, 418, 420; 1922, 1924) is located on an inner-facing surface of the garment (100; 1900).
3. The garment (100; 1900) according to any of claims 1 through 2, wherein an innermost-facing layer of the pocket (414, 416, 418, 420; 1922, 1924) is formed from a mesh material.
4. The garment (100; 1900) according to any of claims 1 through 3, wherein a pocket opening (413, 415, 417,

- 419) of the pocket (414, 416, 418, 420; 1922, 1924) includes a loop structure (432) to which the closure mechanism (518) of the thermal insulation insert (424, 426, 428, 430; 1926, 1928) is adapted to be removably coupled.
5. The garment (100; 1900) according to any of claims 1 through 4, wherein the garment (100; 1900) comprises an upper-body garment (100), and wherein the pocket (414, 416, 418, 420) is located on a torso portion (110, 110a, 110b, 112, 112a, 112b) of the upper-body garment (100).
 6. The garment (100; 1900) according to claim 5, wherein the pocket (414, 416, 418, 420) is located on an inner-facing surface of the torso portion (110, 110a, 110b, 112, 112a, 112b) of the upper-body garment (100).
 7. The garment (100; 1900) according to any of claims 5 through 6, wherein the upper-body garment (100) further comprises: two or more additional pockets located on the inner-facing surface of the torso portion (110, 110a, 110b, 112, 112a, 112b) of the upper-body garment (100); and two or more additional thermal insulation inserts each removably positioned within a respective pocket of the two or more additional pockets.
 8. The garment (100; 1900) according to any of claims 5 through 7, wherein a pocket opening (413, 415, 417, 417) of the pocket (414, 416, 418, 420) is positioned adjacent to a neck opening (114) of the upper-body garment (100), and wherein the pocket extends in a vertical direction toward a waist opening (116) of the upper-body garment (100).
 9. A method of using the garment (100; 1900) of claim 1, the method comprising: removing the thermal insulation insert (424, 426, 428, 430; 1926, 1928) from the pocket (414, 416, 418, 420; 1922, 1924) of the garment (100; 1900); folding the thermal insulation insert (424, 426, 428, 430; 1926, 1928) so that the first end (510) of the thermal insulation insert (424, 426, 428, 430; 1926, 1928) is positioned adjacent to the second end (512) of the thermal insulation insert (424, 426, 428, 430; 1926, 1928); positioning the strap of the closure mechanism (518) so that it encircles the folded thermal insulation insert (424, 426, 428, 430; 1926, 1928); and securing the male component (520) to the female component (522) of the closure mechanism (518).
 10. The method of using the garment (100; 1900) according to claim 9, further comprising stowing the folded thermal insulation insert (424, 426, 428, 430; 1926, 1928) within a second pocket (124, 126; 1930) located on the garment (100; 1900).
 11. The method of using the garment (100; 1900) according to claim 10, wherein the second pocket (124, 126; 1930) is removably attached to the garment (100; 1900).
 12. The method of using the garment (100; 1900) according to any of claims 10 through 11, wherein the second pocket (124, 126; 1930) includes a reversible closure mechanism (1512, 310) adapted to reversibly close a pocket opening of the second pocket (124, 126; 1930).
 13. The method of using the garment (100; 1900) according to any of claims 9 through 12, further comprising: releasing the male component (520) from the female component (522) of the closure mechanism (518); unfolding the thermal insulation insert (424, 426, 428, 430; 1926, 1928) such that the first end (510) of the thermal insulation insert (424, 426, 428, 430; 1926, 1928) is spaced apart from the second end (512) of the thermal insulation insert (424, 426, 428, 430; 1926, 1928) by an entire length of the thermal insulation insert (424, 426, 428, 430; 1926, 1928); and removably positioning the unfolded thermal insulation insert (424, 426, 428, 430; 1926, 1928) within the pocket (414, 416, 418, 420; 1922, 1924) of the garment (100; 1900).
 14. The method of using the garment (100; 1900) according to claim 13, further comprising removably coupling the closure mechanism (518) to a loop structure (432) located at a pocket opening (413, 415, 417, 419) of the pocket (414, 416, 418, 420; 1922, 1924) once the thermal insulation insert (424, 426, 428, 430; 1926, 1928) is removably positioned within the pocket (414, 416, 418, 420; 1922, 1924) of the garment (100; 1900).

Patentansprüche

1. Kleidungsstück (100; 1900), aufweisend: eine Tasche (414, 416, 418, 420; 1922, 1924), die auf dem Kleidungsstück (100; 1900) positioniert ist; und einen Wärmeisolierungseinsatz (424, 426, 428, 430; 1926, 1928), der innerhalb der Tasche (414, 416, 418, 420; 1922, 1924) lösbar positioniert ist, wobei der Wärmeisolierungseinsatz (424, 426, 428, 430; 1926, 1928) umfasst: eine erste Textilschicht (526); eine zweite Textilschicht (528), die an der ersten Textilschicht (526) gesichert ist, um den Wärmeisolierungseinsatz (424, 426, 428, 430; 1926, 1928) auszubilden, wobei der Wärmeisolierungseinsatz (424, 426, 428, 430; 1926, 1928) ein erstes Ende (510) und ein zweites Ende (512) gegenüber dem ersten Ende (510) aufweist; ein wärmeisolierendes Füllmaterial (530), das innerhalb eines Raumes zwischen der ersten Textilschicht (526) und der zweiten

Textilschicht (528) enthalten ist; **dadurch gekennzeichnet, dass** der Wärmeisolierungseinsatz (424, 426, 428, 430, 1926, 1928) einen Verschlussmechanismus (518) aufweist, der entweder an dem ersten Ende (510) und/oder an dem zweiten Ende (512) des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) positioniert ist, wobei der Verschlussmechanismus (518) eine männliche Komponente (520), eine weibliche Komponente (522) und einen Riemen umfasst, der sich zwischen der männlichen Komponente (520) und der weiblichen Komponente (522) erstreckt.

2. Kleidungsstück (100; 1900) nach Anspruch 1, wobei sich die Tasche (414, 416, 418, 420; 1922, 1924) an einer nach innen weisenden Fläche des Kleidungsstücks (100; 1900) befindet.
3. Kleidungsstück (100; 1900) nach einem der Ansprüche 1 bis 2, wobei die innerste Schicht der Tasche (414, 416, 418, 420; 1922, 1924) aus einem Netzmaterial ausgebildet ist.
4. Kleidungsstück (100; 1900) nach einem der Ansprüche 1 bis 3, wobei eine Taschenöffnung (413, 415, 417, 419) der Tasche (414, 416, 418, 420; 1922, 1924) eine Schlaufenstruktur (432) beinhaltet, mit der der Verschlussmechanismus (518) des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) so angepasst ist, dass er lösbar gekoppelt werden kann.
5. Kleidungsstück (100; 1900) nach einem der Ansprüche 1 bis 4, wobei das Kleidungsstück (100; 1900) ein Oberkörper-Kleidungsstück (100) umfasst und wobei sich die Tasche (414, 416, 418, 420) an einem Oberkörperbereich (110, 110a, 110b, 112, 112a, 112b) des Oberkörper-Kleidungsstücks (100) befindet.
6. Kleidungsstück (100; 1900) nach Anspruch 5, wobei sich die Tasche (414, 416, 418, 420) an einer nach innen weisenden Fläche des Oberkörperbereichs (110, 110a, 110b, 112, 112a, 112b) des Oberkörper-Kleidungsstücks (100) befindet.
7. Kleidungsstück (100; 1900) nach einem der Ansprüche 5 bis 6, wobei das Oberkörper-Kleidungsstück (100) ferner aufweist: zwei oder mehr zusätzliche Taschen, die sich auf der nach innen weisenden Fläche des Oberkörperbereichs (110, 110a, 110b, 112, 112a, 112b) des Oberkörper-Kleidungsstücks (100) befinden; und zwei oder mehr zusätzliche Wärmeisolierungseinsätze, die jeweils innerhalb einer entsprechenden Tasche der zwei oder mehr zusätzlichen Taschen lösbar positioniert sind.
8. Kleidungsstück (100; 1900) nach einem der Ansprüche

che 5 bis 7, wobei eine Taschenöffnung (413, 415, 417, 417) der Tasche (414, 416, 418, 420) benachbart zu einer Halsöffnung (114) des Oberkörper-Kleidungsstücks (100) positioniert ist und wobei sich die Tasche in einer vertikalen Richtung in Richtung einer Taillenöffnung (116) des Oberkörper-Kleidungsstücks (100) erstreckt.

9. Verfahren zum Verwenden des Kleidungsstücks (100; 1900) nach Anspruch 1, wobei das Verfahren umfasst: Entfernen des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) aus der Tasche (414, 416, 418, 420; 1922, 1924) des Kleidungsstücks (100; 1900); Falten des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928), so dass das erste Ende (510) des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) benachbart zu dem zweiten Ende (512) des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) positioniert ist; Positionieren des Riemens des Verschlussmechanismus (518), so dass er den gefalteten Wärmeisolierungseinsatz (424, 426, 428, 430; 1926, 1928) umgibt; und Sichern der männlichen Komponente (520) an der weiblichen Komponente (522) des Verschlussmechanismus (518).
10. Verfahren zum Verwenden des Kleidungsstücks (100; 1900) nach Anspruch 9, ferner umfassend das Verstauen des gefalteten Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) innerhalb einer zweiten Tasche (124, 126; 1930), die sich an dem Kleidungsstück (100; 1900) befindet.
11. Verfahren zum Verwenden des Kleidungsstücks (100; 1900) nach Anspruch 10, wobei die zweite Tasche (124, 126; 1930) an dem Kleidungsstück (100; 1900) lösbar befestigt ist.
12. Verfahren zum Verwenden des Kleidungsstücks (100; 1900) nach einem der Ansprüche 10 bis 11, wobei die zweite Tasche (124, 126; 1930) einen reversiblen Verschlussmechanismus (1512, 310) beinhaltet, der so angepasst ist, dass er eine Taschenöffnung der zweiten Tasche (124, 126; 1930) reversibel schließt.
13. Verfahren zum Verwenden des Kleidungsstücks (100; 1900) nach einem der Ansprüche 9 bis 12, ferner umfassend: Lösen der männlichen Komponente (520) von der weiblichen Komponente (522) des Verschlussmechanismus (518); Entfalten des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928), so dass das erste Ende (510) des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) von dem zweiten Ende (512) des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) um eine gesamte Länge des Wärmeisolierungseinsatzes (424, 426, 428, 430; 1926, 1928) entfernt ist.

rungseinsatzes (424, 426, 428, 430; 1926, 1928) beabstandet ist; und der ungefaltete Wärmeisolationseinsatz (424, 426, 428, 430; 1926, 1928) innerhalb der Tasche (414, 416, 418, 420; 1922, 1924) des Kleidungsstücks (100; 1900) lösbar positioniert.

14. Verfahren zum Verwenden des Kleidungsstücks (100; 1900) nach Anspruch 13, ferner umfassend das lösbare Koppeln des Verschlussmechanismus (518) mit einer Schlaufenstruktur (432), die sich an einer Taschenöffnung (413, 415, 417, 419) der Tasche (414, 416, 418, 420; 1922, 1924) befindet, sofern der Wärmeisolationseinsatz (424, 426, 428, 430; 1926, 1928) innerhalb der Tasche (414, 416, 418, 420; 1922, 1924) des Kleidungsstücks (100; 1900) lösbar positioniert ist.

Revendications

1. Vêtement (100; 1900) comprenant : une poche (414, 416, 418, 420; 1922, 1924) positionnée sur le vêtement (100; 1900) ; et une garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) positionnée amovible à l'intérieur de la poche (414, 416, 418, 420; 1922, 1924), la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) comprenant : une première couche textile (526) ; une seconde couche textile (528) fixée à la première couche textile (526) afin de former la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928), la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) comportant une première extrémité (510) et une seconde extrémité (512) opposée à la première extrémité (510) ; un matériau de remplissage thermiquement isolant (530) contenu à l'intérieur d'un espace entre la première couche textile (526) et la seconde couche textile (528) ; **caractérisé en ce que** la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) comporte un mécanisme de fermeture (518) positionné au niveau de la première extrémité (510) ou de la seconde extrémité (512) de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928), le mécanisme de fermeture (518) comprenant un élément mâle (520), un élément femelle (522) et une sangle s'étendant entre l'élément mâle (520) et l'élément femelle (522).
2. Le vêtement (100; 1900) selon la revendication 1, dans lequel la poche (414, 416, 418, 420; 1922, 1924) est située sur une surface, orientée vers l'intérieur, du vêtement (100; 1900).
3. Le vêtement (100; 1900) selon l'une quelconque des revendications 1 à 2, dans lequel la couche orientée le plus vers l'intérieur, de la poche (414, 416, 418, 420; 1922, 1924), est formée à partir d'un matériau en maille.

4. Le vêtement (100; 1900) selon l'une quelconque des revendications 1 à 3, dans lequel une ouverture (413, 415, 417, 419) de la poche (414, 416, 418, 420; 1922, 1924) comporte une structure à boucle (432) à laquelle le mécanisme de fermeture (518) de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) est adapté à être accouplé amovible.
5. Le vêtement (100; 1900) selon l'une quelconque des revendications 1 à 4, dans lequel le vêtement (100; 1900) comprend un vêtement (100) pour le haut du corps, et dans lequel la poche (414, 416, 418, 420) est située sur une partie torse (110, 110a, 110b, 112, 112a, 112b) du vêtement (100) pour le haut du corps.
6. Le vêtement (100; 1900) selon la revendication 5, dans lequel la poche (414, 416, 418, 420) est située sur une surface, orientée vers l'intérieur, de la partie torse (110, 110a, 110b, 112, 112a, 112b) du vêtement (100) pour le haut du corps.
7. Le vêtement (100; 1900) selon l'une quelconque des revendications 5 à 6, dans lequel le vêtement (100) pour le haut du corps comprend en outre : au moins deux poches supplémentaires situées sur la surface, orientée vers l'intérieur, de la partie torse (110, 110a, 110b, 112, 112a, 112b) du vêtement (100) pour le haut du corps ; et au moins deux garnitures d'isolation thermique supplémentaires, chaque garniture étant positionnée amovible à l'intérieur d'une poche respective parmi les deux poches supplémentaires ou plus.
8. Le vêtement (100; 1900) selon l'une quelconque des revendications 5 à 7, dans lequel une ouverture (413, 415, 417, 419) de la poche (414, 416, 418, 420) est positionnée adjacente à une ouverture de cou (114) du vêtement (100) pour le haut du corps, et dans lequel la poche s'étend dans une direction verticale vers une ouverture de taille (116) du vêtement (100) pour le haut du corps.
9. Procédé d'utilisation du vêtement (100; 1900) de la revendication 1, le procédé comprenant : le retrait de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) à partir de la poche (414, 416, 418, 420; 1922, 1924) du vêtement (100; 1900) ; le pliage de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) de telle façon que la première extrémité (510) de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) soit positionnée adjacente à la seconde extrémité (512) de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) ; le positionnement de la sangle du mécanisme de fermeture (518) de telle façon qu'elle entoure la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) pliée ; et

la fixation de l'élément mâle (520) à l'élément femelle (522) du mécanisme de fermeture (518).

10. Le procédé d'utilisation du vêtement (100; 1900) selon la revendication 9, comprenant en outre le rangement de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) pliée à l'intérieur d'une seconde poche (124, 126; 1930) située sur le vêtement (100; 1900). 5
11. Le procédé d'utilisation du vêtement (100; 1900) selon la revendication 10, dans lequel la seconde poche (124, 126; 1930) est fixée amovible au vêtement (100; 1900). 10
12. Le procédé d'utilisation du vêtement (100; 1900) selon l'une quelconque des revendications 10 à 11, dans lequel la seconde poche (124, 126; 1930) comporte un mécanisme de fermeture réversible (1512, 310) adapté à fermer de manière réversible une ouverture de la seconde poche (124, 126; 1930). 15
13. Le procédé d'utilisation du vêtement (100; 1900) selon l'une quelconque des revendications 9 à 12, comprenant en outre : le desserrage de l'élément mâle (520) à partir de l'élément femelle (522) du mécanisme de fermeture (518) ; le dépliage de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) de sorte que la première extrémité (510) de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) soit espacée de la seconde extrémité (512) de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) d'une longueur entière de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) ; et le positionnement amovible de la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) dépliée à l'intérieur de la poche (414, 416, 418, 420; 1922, 1924) du vêtement (100; 1900). 20
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14. Le procédé d'utilisation du vêtement (100; 1900) selon la revendication 13, comprenant en outre l'accouplement amovible du mécanisme de fermeture (518) à une structure à boucle (432) située au niveau d'une ouverture (413, 415, 417, 419) de la poche (414, 416, 418, 420; 1922, 1924) une fois que la garniture d'isolation thermique (424, 426, 428, 430; 1926, 1928) est positionnée amovible à l'intérieur de la poche (414, 416, 418, 420; 1922, 1924) du vêtement (100; 1900). 45
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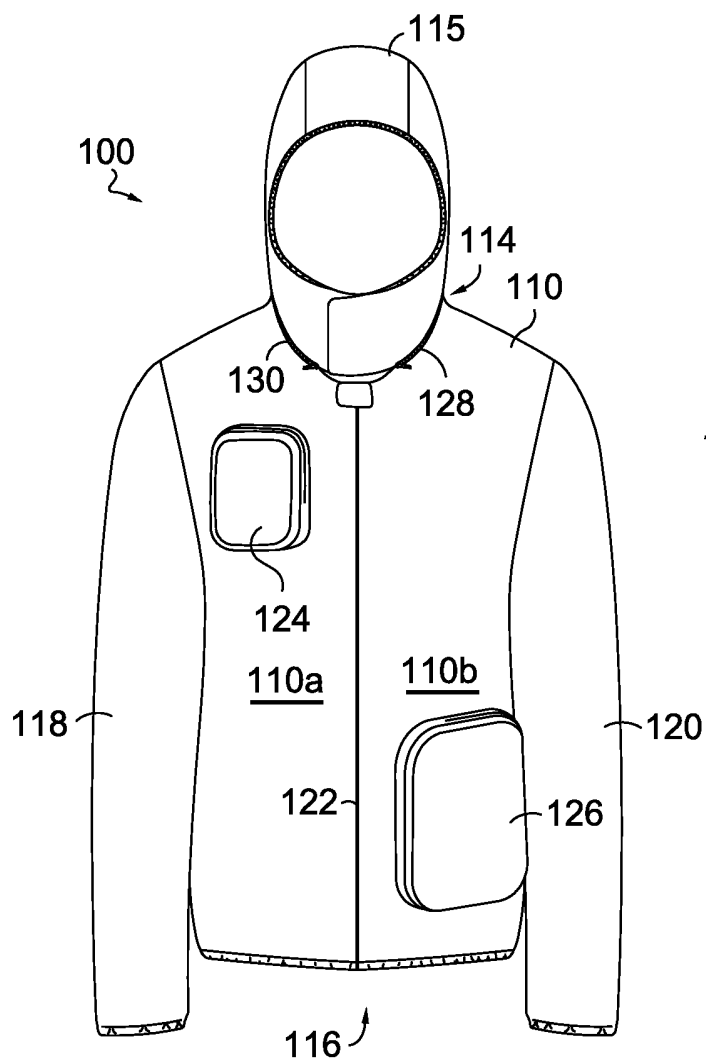
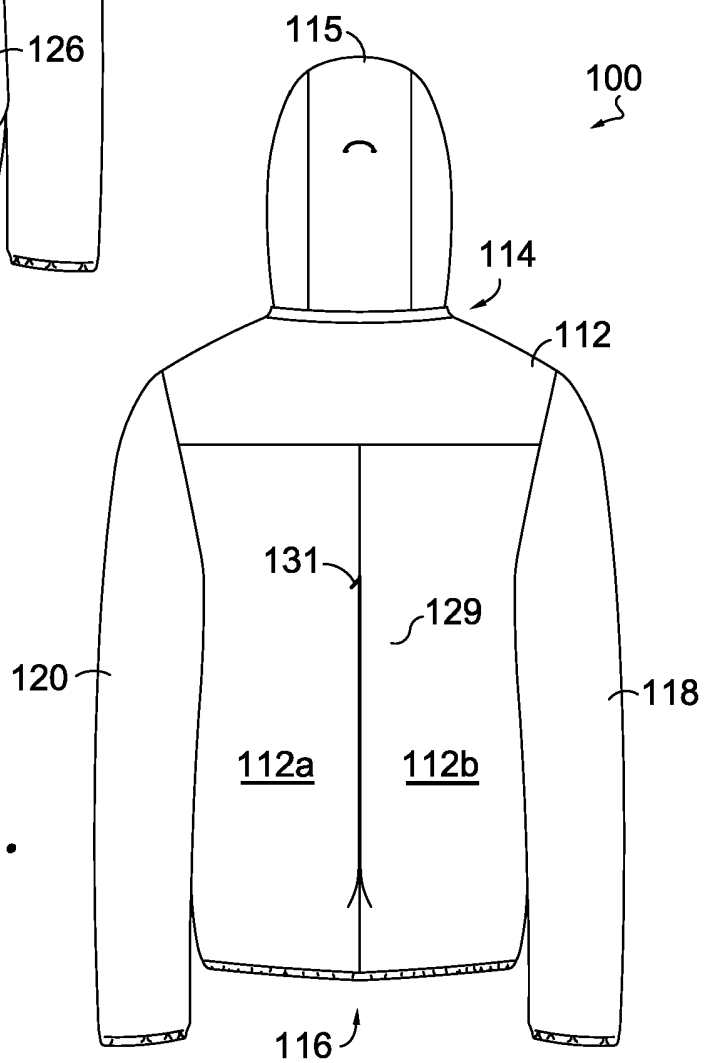


FIG. 1.

FIG. 2.



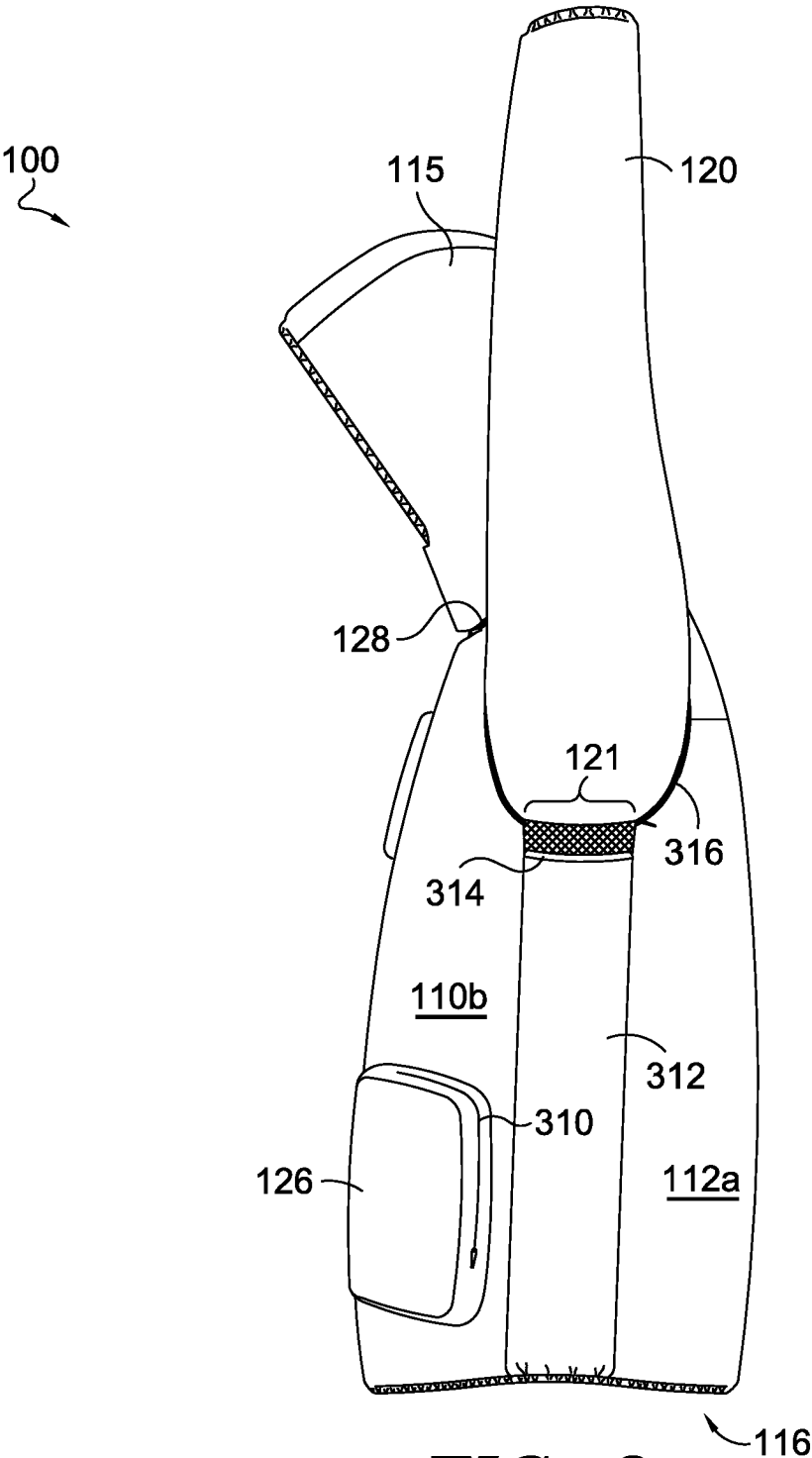


FIG. 3.

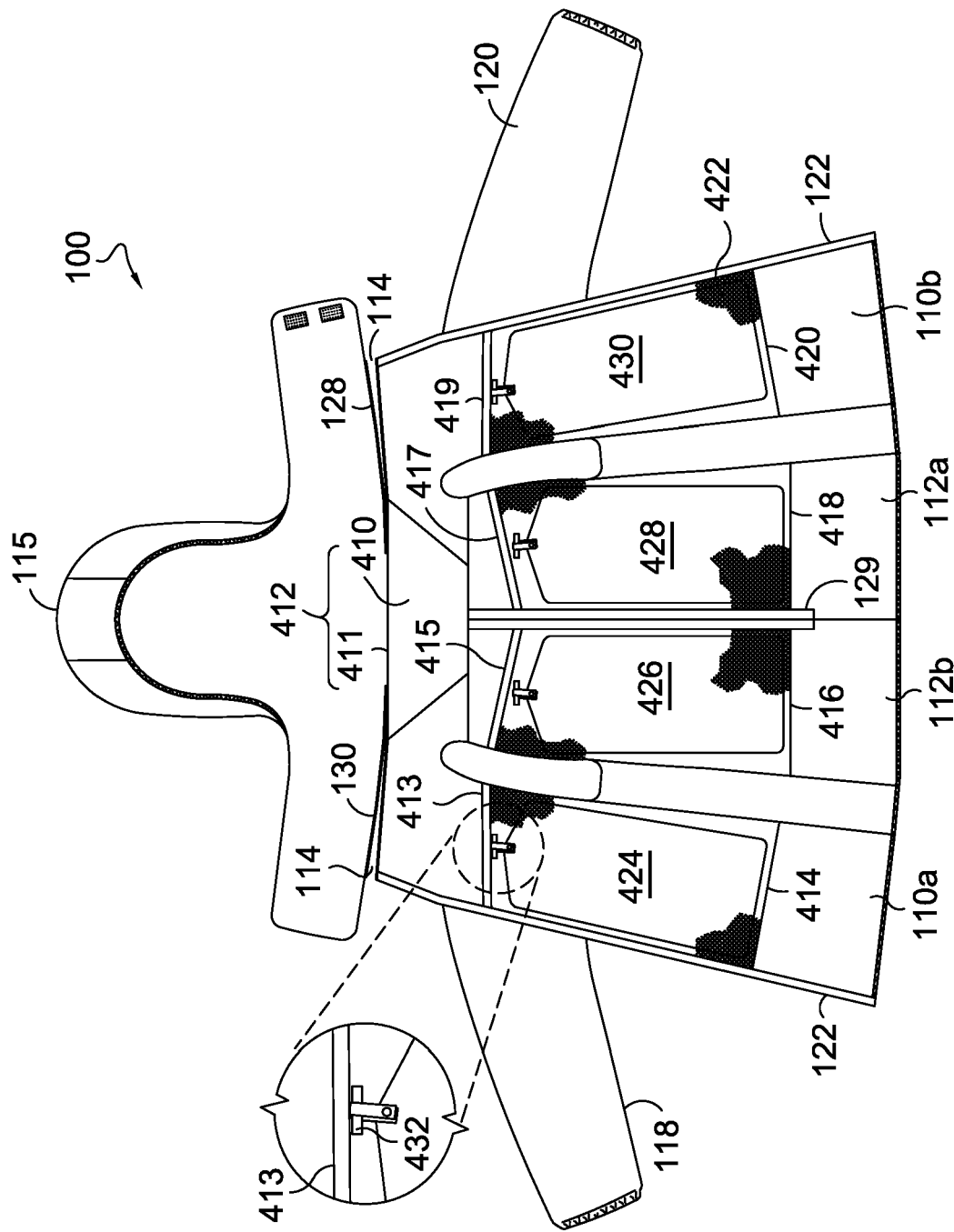
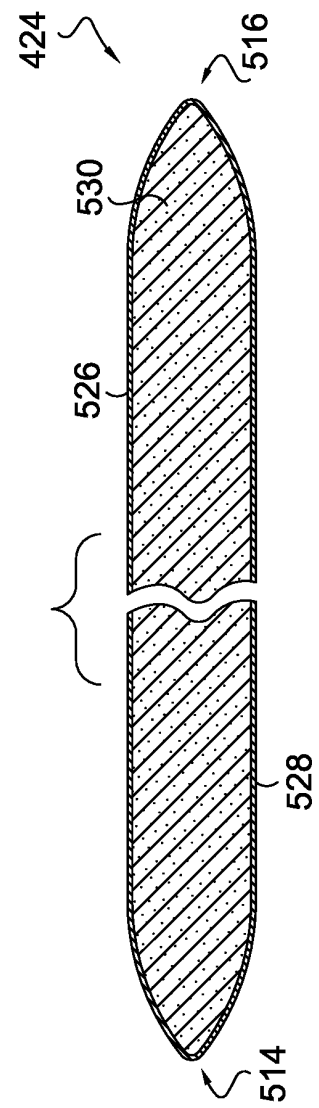
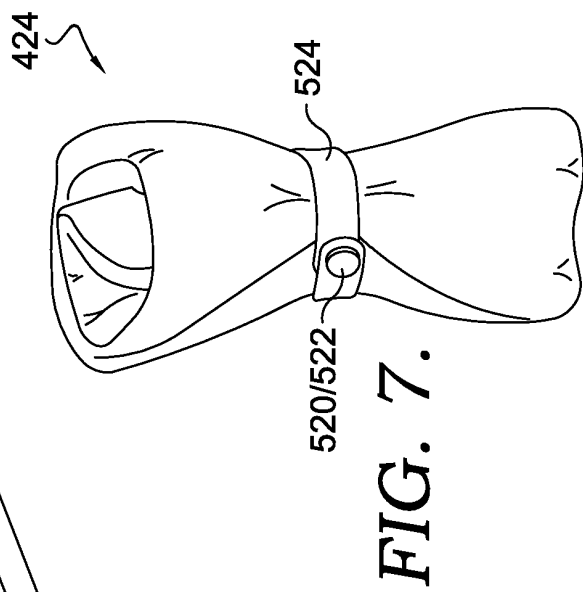
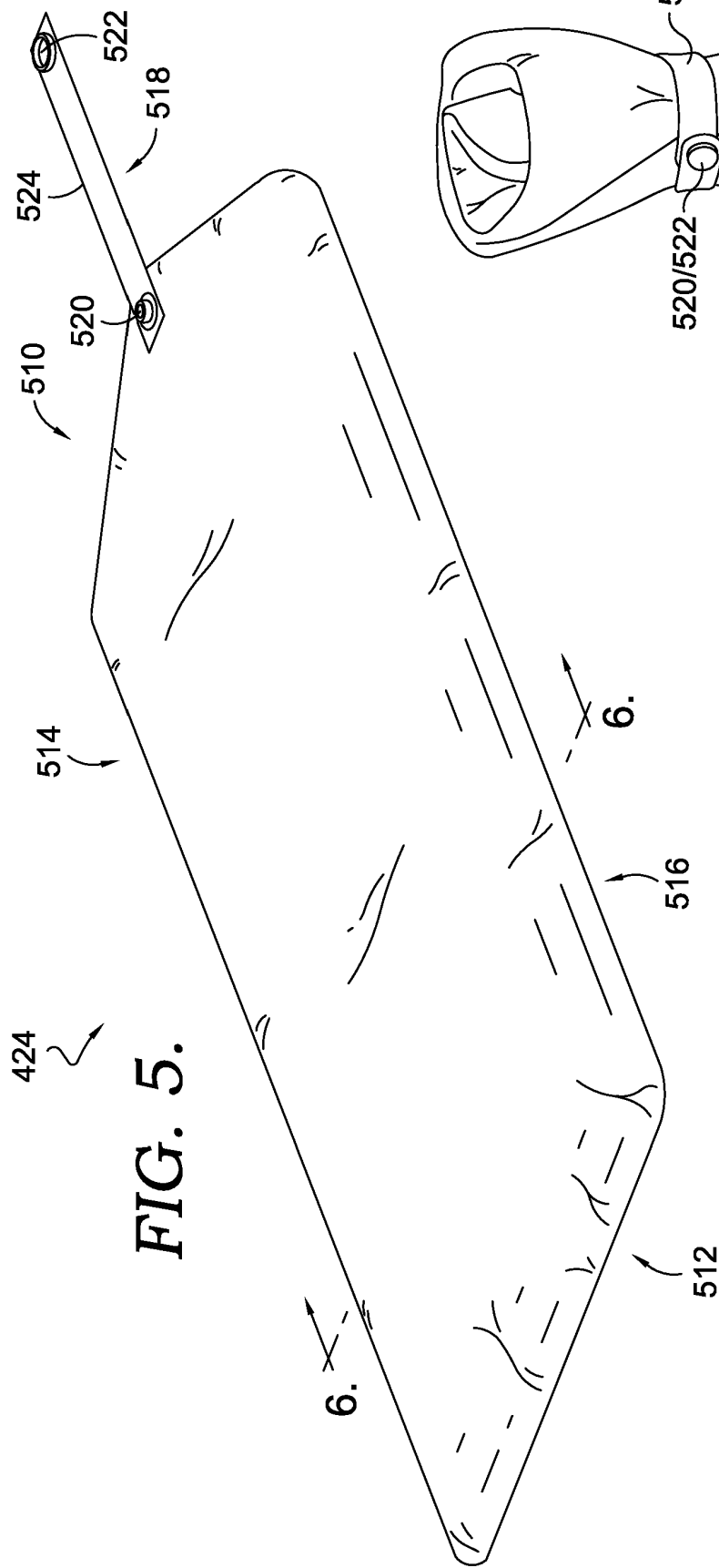


FIG. 4.



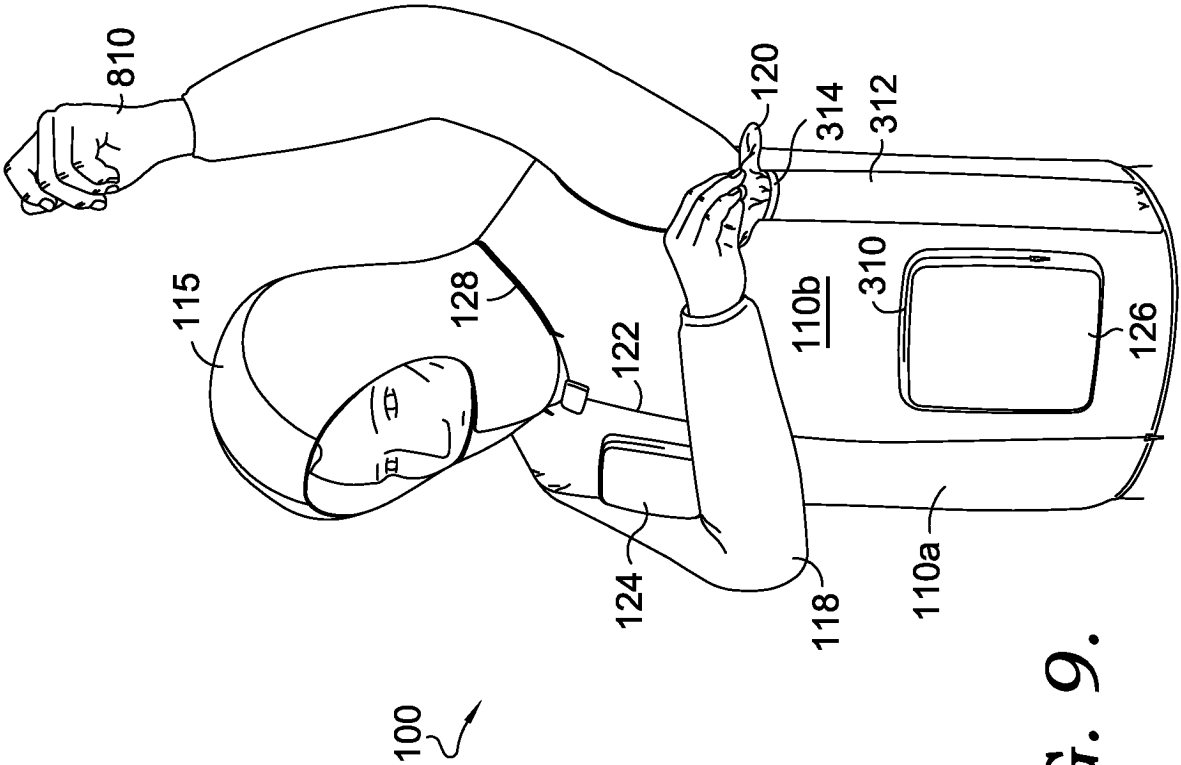


FIG. 9.

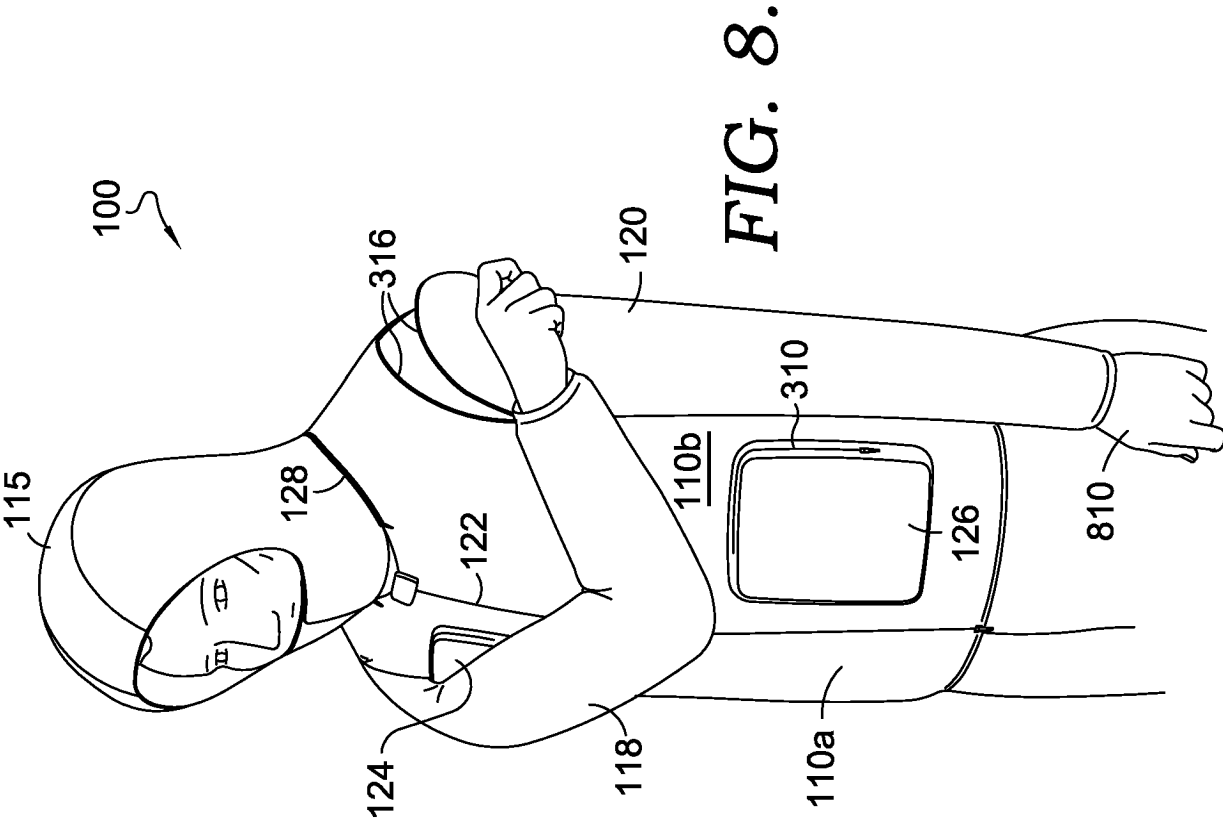


FIG. 8.

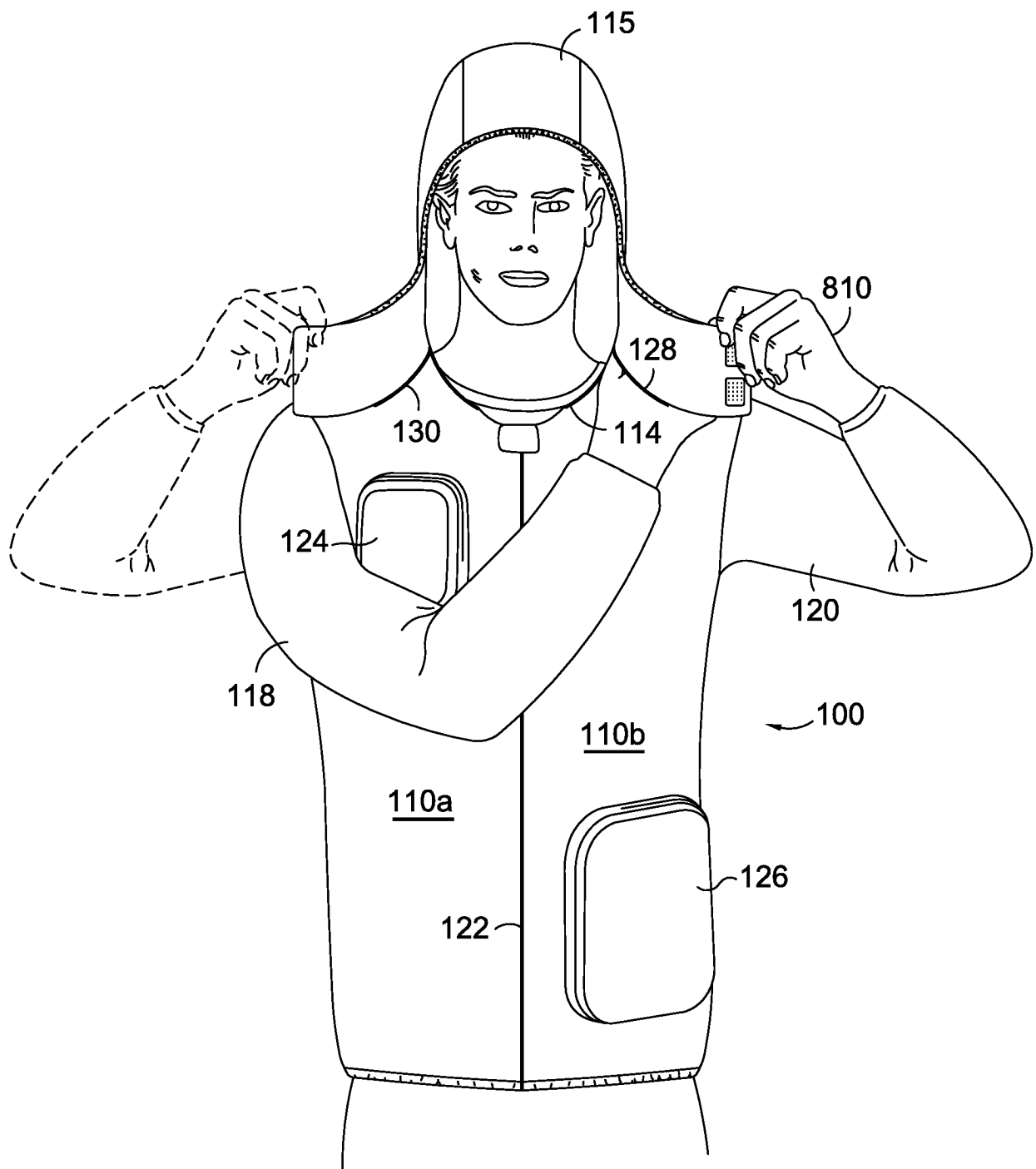


FIG. 10.

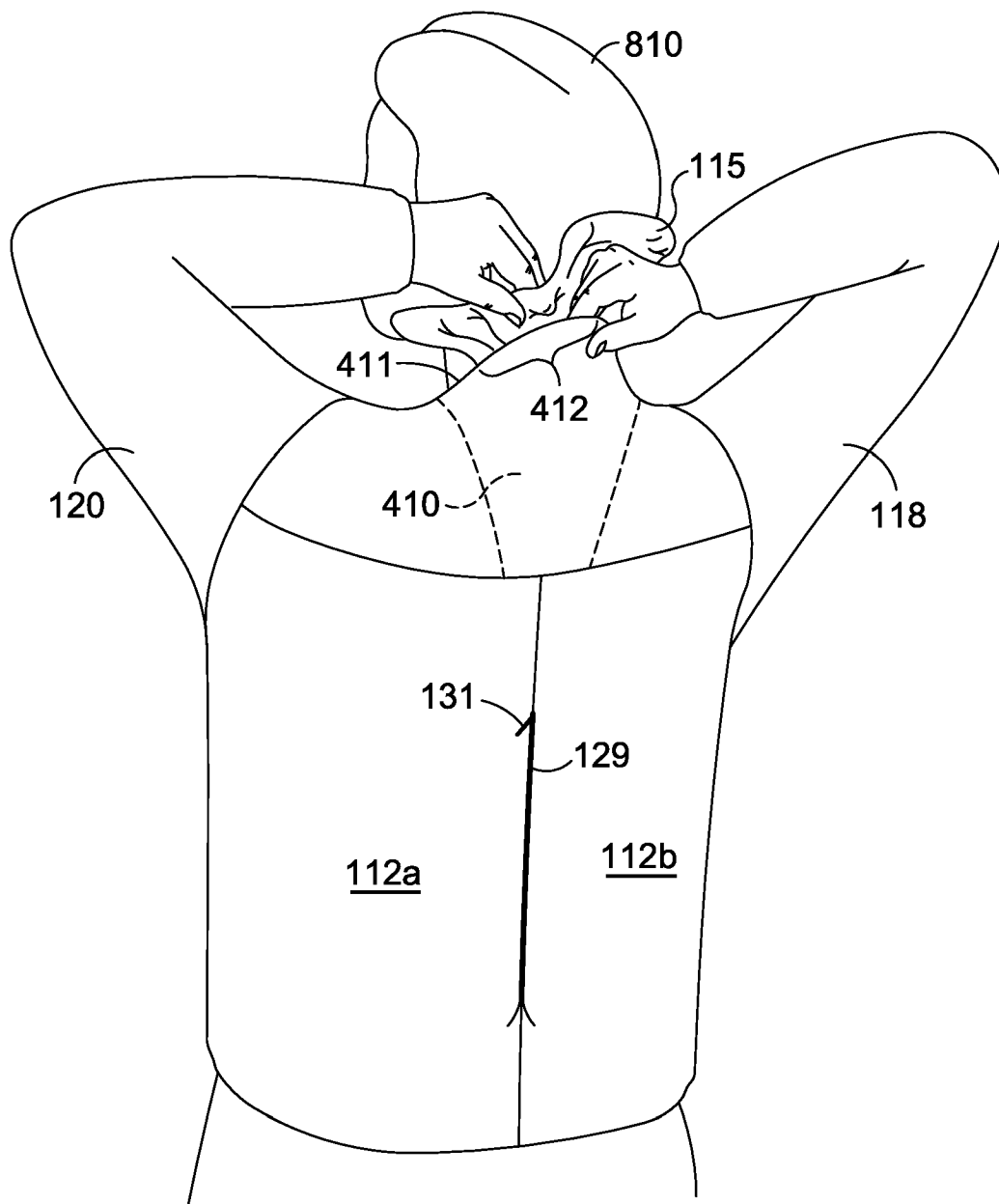


FIG. 11.

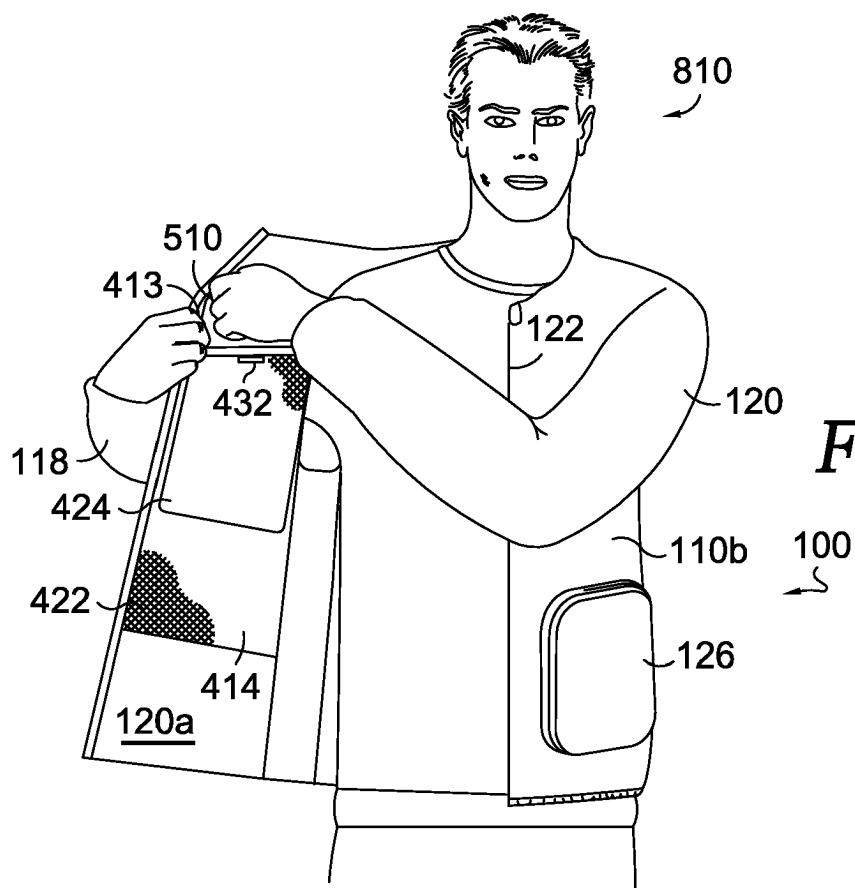


FIG. 12.

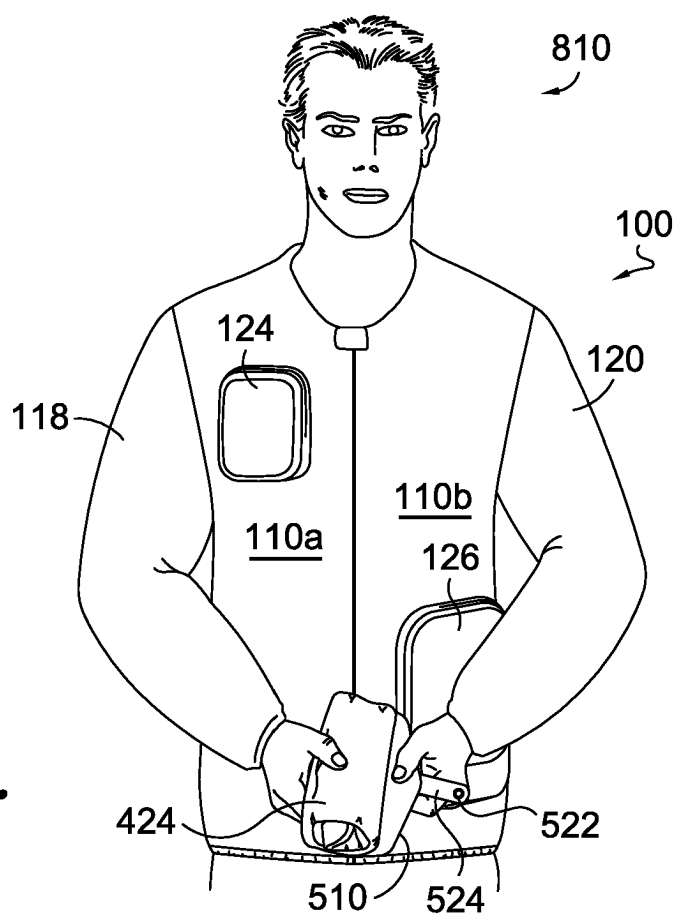


FIG. 13.

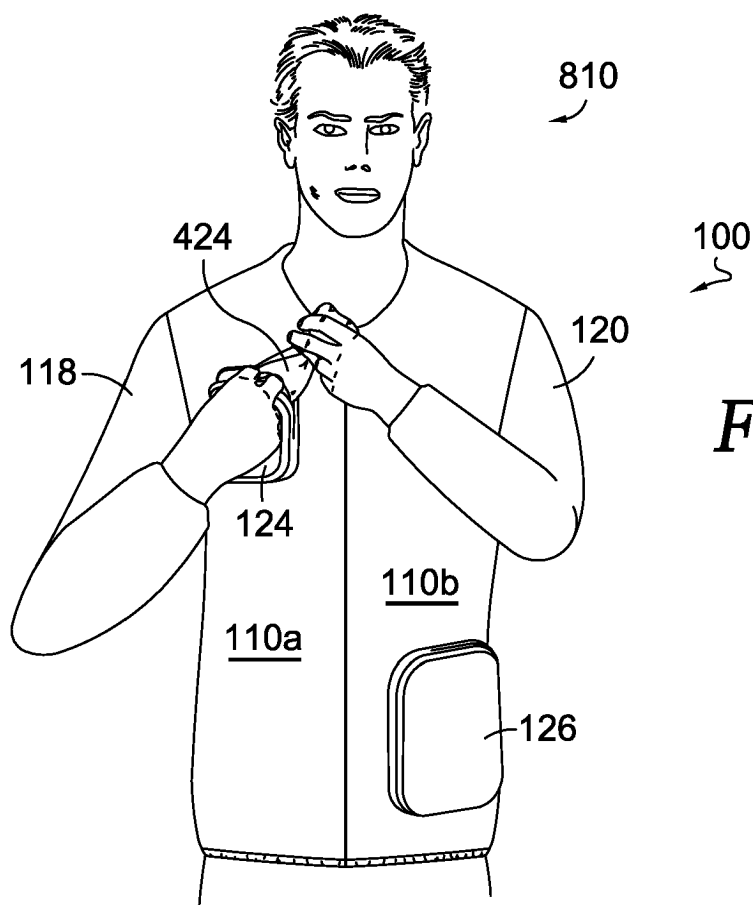


FIG. 14.

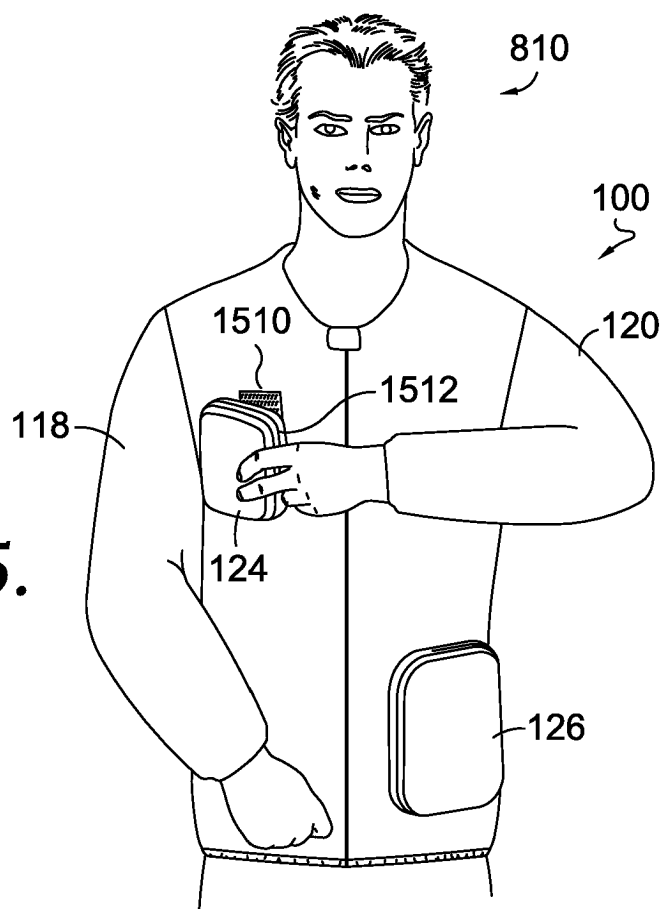


FIG. 15.

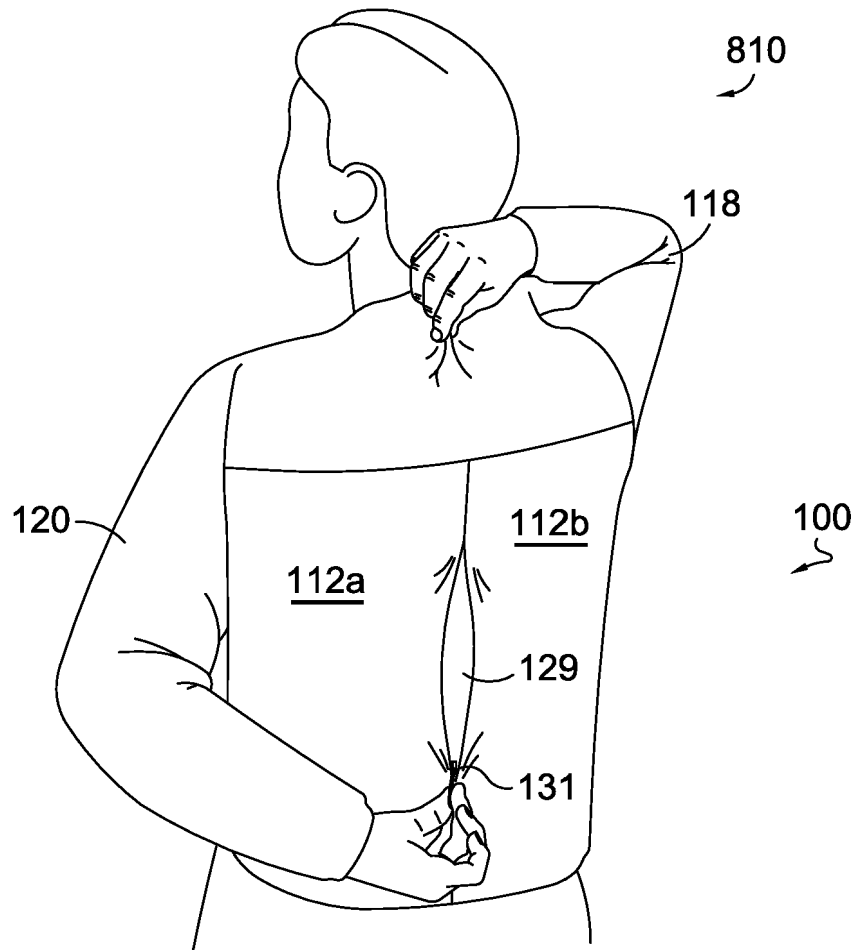


FIG. 16.

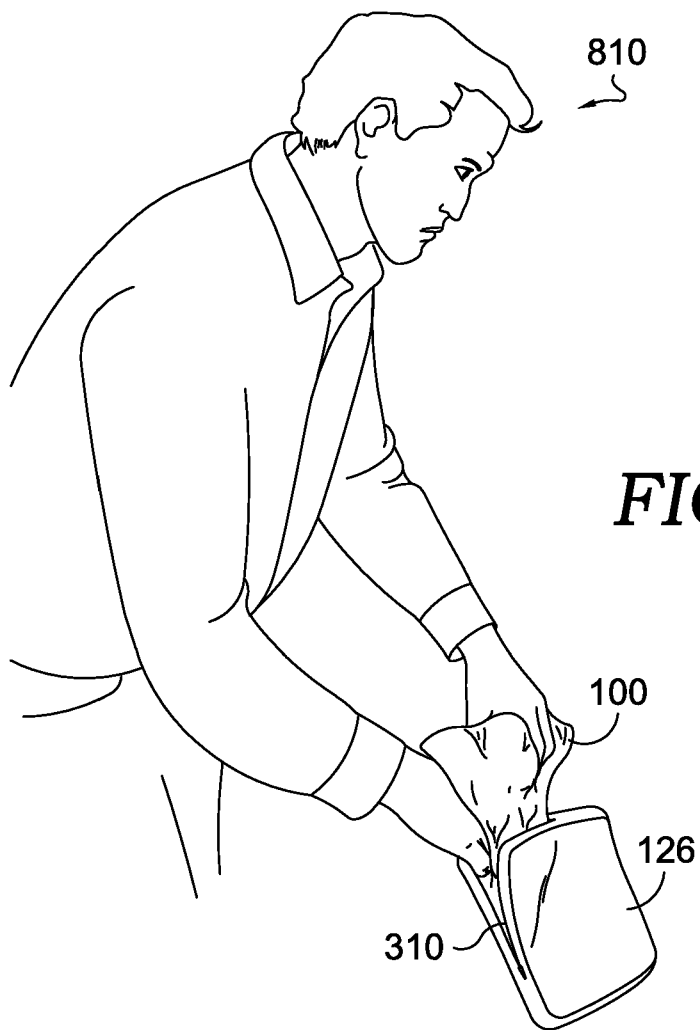
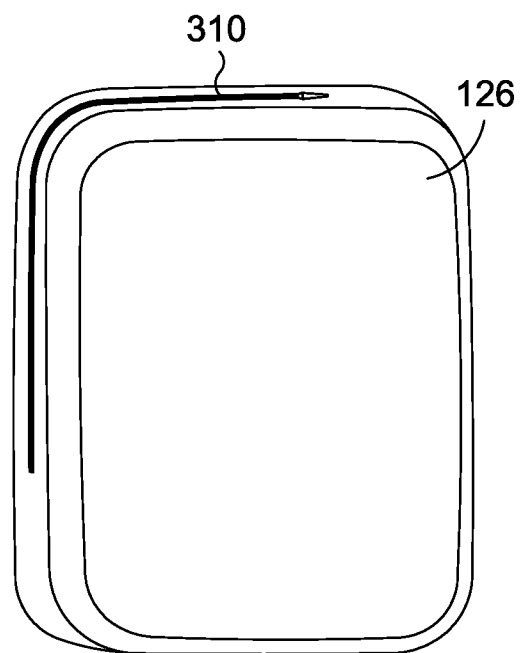


FIG. 17.

FIG. 18.



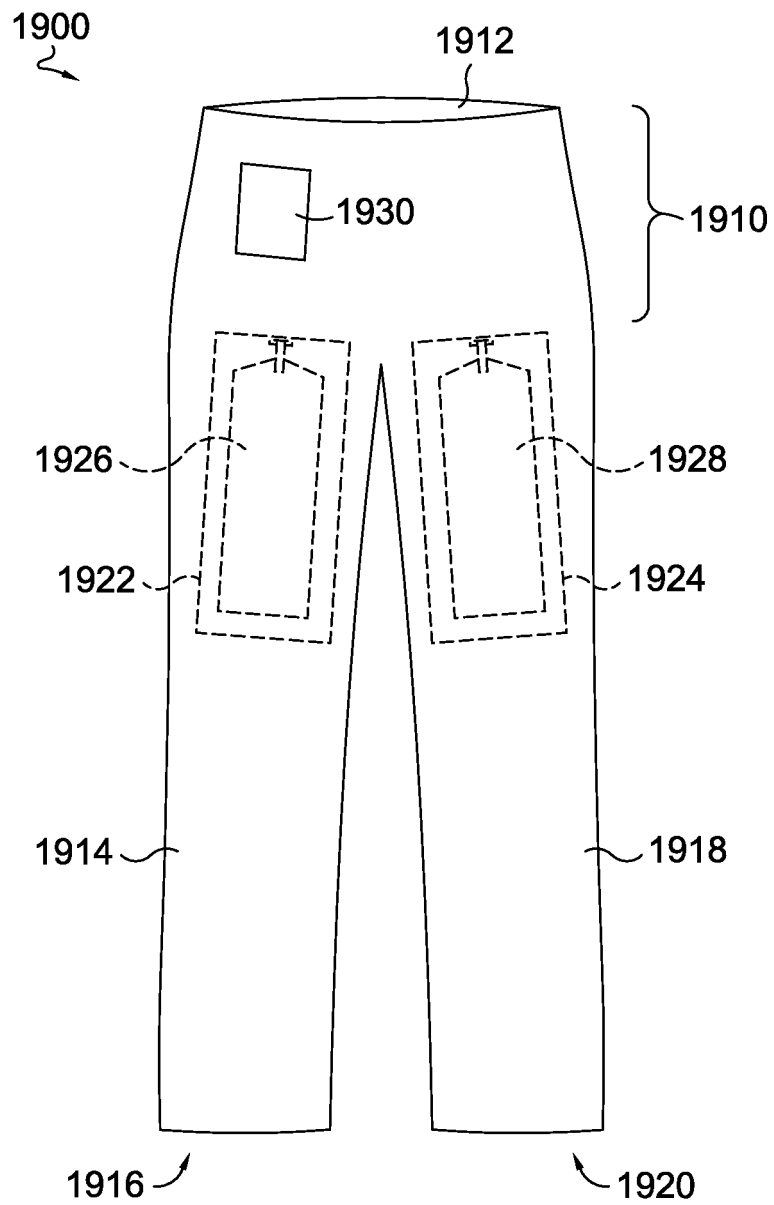


FIG. 19.

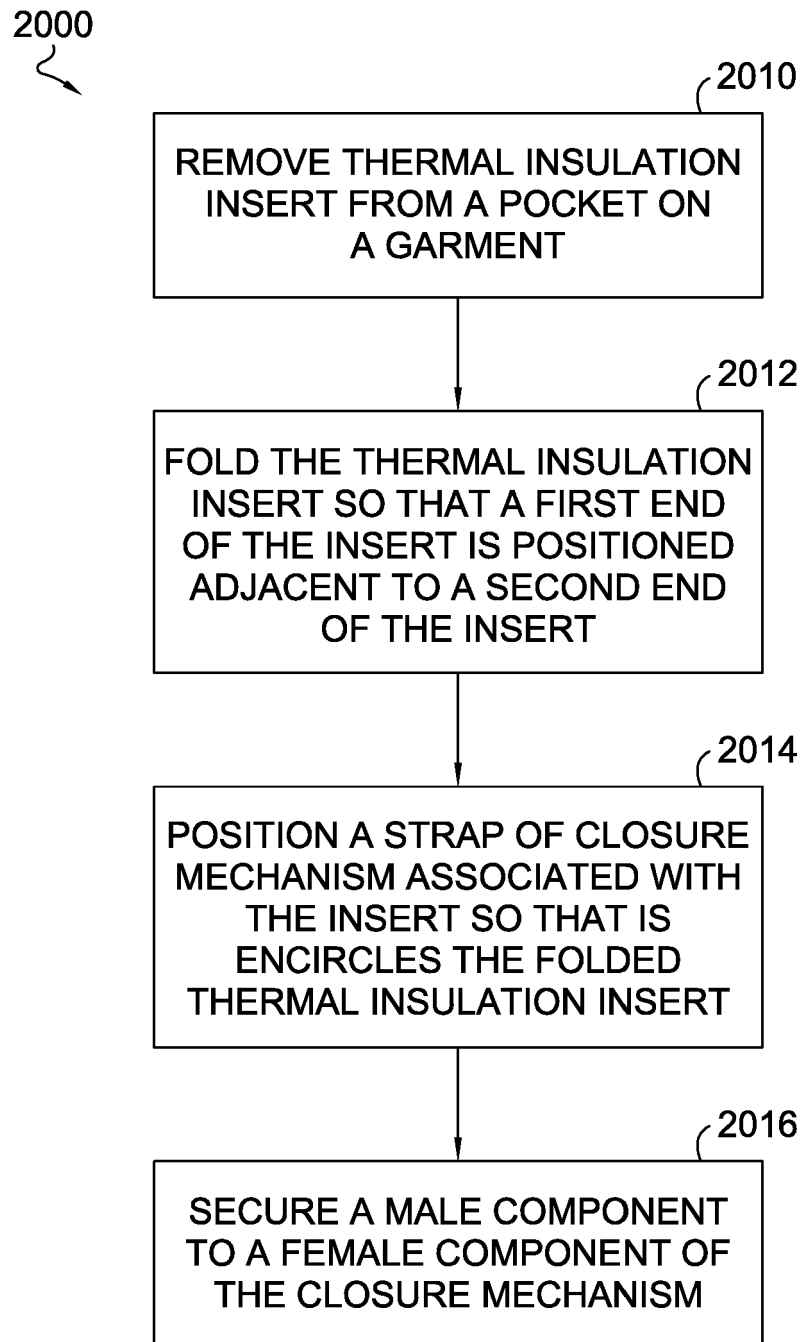


FIG. 20.

REFERENCES CITED IN THE DESCRIPTION

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