

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2018/0085655 A1 Kasmark

Mar. 29, 2018 (43) **Pub. Date:**

(54) CUSHION BACKED SPORTS SHIRT

- (71) Applicant: Thomas Kasmark, Virginia Beach, VA
- (72) Inventor: Thomas Kasmark, Virginia Beach, VA
- Appl. No.: 15/695,626
- (22) Filed: Sep. 5, 2017

Related U.S. Application Data

(60) Provisional application No. 62/400,143, filed on Sep. 27, 2016.

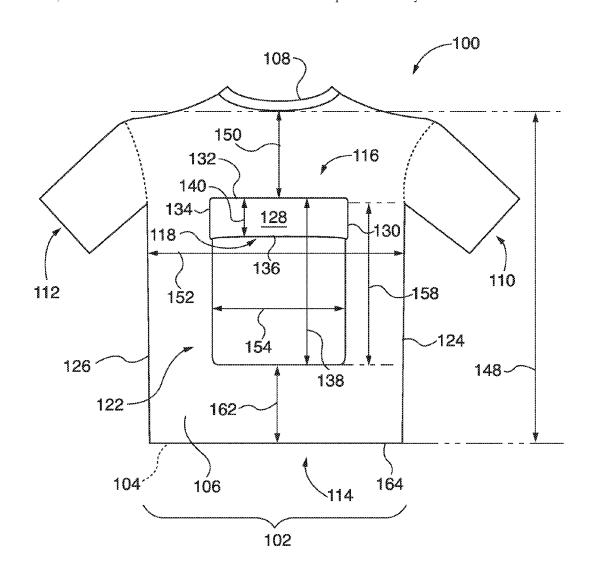
Publication Classification

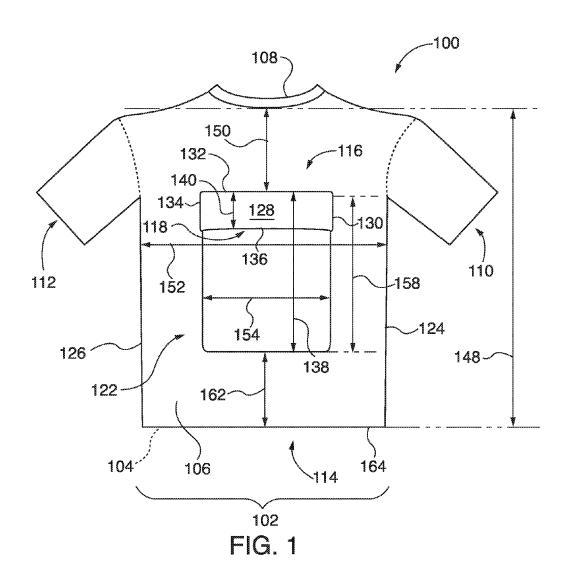
(51) Int. Cl. A63B 71/08 (2006.01)A63B 71/12 (2006.01)A63B 21/00 (2006.01)

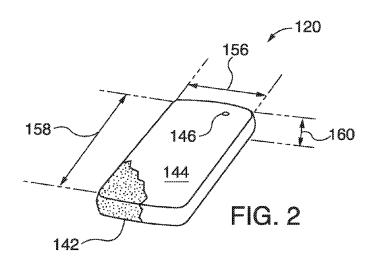
(52) U.S. Cl. CPC A63B 71/081 (2013.01); A41D 13/0015 (2013.01); A63B 21/4007 (2015.10); A63B 71/12 (2013.01)

ABSTRACT (57)

A shirt having a pocket on the rear, and a cushion insertible into the pocket. The pocket may account for half of the height of the shirt, and forty-five to fifty percent of the width of the shirt. The pocket may have a flap covering an opening of the pocket. The cushion may be made from open or closed cell synthetic foam, and may include a flexible covering having an air bleed hole to accommodate compression and expansion of the synthetic foam.







CUSHION BACKED SPORTS SHIRT

RELATED APPLICATIONS

[0001] This application claims priority in accordance with 37 CF.R. 1.19(e) to U.S. Provisional Patent Application Ser. No. 62/400,143 filed for CUSHION BACKED SPORTS SHIRT filed Sep. 27, 2016 which is included herein in its entirety by reference.

FIELD OF THE DISCLOSURE

[0002] The present disclosure relates to protective apparel, and more particularly, to a shirt providing a protective cushion over the back area.

BACKGROUND

[0003] People who engage in outdoor activities such as running may engage in ancillary activities such as calisthenics before or after the main activity. A distance runner often finds himself or herself far from indoor facilities when wanting to perform calisthenics and other ancillary activities. It frequently becomes necessary then to engage in an ancillary activities on surfaces not intended to accommodate such activities, such as asphalt, concrete, gravel, and exposed soil. Because many activities such as calisthenics require lying on an environmental surface, ordinary running apparel will not protect the body from dirt, injury, and other hazards which arise from contact with the environmental surface.

[0004] There exists a need for protection, particularly along the back of the body, from contact with hard environmental surfaces.

SUMMARY

[0005] The disclosed concepts address the above stated situation by providing a shirt adapted to receive a cushion protecting the back. The shirt includes a pocket into which the cushion may be inserted and preferably, removed. The pocket may have an overhanging panel to prevent inadvertent loss of the cushion.

[0006] The cushion is configured and located on the shirt to cover over a third of the surface area of the back between the neck and the waist of the user.

[0007] It is an object to provide improved elements and arrangements thereof by apparatus for the purposes described which is inexpensive, dependable, and fully effective in accomplishing its intended purposes.

[0008] These and other objects will become readily apparent upon further review of the following specification and drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Various objects, features, and attendant advantages of the disclosed concepts will become more fully appreciated as the same becomes better understood when considered in conjunction with the accompanying drawings, in which like reference characters designate the same or similar parts throughout the several views, and wherein:

[0010] FIG. 1 is a rear view of a protective shirt as it would be if laid flat against a flat environmental surface (not shown), according to at least one aspect of the disclosure; and

[0011] FIG. 2 is a perspective view of a cushion used with the protective shirt of FIG. 1, shown partially broken away to reveal internal detail.

DETAILED DESCRIPTION

[0012] Referring first to FIG. 1, according to at least one aspect of the disclosure, there is shown a protective shirt 100 for protecting a back of a body of a wearer (not shown). Protective shirt 100 may comprise a torso section 102 including a front panel 104 for covering a chest and an abdomen of the wearer, a rear panel 106 connected to front panel 104 along sides of the body of the wearer, a neck opening 108 dimensioned and configured to pass a head of the wearer therethrough, a first arm opening 110 located at one of the sides, and an opposed second arm opening 112 at another one of the sides. First arm opening 110 and second arm opening 112 are dimensioned and configured to pass (respectfully) a right arm and a left arm of the wearer therethrough. A waist opening 114 is dimensioned and configured to pass a waist of the wearer therethrough.

[0013] Unless otherwise indicated, the terms "first", "second", etc., are used herein merely as labels, and are not intended to impose ordinal, positional, or hierarchical requirements on the times to which these terms refer. Moreover, reference to, e.g., a "second" item does not either require or preclude the existence of, e.g., a "first" or lowernumbered item, and/or, e.g., a "third" or higher-numbered item.

[0014] It should be noted at this point that orientational terms such as front, rear, height, and width refer to the subject drawing as viewed by an observer. The drawing figures depict their subject matter in orientations of normal use, which could obviously change with changes in body posture and position. Therefore, orientational terms must be understood to provide semantic basis for purposes of description only, and do not imply that their subject matter can be used only in one position.

[0015] Protective shirt 100 includes a pocket 116 on rear panel 106 of torso section 102. Pocket 116 includes an access opening 118 for insertion of a cushion 120 (FIG. 2) and joined to rear panel 106 along a periphery 122 of pocket 116 except at access opening 118. Pocket 116 may cover at least one third of the area of rear panel 106 when torso section 102 is laid flat with rear panel 106 overlying front panel 104. When protective shirt 100 is laid flat with rear panel 106 overlying front panel 104, respective right and left side edges 124, 126 of torso section 102 demarcate right and left bounds of torso section 102. When protective shirt 100 is donned, right and left side edges 124, 126 would extend along the right and left sides of the torso of the wearer.

[0016] In this respect, and also with respect to neck opening 108 and first and second arm openings 110, 112, protective shirt 100 may be similar to an ordinary Tee shirt (not shown).

[0017] Cushion 120 may be dimensioned and configured to be received in pocket 116 by insertion through access opening 118 in close cooperation with pocket 116. Access opening 118 may face the same direction as neck opening 108.

[0018] Pocket 116 may be a parallelepiped in plan view (i.e., as shown in FIG. 1) when protective shirt 100 is laid flat with rear panel 106 overlying front panel 104.

[0019] Protective shirt 100 may further comprise a flap 128 covering access opening 118.

[0020] Pocket 116 may be rectangular in plan view when protective shirt 100 is laid flat with rear panel 106 overlying the front panel 104. Flap 128 covering access opening 118 may be joined to pocket 116 along a right edge 130 of flap 128, along a top edge 132 of flap 128, wherein top edge 132 faces the same direction as neck opening 108 of torso section 102, and along a left edge 134 of flap 128, and is unjoined to pocket 128 along a bottom edge 136 of flap 128.

[0021] Pocket 128 may have a height 138 extending from neck opening 108 to waist opening 114 when torso section 102 is laid flat with rear panel 106 overlying front panel 104. Flap 128 may have a height 140 parallel to height 138 of pocket 128 in a range of fifteen to twenty-five percent of height 138 of pocket 128.

[0022] Referring now to FIG. 2, cushion 120 may comprises a synthetic foam 142 which is at least one of an open cell foam and a closed cell foam. Cushion 120 may further comprises a flexible covering 144 over synthetic foam 142. Flexible covering 144 may have an air bleed hole 146 to accommodate expulsion and return of air when cushion 120 is compressed and expanded.

[0023] Again referring to FIG. 1, torso section 102 may have a height 148 extending from neck opening 108 to waist opening 114 when torso section 102 is laid flat with rear panel 106 overlying front panel 104. Pocket 116 may have height 138 parallel to height 148 of torso section 102 about half height 148 of torso section 102. Height 138 is parallel to height 148 when cushion 120 is installed in pocket 116. [0024] Torso section 102 has a width 152 extending from right edge 124 of rear panel 106 to left edge 126 of rear panel 106 when torso section 102 is laid flat with rear panel 106 overlying front panel 104. Pocket 116 may have a width 154 parallel to width 152 of torso section 102 in a range of forty-five to fifty percent of width 152 of torso section 102. [0025] Cushion 120 may have a width 156 parallel to width 152 of torso section 102 and in a range of forty to forty-five percent of width 152 of torso section 102.

[0026] The above relationships may be realized in an exemplary embodiment of protective shirt 100 sized for a typical adult, wherein height 148 of torso section 102 is about thirty inches; width 152 of torso section 102 is about twenty-two inches; height 138 of pocket 116 is about fourteen inches; width 154 of pocket 116 is about ten to eleven inches with cushion 120 installed therein; width 156 of cushion 120 is nine to ten inches; and height 158 of cushion 120 is about fourteen inches. Thickness 160 of cushion 120 may be about one and one half inches. Top edge 132 of flap 128 may have a spacing 150 from neck opening 108 of about six inches.

[0027] Because of the close cooperation between pocket 116 and cushion 120 with the latter installed in the former, height 138 of pocket 116 is just greater than height 158 of cushion 120.

[0028] Bottom edge 164 of torso section 102 may have a spacing 162 to pocket 116 of about ten inches.

[0029] The above dimensions refer to the spread condition of protective shirt 100 shown in FIG. 1, shown as if laid flat, and with cushion 120 installed in pocket 116.

[0030] Of course, protective shirt 100 may be made to fit body sizes other than that of an average adult.

[0031] While the disclosed concepts have been described in connection with what is considered the most practical and preferred implementation, it is to be understood that the disclosed concepts are not to be limited to the disclosed

arrangements, but are intended to cover various arrangements which are included within the spirit and scope of the broadest possible interpretation of the appended claims so as to encompass all modifications and equivalent arrangements which are possible.

I claim:

- 1. A protective shirt for protecting a back of a body of a wearer, comprising:
 - a torso section including
 - a front panel for covering a chest and an abdomen of the wearer,
 - a rear panel connected to the front panel along sides of the body of the wearer,
 - a neck opening dimensioned and configured to pass a head of the wearer therethrough,
 - a first arm opening located at one of the sides and an opposed second arm opening at another one of the sides, the first arm opening and the second arm opening dimensioned and configured to pass respectfully a right arm and a left arm of the wearer therethrough.
 - a waist opening dimensioned and configured to pass a waist of the wearer therethrough, and
 - a pocket on the rear panel of the torso section, the pocket including an access opening for insertion of a cushion and joined to the rear panel along a periphery of the pocket except at the access opening, the pocket covering at least one third of the area of the rear panel when the torso section is laid flat with the rear panel overlying the front panel; and
 - a cushion dimensioned and configured to be received in the pocket by insertion through the access opening in close cooperation with the pocket.
- 2. The protective shirt of claim 1, wherein the access opening faces the same direction as the neck opening.
- 3. The protective shirt of claim 1, wherein the pocket is a parallelepiped in plan view when the protective shirt is laid flat with the rear panel overlying the front panel.
- **4**. The protective shirt of claim **3**, further comprising a flap covering the access opening.
- 5. The protective shirt of claim 4, wherein the pocket is rectangular in plan view when the protective shirt is laid flat with the rear panel overlying the front panel, and the flap covering the access opening is joined to the pocket along a right edge of the flap, along a top edge of the flap, wherein the top edge faces the same direction as the neck opening of the torso section, and along a left edge of the flap, and is unjoined to the pocket along a bottom edge of the flap.
- 6. The protective shirt of claim 5, wherein the pocket has a height extending from the neck opening to the waist opening when the torso section is laid flat with the rear panel overlying the front panel, and the flap has a height parallel to the height of the pocket in a range of fifteen to twenty-five percent of the height of the pocket.
- 7. The protective shirt of claim 1, wherein the cushion comprises a synthetic foam which is at least one of an open cell foam and a closed cell foam.
- **8**. The protective shirt of claim **7**, wherein the cushion further comprises a flexible covering over the synthetic foam.
- 9. The protective shirt of claim 8, wherein the flexible covering has an air bleed hole to accommodate expulsion and return of air when the cushion is compressed and expanded.

- 10. The protective shirt of claim 1, wherein the torso section has a height extending from the neck opening to the waist opening when the torso section is laid flat with the rear panel overlying the front panel, and the pocket has a height parallel to the height of the torso section about half the height of the torso section.
- 11. The protective shirt of claim 10, wherein the cushion has a height parallel to the height of the torso section and in a range of forty to fifty percent of the height of the torso section.
- 12. The protective shirt of claim 1, wherein the torso section has a width extending from a right edge of the rear panel to a left edge of the rear panel when the torso section is laid flat with the rear panel overlying the front panel, and the pocket has a width parallel to the width of the torso section in a range of forty-five to fifty percent of the width of the torso section.
- 13. The protective shirt of claim 12, wherein the cushion has a width parallel to the width of the torso section and in a range of forty to forty-five percent of the width of the torso section.

* * * * *