

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2010/0095433 A1

Apr. 22, 2010 (43) **Pub. Date:**

(54) HOCKEY SHORT WITH INTEGRAL GARTER

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(21) Appl. No.: 12/562,531 (22) Filed: Sep. 18, 2009

Related U.S. Application Data

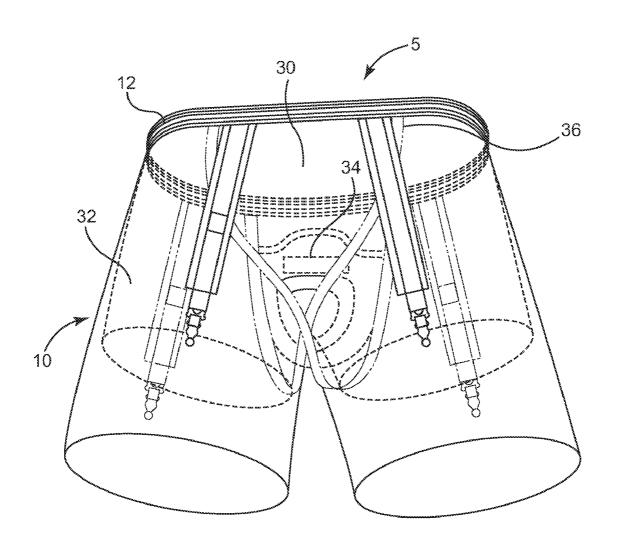
(60) Provisional application No. 61/098,436, filed on Sep. 19, 2008.

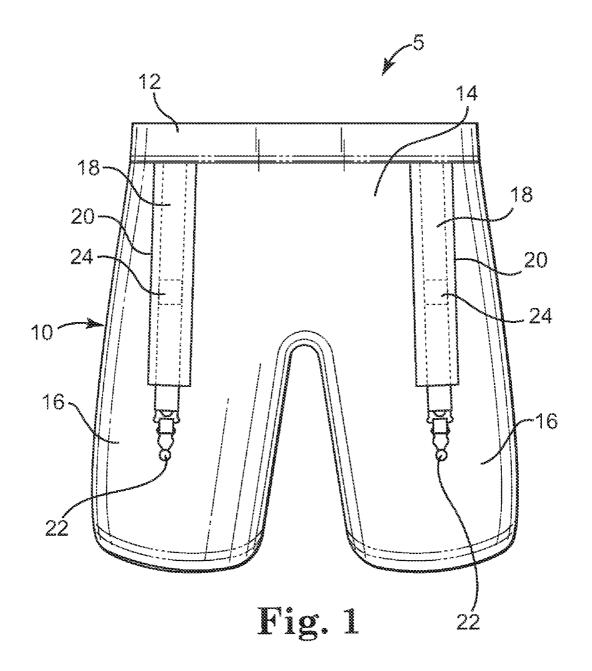
Publication Classification

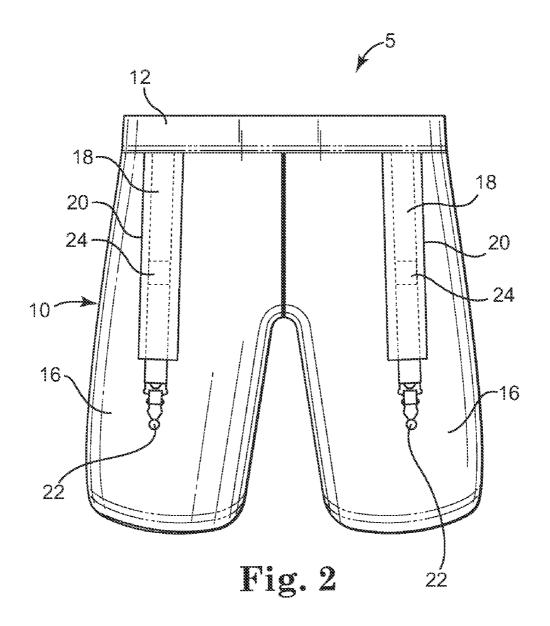
(51) Int. Cl. A41D 1/08 (2006.01)

(57) **ABSTRACT**

The present invention is a short member including garters that extend through sleeves positioned on the front of the short member. The integral jock support member may also include a pocket portion attached to a front portion of the short, which is configured to house a protective groin cup and support members positioned adjacent to the pocket portion. A bib may be attached to the waistband of the short member.







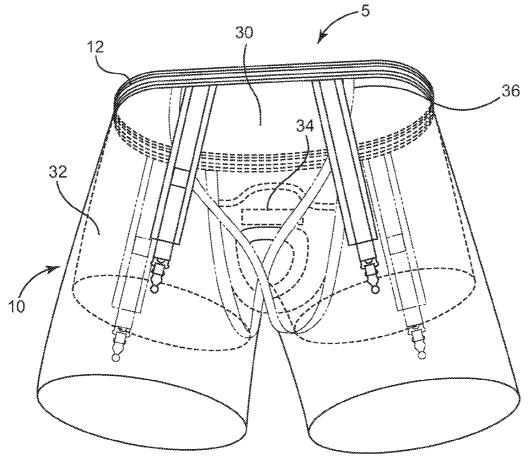


Fig. 3

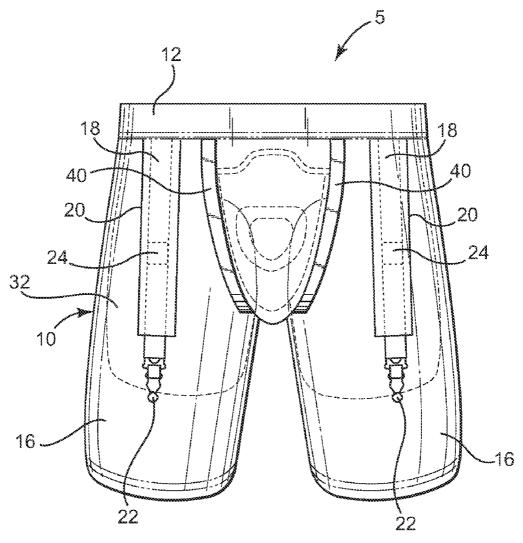


Fig. 4

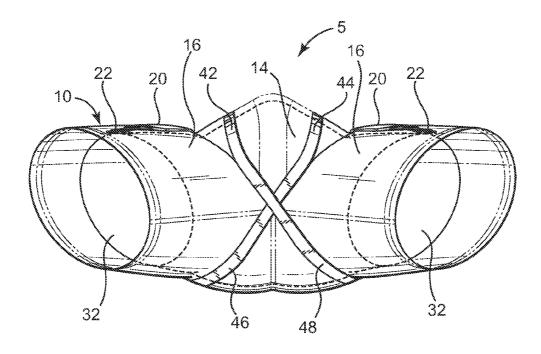
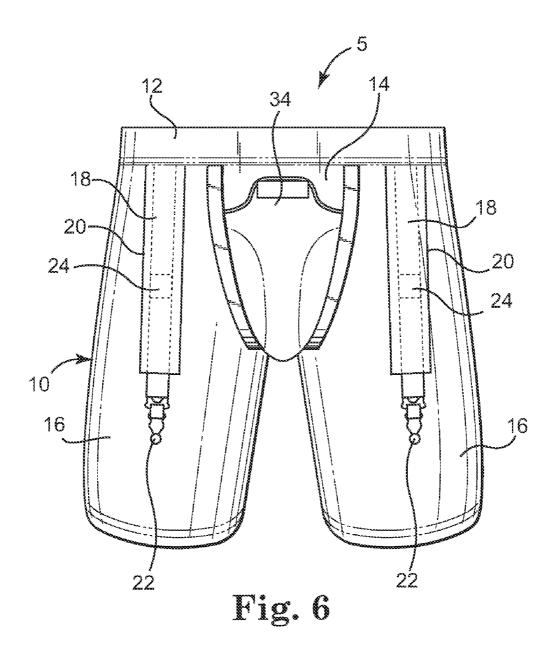


Fig. 5



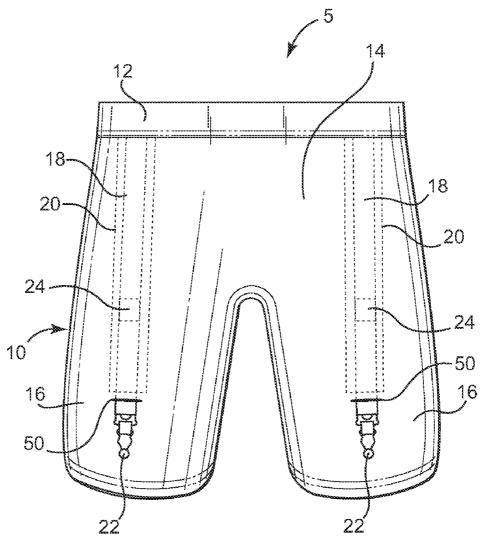


Fig. 7

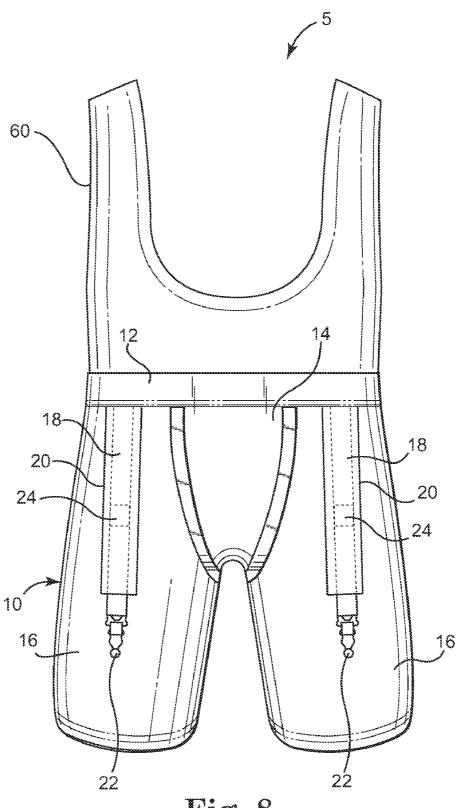


Fig. 8

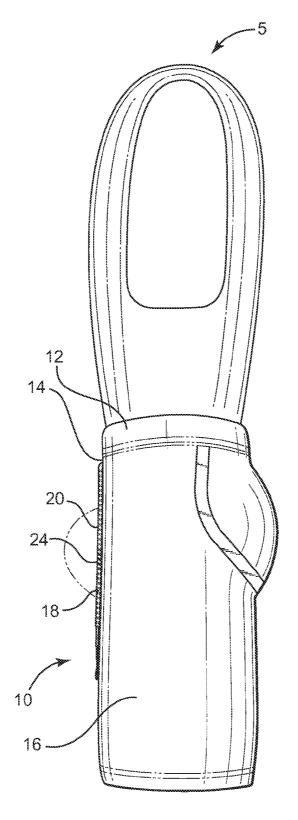


Fig. 9

HOCKEY SHORT WITH INTEGRAL GARTER

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit under 35 U.S.C. §119(e) of U.S. provisional application 61/098,436 entitled "Hockey Short With Integral Garter" filed Sep. 19, 2008, which is hereby incorporated by reference in its entirety.

BACKGROUND

[0002] Conventional hockey gear includes a jock strap with a protective cup, shorts or pants, and socks that extend up a significant portion of a player's legs. Garter straps connected to the shorts or pants may be used to keep the socks fully extended along the player's legs. Suspenders or similar straps may be used to keep the shorts suspended around the player's waist.

[0003] The resulting gear therefore includes a series of straps, which require separate manipulation and attachment by the wearer prior to playing. Such straps are also subject to twisting and/or tangling prior to or during competition. Moreover, because the various parts of the gear are attached by straps, movement of one part of the gear can result in the connected parts being moved out of position.

SUMMARY OF THE INVENTION

[0004] The present invention in one embodiment is a short member including a short member including first and second garter members for connection to hockey socks. The garters extend through respective first and second integrally attached sleeves positioned on the front of the short member such that the distal end of each garter extends outwardly from the sleeve. The sleeve members may be disposed on the inside or outside of the short members and more than two garters/ sleeves may be used. In embodiments in which the sleeves are attached to an inside surface of the short member, slits may be formed in the short member to allow the distal ends of the garter members to be exposed.

[0005] The short member may also include an integral jock support member with a pocket portion attached to a front portion of the short, either on the inside or outside, to house a protective groin cup. A support member may be positioned adjacent to the pocket portion along the front portion of the short, and may optionally extend along a crotch portion and/or a rear portion of the short. The support members help secure the pocket and protective cup remains over a user's groin during athletic or other physical activity. Suitable support members includes elongate straps that are positioned on opposing sides of the cup pocket.

[0006] Another embodiment of the present invention further includes a bib, which is integrally attached to the support short along the waistband. The bib can be used in place of suspenders or similar straps to suspend the shorts and socks once attached to the garter straps.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 illustrates a front view of a hockey short according to an embodiment of the present invention;

[0008] FIG. 2 illustrates a rear view of the hockey short shown in FIG. 1;

[0009] FIG. 3 illustrates a rear view of the hockey short shown in FIG. 1;

[0010] FIG. 4 illustrates a front view of a hockey short according to another embodiment;

[0011] FIG. 5 illustrates a bottom view of the hockey short shown in FIG. 3;

[0012] FIG. 6 illustrates a front view of a hock short according to another embodiment;

[0013] FIG. 7 illustrates a front view of a hockey short according to another embodiment of;

[0014] FIG. 8 illustrates a front view of a hockey short and integrated bib according to another embodiment;

[0015] FIG. 9 illustrates a side view of a hockey short shown in FIG. 7;

DETAILED DESCRIPTION

[0016] FIG. 1 shows a frontal view of a short 5 of the present invention which includes a short member 10 having a waistband 12 and a front portion 14 with leg portions 16. Garters 18, extend from the waistband 12 through sleeves 20, which are positioned along the front portion 14 portion and respective leg portions 16. The garters include connectors 22, each of which can be attached to a sock (not shown) and adjusters 24 for adjusting the length of the garters 18.

[0017] The sleeves 20 are formed integrally with the front portion 14 and leg portions 16 to form channels through which the garters 18 extend. In this manner, the garters 18 are restricted from moving freely, which may reduce the potential of the garters twisting, catching on other gear and/or disconnecting from the socks. In one embodiment, the sleeves 20 are sewn onto the front portion 14 and leg portions 16.

[0018] In one embodiment, the garters 18 can be removed from the sleeves 20 to, for example adjust the length of the garters 18 using the adjusters 24, which are optional. The garters 18 may also be formed from an elastic material to provide adjustment capability. The garters 18 as shown extend from the waistband 12 to the leg portions 16. The garters 18 could be attached at a point below the waistband and/or extend a greater or lesser distance along the front portion 14 and/or leg portions 16. The position of the sleeves 20 could be altered in a similar manner. In one embodiment, more than two garters 18 are included on the front portion 14. [0019] Suitable connectors 22 includes clips, hooks, Velcro, snaps, buttons and other means for providing a removable connection with the socks. Suitable adjusters 24 include conventional strap adjustment means. In one embodiment, no adjusters 24 are included.

[0020] FIGS. 2 and 3 show a rear view of the short 10 including waistband 12, rear portion 30 with leg portions 16, garters 18 and sleeves 20. The additional garters 18 and sleeves 20 on the rear portion 30 are optional and in one embodiment are only included on the front portion 14, or alternatively. In another embodiment, the garters 18 and sleeves 20 are only disposed on the rear portion 30. FIG. 3 further illustrates in phantom an inner short 32 disposed on the inside of short 10, and which includes a cup pocket 34 and support members 36. Any one or all of the inner short 32, cup pocket 34 and support members 36 are optional.

[0021] FIG. 4 shows an alternate embodiment of the present invention, which includes support members 40 on the outside of the short instead of, or in addition to, the support members 36 located the inside as shown in FIG. 3. An inner short 30 and/or cup 34 as shown in FIG. 3 are also optional in this embodiment. FIG. 5 shows an underneath view of the short 10, including support members 40. The support members 40 are generally positioned about the short 10 to pass

between the user's legs and to follow the contours of the user's groin and buttocks regions to increase the contact of the cup pocket 34 (and therefore the protective cup) over the user's groin region, particularly during body movement. In this manner, the support members 40 function similarly to a jock strap. However, because the support members 40 are integrally attached to the short member 10, strap twisting and misalignment of the cup experienced with conventional non-integrated straps is eliminated.

[0022] As further shown in FIGS. 4-5, the support members 40 may form an "X" configuration around the short member 10, with front legs 42, 44 attached to the waistband 12, front portion 14 and/or the leg portions 16, and the rear legs 46, 48 attached to the rear portion 30, leg portions 16 and/or waistband 12. The legs 42, 44, 46 and 48 meet, pass and/or intersect at the crotch region of the short to complete the "X" configuration. The support members 40 may take on other configurations as well. In one embodiment, for example, rear legs 46, 48 are not included and the front legs 42, 44 terminate at or around the crotch region of the short.

[0023] The support members 40 may be formed in several ways. In the illustrated embodiment, the support members 40 are formed by two discrete straps, which may be integrally attached to the short member 10 by a conventional zigzag stitch. The straps may be formed from a variety of materials. In one embodiment, the straps are formed from a material having suitable elasticity and/or resiliency to apply tension to the user's body when worn. In another embodiment, the elongate members are formed by elastic or tension threads along a similar path as described herein. In a further embodiment, a material exhibiting a different elasticity that than the primary short member material is integrally stitched or formed into the short member 10.

[0024] In yet another embodiment, the support members 40 are formed from a non-fabric material, which is coated, printed, applied onto (or otherwise embedded into) the short member 10. Suitable materials for the support members 40 according to this embodiment can adhere to (or can be embedded in) the material of the short member 10, and have physical properties (e.g., elasticity, flexibility, tensile strength) that differ from the physical properties of the short member 10. Such materials may also be lighter than fabric- or elastic-type members that are sewn onto the short member 10. Suitable materials include a variety of polymers including silicone.

[0025] The embodiment illustrated in FIG. 6 is similar to FIG. 4 except that the cup pocket 34 is disposed on the outside surface of the front portion 14. The cup pocket 34, whether disposed on the inside or outside of the short, may house a protective cup disposed within a space formed between a front panel and a rear panel, which are secured together to form the cup pocket 34. The cup pocket 34 may include a padding layer disposed between the cup and a user's groin. The cup pocket 34 is adapted to house a variety of protective cups. An example of a suitable protective cup is reported in the U.S. patent application Ser. No. 11/034,235 entitled "Impact Protection Device," which is hereby expressly incorporate by reference in its entirety.

[0026] FIG. 7 is similar to FIG. 1, except that sleeves 20 are formed on the inside of the short and the garters 18 extend through slits 50 in the leg portions 16. The embodiment illustrated in FIGS. 8 and 9 is similar to FIG. 4 except that the short 5 is integrally connected to a bib 60 at or near waistband 12. The bib 60 provides additional support to suspend the

short at the waist of the user because the socks tend apply a downward force when connected to the garters 18.

[0027] The short member 10 and/or bib 60 may be formed from a variety of materials. In one embodiment, the short member 10 and/or bib 60 may be at least partially formed from a compression-type material in order to fit snugly to the user's body. Suitable materials of this type include various mixtures of nylon, polyester, cotton and spandex. Suitable materials may also have moisture wicking capabilities, and/or may be formed partly or completely into a mesh to provide improved ventilation to the user. In one embodiment, particular panels of material, particularly the bib, are formed from mesh material. The short member 10 and/or bib 60 may also be formed at least partially from a low compression, loose fitting material, for example, a loose fitting mesh material. The short member 10 could also include protective padding along the sides or rear is desired.

[0028] The waistband 12 may be formed from a variety of suitable materials, and may include an elastic strip to provide a tension fit about the waist of a user. In an alternate embodiment, the waistband may include a drawstring or the like. In a further embodiment, the waistband may include adjustment members such as Velcro-type flaps to manually tighten or loosen the waistband 12 about a user's waist. The various components of the short 5 and bib 60 may be sewn together in a conventional manner.

[0029] Although embodiments various features have been described, it will be appreciated that many of these features can be included or eliminated to achieve various combinations of features.

1. A short member comprising:

front and rear leg portions;

a waist portion;

first and second garter members attached to the short member at respective proximal ends and including sock attachments at respective distal ends;

first and second sleeve members attached to the front portion, the first and second sleeve members each including a channel having an opening at a distal end of the sleeve member; and

wherein the first and second garter members are configured to be positioned within the channels such that the sock attachments extend from the distal end openings of the first and second sleeve members.

- 2. The short member of claim 1 wherein the proximal ends of the first and second garter members are attached to the short portion at or adjacent to the waist portion, and wherein the first and second garter members extend generally downwardly along the front leg portion.
- 3. The short member of claim 1 further comprising third and fourth garter members positioned on the rear leg portion.
- **4**. The short member of claim **3** further comprising third and fourth sleeve members within which the third and fourth garter members are positioned.
- **5**. The short member of claim **1** wherein the first and second sleeve members are disposed generally vertically along a length of the front leg portion.
- **6.** The short member of claim **1** wherein the first and second sleeve members are disposed on an outside surface of the front leg portion.
- 7. The short member of claim 6 wherein the first and second sleeve members each include a proximal opening, a distal opening and a channel extending therebetween.

- 8. The short member of claim 1 wherein the first and second sleeve members are disposed on an inside surface of the front leg portion.
- 9. The short member of claim 8 wherein the front leg portion includes first and second slits disposed at respective distal ends of the first and second sleeve members.
- 10. The short member of claim 9 wherein the distal ends of the first and second garter members are configured to extend through the respective first and second slits such that the sock attachments are disposed on an outer surface of the front leg portion.
- 11. The short member of claim 1 wherein the first and second garter members include adjustment members for adjusting a length of the garter members.
- 12. The short member of claim 1 further comprising a bib member integrally attached to the short member at the waist portion.

- ${\bf 13}$. The short member of claim 1 wherein further comprising a pocket member disposed on the front leg portion
- **14**. The short member of claim **13** further comprising a protective cup adapted to be positioned within the pocket member.
- **15**. The short member of claim **1** further comprising an integral jock support member including:
 - a pocket portion attached to the front portion of the short member for housing a protective cup adjacent the groin of a user, and
 - a support member attached to the short member, which is positioned generally adjacent to the pocket portion and extends along at least the front portion of the short member.

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