A continuous sports bra includes a main body cut from a single piece of tubular material and wrap-around side panels coupled to the main body. The main body includes support cups and is configured to encircle the upper torso of the wearer. The sports bra includes shoulder straps that extend upward from the main body to a back panel. Coupled to the back panel are two side panels that extend forward and thus back around and beneath the support cups of the main body to provide additional support. The free ends of the side panels may clasp together directly or be coupled to the main body proximate a front, central region of the torso.
FIELD OF THE INVENTION

This invention relates generally to a sport bra, and more specifically to a sports bra having additional wrap-around support.

BACKGROUND OF THE INVENTION

Sports bras come in many configurations and are primarily selected to provide support that is not available from traditional, undergarment bras. U.S. Pat. No. 6,422,917 discloses a “therapeutic brassiere” having straps that extend over the shoulders and cross over to the lateral sides of the cups. The therapeutic brassiere is constructed from a one-piece, breathable, stretchable fabric. The left side strap passes over the left shoulder of the wearer, crosses in the back and fastens to the outside edge proximate the right breast cup. Likewise, the right side strap passes over the right shoulder, crosses in the back and fastens to the outside edge proximate the left breast cup. U.S. Pat. No. 4,444,191 discloses a sports bra having wrap-around members to provide support in various regions. This sports bra operates as a vest-like side panel that includes a front and back panel, both made from a non-elastic material. The front panel serves to limit and/or prevent undue vertical breast movement. Elastic straps are disposed on either the inner or the outer surface of the front panel to further restrict breast movement during jogging. Another sports bra configuration is called the “Caroline Bra” made by Body by Brazil. The Caroline Bra utilizes a wrap-around style with shoulder straps that extend from the front support cups, across the back and under the side panels. The straps are securely stitched to the left and right sides of the support cups. A separate band surrounds the lower peripheral edge of the bra and attaches beneath each support cup.

SUMMARY OF THE INVENTION

The present invention relates to a sports bra having a main body coupled to or integrally formed with wrap-around side panels that support at least a portion of the main body. The main body includes support cups and is configured to encircle the upper torso of the wearer. In one embodiment, the main body and wrap-around side panels are formed from a continuous, unitary piece of fabric material. In another embodiment, the main body and wrap-around side panels are formed separately and then selectively stitched or otherwise coupled together. The shoulder straps extend upward from the main body, over the shoulders of the wearer and may be coupled to a back panel, which in turn is coupled to the side panels. The wrap-around side panels are configured to extend around the torso and beneath the support cups to provide additional support thereto. The free ends of the side panels may be fastened together directly or independently secured to the main body.

In accordance with an aspect of the invention, a sports bra includes a pair of shoulder straps; a torso panel sized to snugly and elastically fit over an upper torso of a wearer, the panel coupled to the pair of shoulder straps; and a pair of wrap-around side panels extendable in opposite directions originating from a back portion of the torso panel, the side panels extendable around the upper torso with a portion of each side panel configured to provide additional support beneath a cup region of the torso panel, the side panels having end portions attachable proximate a front, center portion of the torso panel beneath the cup region.

In accordance with another aspect of the invention, a method for making a sports bra includes the steps of (1) cutting a fabric material to form a torso panel, shoulder straps and a pair of wrap-around side panels that extend in opposite directions from a back portion of the torso panel; (2) arranging each wrap-around side panel to have at least a portion that provides additional support beneath a cup region of the torso panel; and (3) positioning free ends of the wrap-around side panels to be secureable proximate a front, center region of the torso panel.

In accordance with yet another aspect of the invention, a sports bra includes a pair of shoulder straps; a continuous panel sized to snugly fit over an upper torso of a wearer and having a cup region, the panel coupled to the pair of shoulder straps; and a pair of wrap-around side panels extendable in opposite directions from and coupled to the shoulder straps, the side panels extendable around the upper torso with a portion of each side panel configured to provide additional support beneath the cup region of the panel and the side panels fastenable proximate a front region of the panel beneath the cup region.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred and alternative embodiments of the present invention are described in detail below with reference to the following drawings:

Fig. 1 is a perspective view of a sports bra having wrap-around side panels according to an embodiment of the present invention;

Fig. 2 is a perspective view of a sports bra having wrap-around side panels according to another embodiment of the present invention;

Fig. 3 is a front elevational view of the sports bra of Fig. 2;

Fig. 4 is a rear elevational view of the sports bra of Fig. 2;

Fig. 5 is an exploded, partial perspective view of a pin-type clasp used to secure wrap-around side panels of a sports bra;

Fig. 5B is an exploded, partial perspective view of an engagement type clasp used to secure wrap-around side panels of a sports bra.

Fig. 6 is an exploded, rear elevational view of a sports bra having separate back panels attachable to each other according to an embodiment of the present invention;

Fig. 7 is a partial, rear elevational view of the sports bra of Fig. 6 showing the back panels attached to each other according to an embodiment of the present invention;

Fig. 8 is a front elevational view of a sports bra having sleeves for adjusting a fit of the sports bra around a torso according to an embodiment of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

As will be described in further detail below, a sports bra includes a main body coupled to or integrally formed with wrap-around side panels that support at least a portion, such as support cups, of the main body. The main body is configured to encircle the upper torso of the wearer. In one embodiment, the main body and wrap-around side panels are formed from a continuous, unitary piece of fabric material. In another embodiment, the main body and wrap-around side panels are formed separately and then selectively stitched or otherwise coupled together. The wrap-around side panels may be
coupled to a back panel, which in turn is coupled to the shoulder straps that extend upward from back panel toward a front portion of the main body. Further, the wrap-around side panels extend around the torso of the wearer to provide additional support while being adjustable to provide a comfortable, yet secure fit.

Fig. 1 shows a sports bra 100 having a main body 102 that takes the form of a torso panel 104 sized to snugly and elastically fit over an upper torso (not shown) of a wearer. The torso panel 104 includes a front portion 106 that forms a unitary and continuous tube with a back portion 108. In one embodiment, the front and back portions 106, 108 are seamlessly attached. Shoulder straps 110 (e.g., left and right shoulder straps) extend upward from the torso panel 104 and are configured to carry tension from the front portion 106 to a back panel 112 coupled to the shoulder straps 110. The width, shape and configuration may be varied depending on a style for the sports bra 100, but generally includes a width sufficient to cover a central, upper portion of a back of the wearer.

Wrap-around side panel or side panels 114 (e.g., left and right side panels) extend in opposite directions as originating from the back panel 112. In one embodiment, the side panels 114 and the back panel 112 are arranged with an upside down T-back shape. The side panels 114 extend around the upper torso and each side panel may include a cup support portion 116 that is generally positioned under a respective cup region of the main body 102 to provide additional support. Each side panel 114 includes a free end portion 118 and these end portions 118 may be directly connected to one another proximate a front, center portion the torso panel 104 or may be fastened to the torso panel 104, yet remain separated from each other. In one embodiment, the free end portions 118 are coupled to mating clasps that engage to secure the sports bra 100 to the wearer. The mating clasps may take a variety of forms as described below and illustrated in Figs. 5A and 5B.

In one embodiment, the material used for the main body 102, the shoulder straps, the back panel and the side panels of the sports bra 100 may be cut from the same monolithic piece of material, thus the transition from one component to next is seamless. The material for the sports bra 100 may take the form of, but not be limited to, a breathable, stretchable and wicking material.

Figs. 2-4 show another sports bra 200 having many of the features of the above-described sports bra 100. Hence, only the features that vary significantly from the above-described sports bra 100 will be described herein in detail. Referring to Figs. 2-4 as a group, the sports bra 200 includes a main body 202 with cup support regions 204, 206. The main body 202 may take the form of a torso panel having a back portion 208. Shoulder straps 210 extend upward generally from each cup support region 204, 206 and attach to a back panel 212. Side panels 214 extend from the back panel 212 around the torso. In the illustrated embodiment, the side panels 214 include a tapered or angled portion 216 having a slope consistent with an angle 218 taken relative to a horizontal 220. The slope defined by the angle 218 may be generally straight or may have some curvature corresponding to a general shape of the cup support regions 204, 206. One purpose of the tapered portions 216 is to provide additional support near the sides of the cup support regions 204, 206 and at least some additional there beneath. Further, the configuration of the side panels 214 may provide inward compression of the torso and thus generate a snugger or more secure fit. Similar to the embodiment described in Fig. 1, free ends 222 of the side panels 214 may be coupled together using an adjustable clasp 224.

Since, in the preferred embodiment, the side panels 214 are not fixed to the main body 202, the user is able to adjust the fit of the side panels 214 by adjusting the positioning relative to main body 202 and by adjusting the tension with the clasp 224. Thus, the side panels 214 may be positioned higher or lower relative to the cup support regions 204, 206.

Figs. 5A and 5B show two different devices or clasps 300a, 300b that may be used to connect the free ends of the side panels together. In Fig. 5A, the clasp 300a includes a pin member 302 and a receiving member 304. The pin member 302 may be insertable into the receiving member 304 to couple the side panels 306 together. In Fig. 5B, the clasp 300b includes an insertion member 308 sized to be received and removably captured in a corresponding engagement member 310. In the illustrated embodiment, the insertion member 308 and engagement member 310 are fastened to the side panels 306. In either embodiment, the mating clasps may be configured to permit adjustment of the length of the side panels 306. In yet another embodiment, the free ends of the side panels 306 may be fastened to each other or to the main body of the sports bra using a hook and loop fastener system, more commonly referred to as a VELCRO® fastener system.

In one alternate embodiment, loops or sleeves may be provided along the front or sides of the main body 202, through which the side panels 214 may extend. Such loops or sleeves would help maintain the general positioning of the side panels 214 relative to the main body 202 within a certain area while still allowing substantially independent support provided by the side panels 214. Other fasteners to permit vertical adjustment of the side panels 214 relative to the main body 202 by alternatively being provided, such as hook-and-loop fasteners or snaps. Such arrangements provide the benefits of adjustable under-cup support.

Figs. 6-8 show another embodiment of a sports bra 400 having a torso panel 402 coupled to shoulder straps 404, which in turn are attached to an under back panel 406. The under back panel 406 may have generally a Y-shape as illustrated, but other shapes are possible. In one embodiment, the torso panel 402, shoulder straps 404 and the under back panel 406 are made from a unitary piece of material. In another embodiment, at least two of these components are stitched, sewn or otherwise connected together.

The sports bra 400 further includes wrap-around side panels 408 coupled to an over back panel 410. The side panels 408 and over back panel 410 may have an upside down T-back shape, as illustrated, but again other shapes are possible. As best shown in Fig. 7, the over back panel 410 may be coupled to the under back panel 406 at only the respective upper and lower end portions 412, 414 thereof. By way of example, the upper end portion 412 and the lower end portion 414 may each include independent bar tack stitches for coupling the under and over back panels 406, 410 together at approximately the illustrated, discreet locations. In such an embodiment, the under and over back panels 406, 410 are not attached anywhere else and are thus more free to flex, stretch and/or move relative to each other or in conjunction with the wearer. The two, illustrated assemblies may be made from different, similar or identical materials, where the first assembly includes the torso panel 402, the shoulder straps 404 and the under back panel 406 and the second assembly includes the side panels 408 and the over back panel 410.

Referring specifically to Figs. 7 and 8, a clasp mechanism 416 is attached to each side panel 408 and configured to secure the side panels 408 to a front, center portion of the torso panel 402. More specifically, the clasp mechanism 416 includes a hook portion for securing the side panels...
408 into one or more open-ended loops or sleeves 418 coupled to or integrally formed with the torso panel 402. In another embodiment, the under and over back panels 406, 410 may include additional stitching along their vertical lengths or may be coupled together at other locations that may not include the upper and lower end portions 412, 414.

[0030] While the preferred embodiments of the invention has been illustrated and described, as noted above, many changes can be made without departing from the spirit and scope of the invention. Accordingly, the scope of the invention is not limited by the disclosure of the preferred embodiment. Instead, the invention should be determined by reference to the claims that follow.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A sports bra comprising:
   a pair of shoulder straps;
   a torso panel sized to snugly and elastically fit over an upper torso of a wearer, the panel coupled to the pair of shoulder straps; and
   a pair of wrap-around side panels extendable in opposite directions originating from a back portion of the torso panel, the side panels extendable around the upper torso with a portion of each side panel configured to provide additional support beneath a cup region of the torso panel, the side panels having end portions attachable proximate a front, center portion of the torso panel beneath the cup region.

2. The sports bra of claim 1, further comprising an under back panel coupled to the shoulder straps.

3. The sports bra of claim 1, further comprising an over back panel coupled to the side panels.

4. The sports bra of claim 1, wherein the side panels and the over back panel are coupled together to define an upside down T-back shape.

5. The sports bra of claim 1, further comprising:
   an under back panel coupled to the shoulder straps; and
   an over back panel coupled to the side panels, the over back panel coupled to the under back panel such that the over back panel covers at least a center portion of the under back panel.

6. The sports bra of claim 5, wherein the over back panel is secured to the under back panel at two locations.

7. The sports bra of claim 5, wherein the two locations include an upper attachment location and a lower attachment location.

8. The sports bra of claim 5, wherein the over back panel is sewingly coupled to the under back panel.

9. The sports bra of claim 1, wherein the shoulder straps, torso panel and the wrap-around side panels comprise a unitary piece of stretchable fabric.

10. The sports bra of claim 1, wherein the shoulder straps, torso panel and the wrap-around side panels are seamlessly coupled together as a unitary, continuous body.

11. The sports bra of claim 1, wherein each wrap-around side panel includes a tapered width configured to be widest near the back portion of the torso panel and narrowest at near the front, center portion of the torso panel.

12. The sports bra of claim 1, wherein a material for the bra includes a breathable, stretchable material.

13. The sports bra of claim 1, further comprising a plurality of open-ended sleeves configured to engageably couple with the side panels to adjustably secure the side panels to the torso panel.

14. The sports bra of claim 1, further comprising a clasp mechanism coupled to each side panel and configured to secure the side panels to each other.

15. A method for making a sports bra, the method comprising:
   cutting a fabric material to form a torso panel, shoulder straps and a pair of wrap-around side panels that extend in opposite directions from a back portion of the torso panel;
   arranging each wrap-around side panel to have at least a portion that provides additional support beneath a cup region of the torso panel; and
   positioning free ends of the wrap-around side panels to be securable proximate a front, center region of the torso panel.

16. The method of claim 15, wherein cutting the fabric material includes cutting a breathable and stretchable material.

17. The method of claim 15, wherein arranging each wrap-around side panel includes cutting each wrap-around side panel to have a width that decreasingly tapers as the wrap-around side panel extends beneath the cup region of the torso panel.

18. The method of claim 15, wherein positioning the free ends of the wrap-around side panels includes securing the free ends to the torso panel.

19. The method of claim 15, wherein positioning the free ends of the wrap-around side panels includes attaching the free ends to each other.

20. A sports bra comprising:
   a pair of shoulder straps;
   a continuous panel sized to snugly fit over an upper torso of a wearer and having a cup region, the panel coupled to the pair of shoulder straps; and
   a pair of wrap-around side panels extendable in opposite directions from and unitarily formed with the continuous panel, the side panels extendable around the upper torso with a portion of each side panel configured to provide additional support beneath the cup region of the panel and the side panels fastenable proximate a front region of the panel beneath the cup region.

21. The sports bra of claim 20, wherein the side panels are fastenable to the panel while remaining separated from one another.

22. The sports bra of claim 20, wherein the side panels are fastenable to each other while remaining separated from the panel.

23. The sports bra of claim 20, further comprising a releasable clasp for fastening the side panels together proximate the front region of the panel beneath the cup region.

24. The sports bra of claim 20, further comprising a back panel extending from the shoulder straps to the side panels.

25. The sports bra of claim 20, wherein the continuous panel includes a stretchable fabric.