US 20110104985A1

(19) **United States**

(12) **Patent Application Publication**

LINDER et al.

(10) **Pub. No.: US 2011/0104985 A1**

(43) **Pub. Date: May 5, 2011**

(54) **ADAPTABLE MULTI-FUNCTION BRA**

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(21) Appl. No.: **12/612,587**

(22) Filed: **Nov. 4, 2009**

Publication Classification

(51) **Int. Cl.**

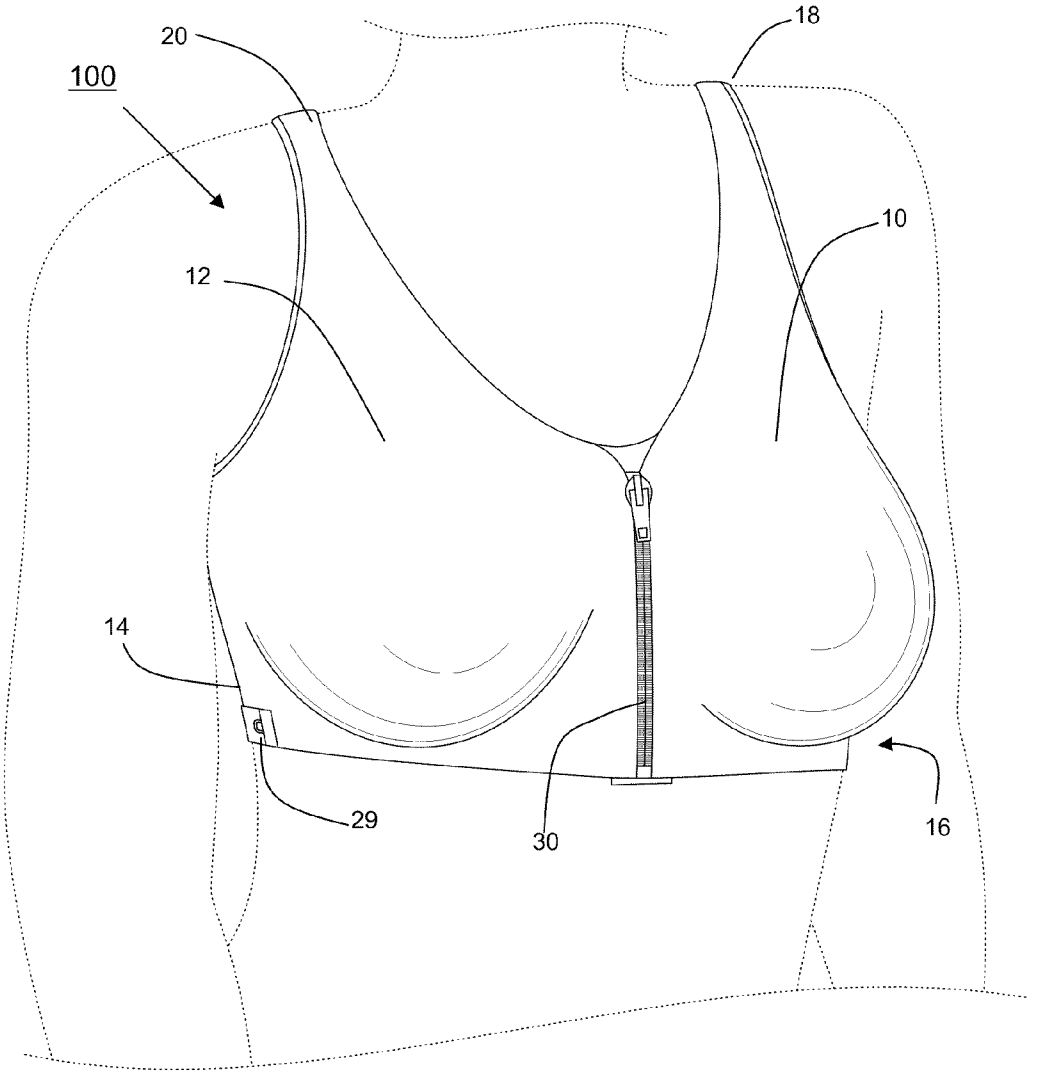
A41C 3/02 (2006.01)

A41C 3/00 (2006.01)

(52) **U.S. Cl.** **450/58**; 450/86

(57) **ABSTRACT**

An adaptable multi-function bra to be worn by women whose breasts have been surgically augmented, for athletic support, sleeping. The brassiere is fabricated from cloth of soft cotton, spandex, a polyester blend or combinations thereof. The bra is devoid of any breast supporting structure such as elastic panels and/or underwire. Adjustable attached cloth straps on each side having a hook at a free end of the strap attaches to one of a plurality of loops provided at each side along the midriff to adjust the breast support firmness.



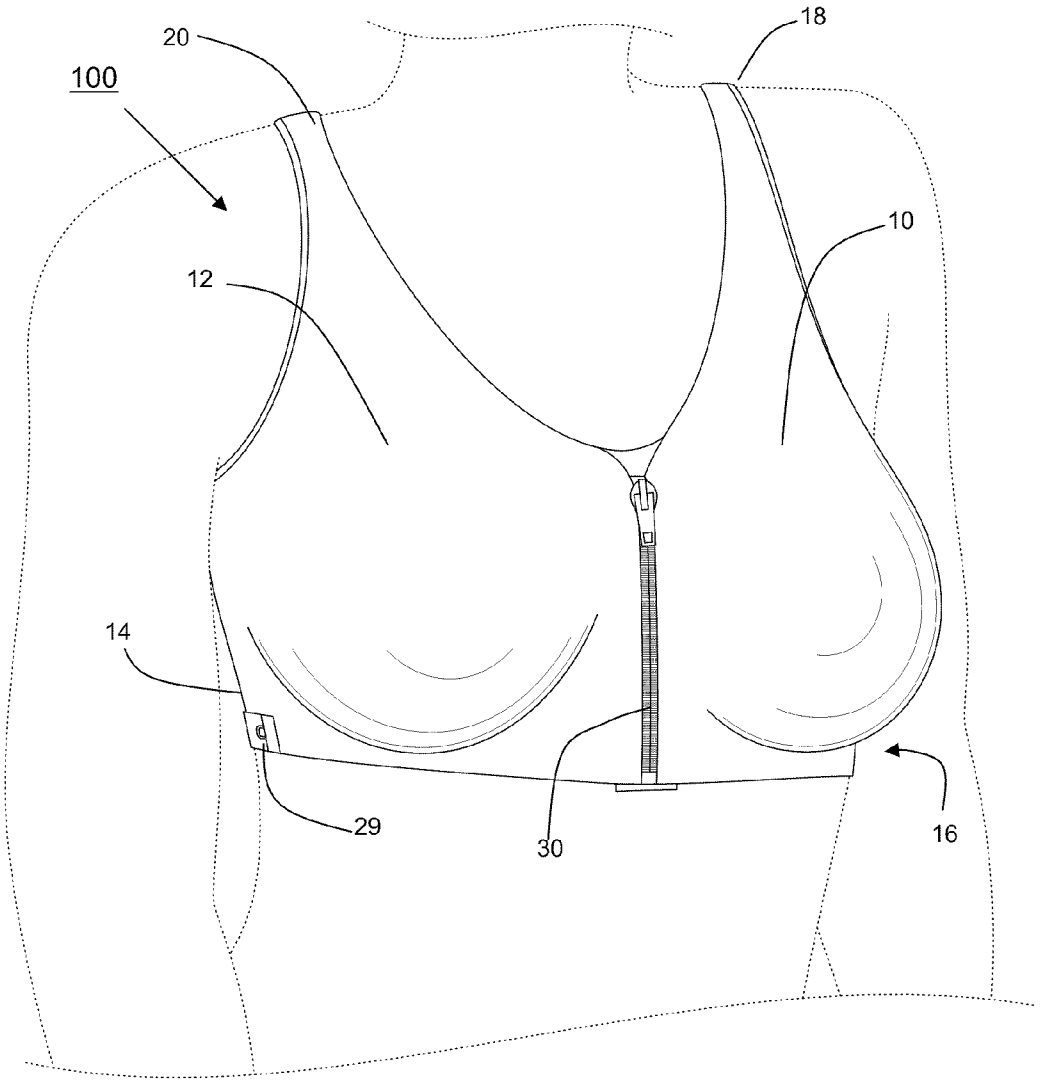


FIG. 1

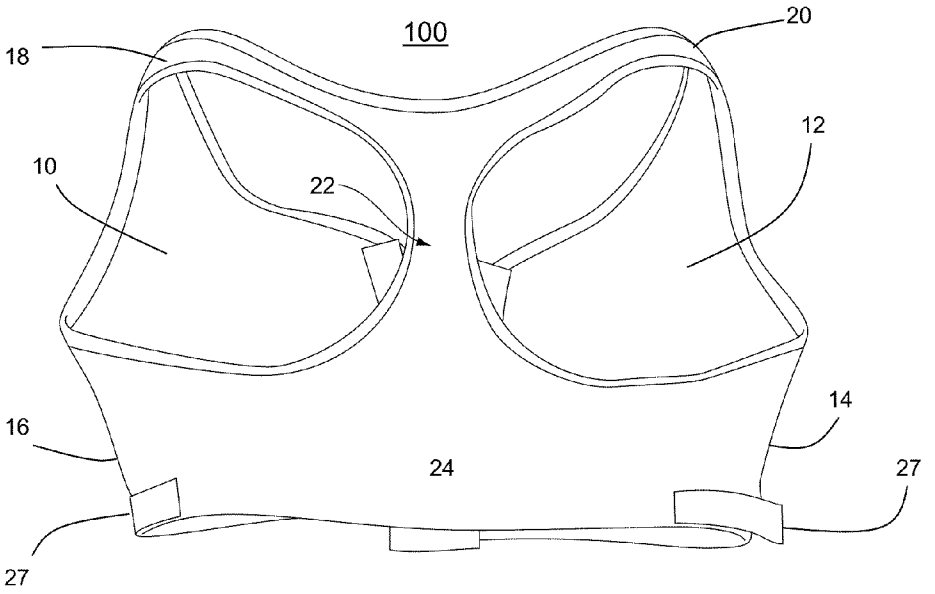


FIG. 2

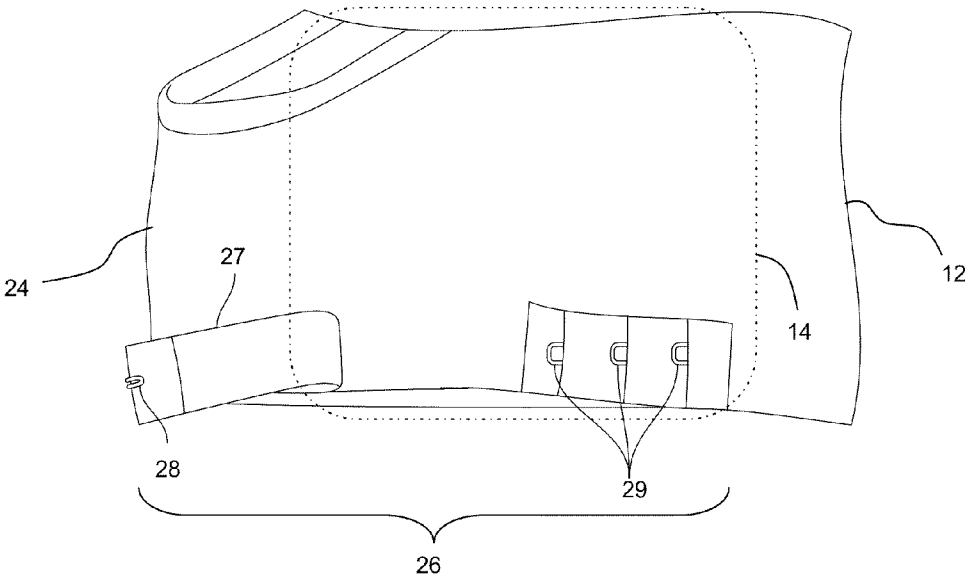


FIG. 3

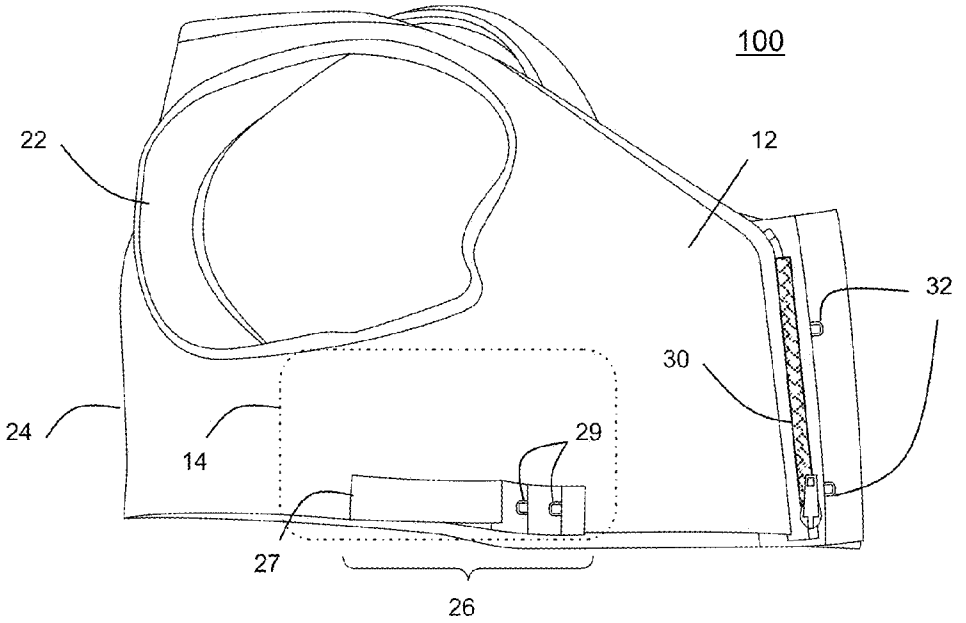


FIG. 4

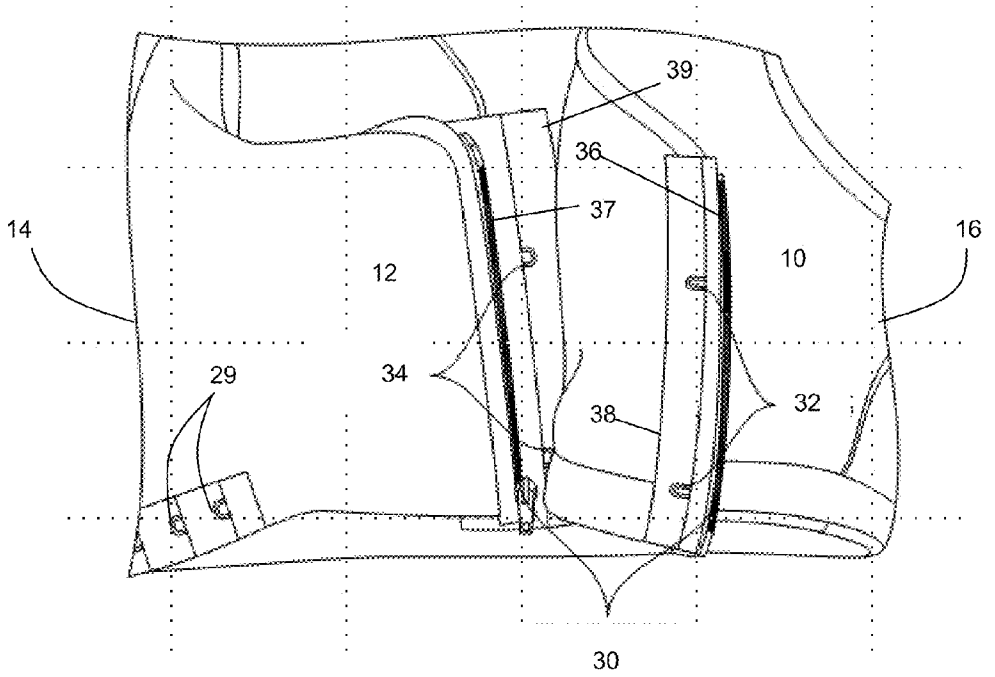


FIG. 5

ADAPTABLE MULTI-FUNCTION BRA

TECHNICAL FIELD

[0001] The present invention generally relates to women's lingerie. More specifically, the present invention is drawn to a multi-function brassiere for use in post-surgery, pregnancy, nursing, athletic and sleeping breast support.

BACKGROUND

[0002] After breast augmentation or reduction, problems have arisen involving the selection and wearing of a proper and comfortable brassiere. First, the post surgical breast is tender during recovery, so underwires and hard elastic, etc., are preferably avoided to minimized irritation and discomfort. Second, the fully recovered augmented breast is substantially self supporting and does not require the uncomfortable underwire support structure incorporated in most conventional brassieres. As the shape, sensitivity and size of the breast changes in the course of recovery, there is a desirable need for adjustment in the bra to accommodate these changes.

[0003] During pregnancy the breasts enlarge as the pregnancy approaches full term, and continuing to enlarge in the post-pregnancy nursing period. There is a need for a comfortable adjustable bra to compensate for these changes.

[0004] During sports activities, a sport bra is often preferred that does not have underwires and hard elastic, etc., yet provides adequate firmness of support to minimized discomfort due to body motion, such as jogging. A bra that is adjustable to the support requirements of different levels of sports activity is beneficial.

[0005] Many women prefer to sleep with a bra that provides a desired measure of comfort and support. A bra to satisfy this need is also beneficial.

[0006] A multi-function bra adapted to satisfy these various needs is both economically and physically beneficial.

SUMMARY

[0007] Disclosed is a bra, worn to provide adjustable support, by women whose breasts have been surgically altered, who are pregnant or nursing (and thus experiencing breast enlargement), who desire added support while sleeping or engaging in sports. The bra is fabricated from materials including cotton and spandex, polyester blends, or any combination of these materials. Spandex material can provide a measure of soft elastic support and/or compression in a bra devoid of any rigid or semi-rigid supporting structure such as elastic panels and/or underwire.

[0008] A side adjustment system is provided on both sides of the bra including an attached adjustment strap with a free end having a hook at the adjustment strap's free end to affix to a plurality of loops fixed in the bra in-line with the adjustment straps, enabling adjustment of horizontal tension across the midriff just below the bust line to adjust for changing breast size and desired support firmness under various activities and conditions.

[0009] A front closure system for closing the bra in front includes one or more pairs of hooks and loops and a vertical zipper. The hook-loop pairs facilitate aligning the bra front to enable easy zipper closure. At least one of the hook-loop pairs is preferably located approximately between one quarter and three quarters of the distance from the top of the zipper toward the bottom to provide an amount of horizontal tension and support across the bust line either above, at or below the horizontal line defined by the nipples.

[0010] Specifically, an adaptable multi-function bra includes two front members and a rear member connecting to each front member by a respective side member passing under a user's armpit, and shoulder straps connected to each respective front member. The shoulder straps passing over the user's left and right shoulders connect to the back.

[0011] The adjustment strap is attached and aligned substantially horizontally on a lower edge of each (i.e., left and right) side of the bra. The strap is attached to the side at one end and has a hook at a free end. A plurality of loops are located on each side of the bra at different successive positions along the lower edge of the bra side for engaging the strap hook at different successive positions. The strap is tensioned according to the successive position at which the hook engages one of the plurality of the loops.

[0012] Accordingly, it is a principal object of the invention to provide a bra which is adapted to be used by women who have had breast alteration surgery.

[0013] Accordingly, it is a principal object of the invention to provide a bra which is adapted to be used by women who are pregnant or nursing.

[0014] It is another object of the invention to provide a bra which is adapted to be used by women engaging in sports activities and/or sleeping that is comfortable to wear and provides a desired adjustable amount of support according to the activity.

[0015] It is a further object of the invention to provide a bra which is devoid of any extraneous rigid or semi-rigid breast supporting structure.

DESCRIPTION OF THE FIGURES

[0016] For a more complete understanding of the present disclosure, reference is now made to the following descriptions taken in conjunction with the accompanying drawings.

[0017] FIG. **1** shows a perspective view of an adaptable multi-function bra in accordance with the disclosure;

[0018] FIG. **2** shows a rear view of the adaptable multi-function bra;

[0019] FIG. **3** shows a right side view of a portion of the adaptable multi-function bra;

[0020] FIG. **4** shows a detailed right side view of the adaptable multi-function bra; and

[0021] FIG. **5** shows a detailed front view of a portion of the adaptable multi-function bra.

DETAILED DESCRIPTION

[0022] An adaptable multi-function bra **100** worn by a user, as illustrated in FIGS. **1** and **2**, comprises left and right front members **10** and **12**, left and right side members **14**, **16** and a back member (described below). Each front member is continuously connected horizontally by the respective side member **14**, **16** to the back. Left and right shoulder straps **18**, **20**, continuously extending from the front members **10**, **12** over each user's shoulder merge to a single "racerback" strap **22** in the user's upper back that then merges with the horizontal back member **24**. Thus, the back member includes the racerback **22** and the horizontal back member **24**. The horizontal back member **24** of the back of the bra **100** extends around to both side members **14**, **16** to merge with the two front mem-

bers **10**, **12**. The lower edges of the front, side and back members are below the bust line (e.g., at midriff or upper midriff level).

[0023] As shown in right side views in FIG. **3** and FIG. **4**, affixed at the lower edge of each of the side members **14**, **16** (where side member **16** is not shown in FIGS. **3** and **4**) is a respective side adjustment system **26** including a strap **27** attached at one end to each side member **14**, **16** and with a hook **28** (not shown in FIG. **4**) at the free end of the strap **27**. The side adjustment system **26** further includes a plurality of loops **29** affixed at locations on the lower edge of each of the respective side members **14**, **16** to which the hook **28** may attach. Attaching the hook **28** at each progressively more distant loop **29** can increase the horizontal tension in the bra **100** along the midriff, providing more compression, support and firmness, if desired, depending, for example, on the size and/or sensitivity of the breasts, degree of physical activity engaged in or comfort and support desired during sleep.

[0024] As shown in FIG. **5**, the bra **100** includes a front closure including a zipper **30** including left and right zipper components **36**, **37**, and one or more alignment front hooks **32** and loops **34** in corresponding pairs to facilitate aligning the zipper **30** for pulling it closed. At least one hook-and-loop pair **32**, **34** is located near the bottom of the zipper **30** at least to aid in the zipper alignment. Placement of at least one hook-and-loop pair **32**, **34** is preferably between one quarter and three quarters of the length of the zipper **30**, as measured from the top of the zipper **30**. The placement of the hook-and-loop pair **32**, **34** may be above, at, or below a horizontal line defined by the nipples. Placement of the hook-and-loop pairs **32**, **34** at the desired locations can provide an additional degree of tensile horizontal compression support across the bust at a desired height relative to the nipple line. For example, higher placement of the hook-and-loop pair **32**, **34** can provide a bando-style compression support for the upper bust. Lower placement of the hook-and-loop pair **32**, **34** can provide a lifting support for the lower bust.

[0025] Left and right interior liners **38**, **39** attached to the left and right front members **10**, **12**, prevent the user's skin from contacting the hook-and-loop pairs **32**, **34** and the left and right zipper components **36**, **37**.

[0026] The bra material is constructed of pliable material such as cotton, spandex, polyester blends, or any combination of these materials. Spandex is preferably included to provide soft elastic support both horizontally and vertically across the breast. The combination of the tensile elastic spandex and the adjustment support system **26** enables adjustable breast support for comfort in the various functions in which the bra **100** is employed.

[0027] Referring to FIG. **2**, the V-shaped configuration of the racerback **22** located in an upper part of the back member enhances the horizontal and vertical compression support across the front members **10**, **12** of the bra **100**. The combination of the racerback **22**, shoulder straps **18**, **20**, the two side adjustment systems **26** (which includes strap **27**/hook **28** and loop **29**) to adjust horizontal tension across the midriff and use of elastic materials comprises a three point adjustable support system for the breasts in a variety of circumstances.

[0028] It is to be understood that the present disclosure is not limited to the embodiment described above, but encompasses any and all embodiments within the scope of the following claims.

[0029] Although the present disclosure and its advantages have been described in detail, it should be understood that various changes, substitutions and alterations can be made herein without departing from the spirit and scope of the disclosure as defined by the appended claims. Moreover, the scope of the present application is not intended to be limited to the particular embodiments of the process, machine, manufacture, composition of matter, means, methods and steps described in the specification. As one of ordinary skill in the art will readily appreciate from the embodiments of the present disclosure, processes, machines, manufacture, compositions of matter, means, methods, or steps, presently existing or later to be developed that perform substantially the same function or achieve substantially the same result as the corresponding embodiments described herein may be utilized according to the present disclosure. For example, materials with elastic and tensile properties superior to spandex may be utilized. Accordingly, the appended claims are intended to include within their scope such processes, machines, manufacture, compositions of matter, means, methods, or steps.

What is claimed is:

1. An adaptable multi-function bra comprising:

two front members and a back member connecting to both front members by respective side members, and shoulder straps connected to each respective front member, the shoulder straps passing over a user's shoulders to connect to the back;

a adjustment strap attached and aligned substantially horizontally on a lower edge of each side member of the bra, the adjustment strap attached to the side member on one end and having a strap hook at a free end; and

a plurality of loops located on each side member of the bra at different successive positions in line with the lower edge of the bra for engaging the strap hook at the different successive positions of the loops, the straps being tensioned according to the successive position at which the hook engages one of the plurality of the loops.

2. The bra of claim **1** further comprising:

a closure for joining the two front members comprising a vertical zipper and one or more mating hook-and-loop pairs interior to the zipper, wherein at least one hook-loop pair is located approximately between one quarter and three quarters of the length of the zipper, as measured from the zipper top.

3. The bra of claim **2** further comprising:

an interior liner corresponding to the vertical zipper location to keep the zipper, hooks and loops from contacting the user's skin.

4. The bra of claim **1** further comprising a racerback on the rear of the bra, wherein the shoulder straps from the front merge to a single V-shaped strap, the V-shaped strap connecting with the rear horizontal back member of the bra.

5. A method of wearing a multi-function bra comprising:

providing a bra having two front members (left and right) and a back member connecting to each front member by a respective side member (left and right) passing under a user's respective arm;

providing shoulder straps connected to each respective front member, the shoulder straps passing over the user's respective shoulders to connect to the back member, armholes being formed on each respective side by the respective front member, side member, shoulder strap and the back member;

providing a strap attached and aligned substantially horizontally on a lower edge of each side member of the bra,

the strap attached to the side member at one end and having a strap hook at a free end of the strap;

providing a plurality of loops located on each side of the bra at different successive positions in line with the lower edge of the bra for engaging the strap hook at the different successive positions, the strap being tensioned according to the successive position at which the strap hook engages one of the plurality of the loops;

providing a closure for joining the two front members comprising a vertical zipper having two complementary (left and right) components and one or more mating hook-and-loop pairs interior to the zipper, wherein the hooks are attached to a first component of the zipper and the loops are attached to the second complementary component of the zipper, and wherein at least one hook-loop combination is located at approximately between one quarter and three quarters of the length of the zipper, as measured from the zipper upper end;

inserting a user's arms through each of two respective armholes, the armholes formed on each side by the respective side member, back member, front member and shoulder strap connecting the front member to the back member;

hooking at least one hook-loop pair of the front closure;

attaching and closing the complementary components of the zipper;

selecting a first strap aligned on a lower edge of a first side component of the bra under the corresponding arm hole;

connecting the strap hook of the first strap to one of a plurality of loops located on the corresponding side member of the bra for engaging the strap hook at the different successive positions, the strap being tensioned according to the successive positions at which the strap hook engages one of the plurality of the loops; and

selecting a corresponding second strap aligned on a lower edge of a second side member of the bra under the corresponding arm hole; and

connecting the strap hook on the second strap to one of a plurality of loops located on the corresponding side member of the bra for engaging the strap hook at the different successive positions, the strap being tensioned according to the successive position at which the strap hook engages one of the plurality of the loops.

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