

US 20160235130A1

(19) United States

(12) Patent Application Publication

Fanger et al.

(10) **Pub. No.: US 2016/0235130 A1** (43) **Pub. Date: Aug. 18, 2016**

(54) WOMEN'S SLEEPWEAR, LOUNGEWEAR AND ACTIVEWEAR GARMENTS WITH INTEGRAL BREAST SUPPORT

(71) Applicant: Private Island, LLC, Burbank, CA (US)

(72) Inventors: Allyson Brown Fanger, Los Angeles, CA (US); Elizabeth Zox Friedman, Los Angeles, CA (US); Deborah Beth Kaplan, Studio City, CA (US)

(21) Appl. No.: 15/017,739

(22) Filed: Feb. 8, 2016

Related U.S. Application Data

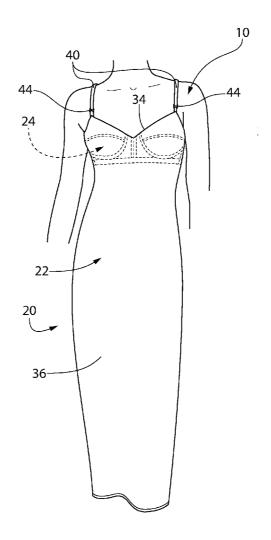
(60) Provisional application No. 62/115,889, filed on Feb. 13, 2015.

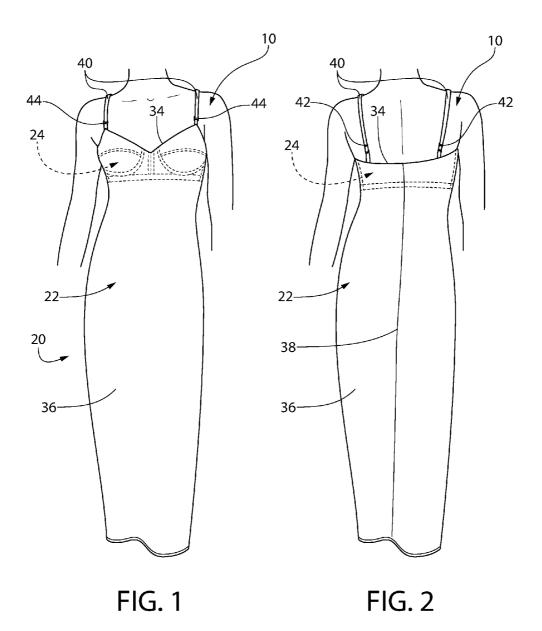
Publication Classification

(51) **Int. Cl.**A41C 3/08 (2006.01)

(57) ABSTRACT

A garment for sleepwear, loungewear, activewear, etc. is disclosed. It includes a fabric shell and a support structure. The support structure includes a pair of cups configured for receipt of a wearer's breasts and a back portion configured to accommodate the wearer's back and includes a first layer, a second layer, a pair of elastic shoulder straps and an elastic band. The first layer is formed of a soft fabric. The second layer is formed of a soft fabric and is located between the first layer and the fabric shell. The first and second layers are secured together by plural stitch lines. The elastic band is secured to the bottom of the support structure to extend about the wearer's torso to provide support for the wearer's breasts. The fabric shell is secured to the support structure and has a portion extending downward to form a skirt section of the garment.





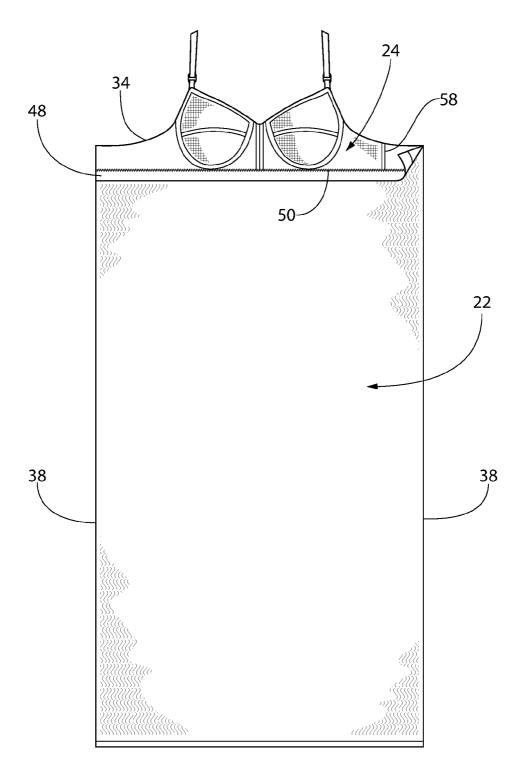
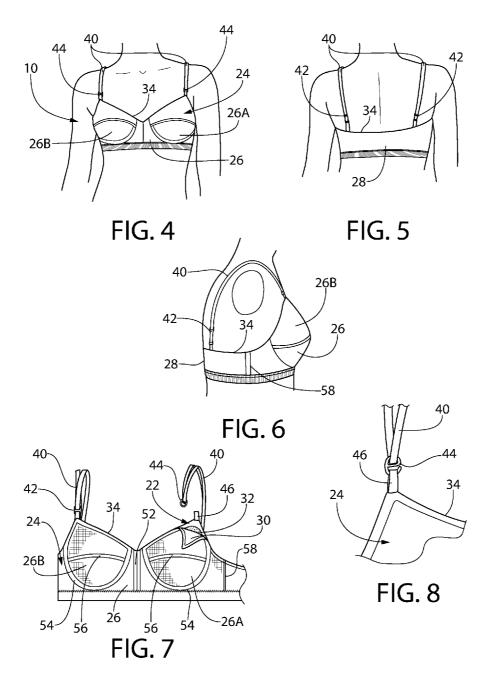


FIG. 3



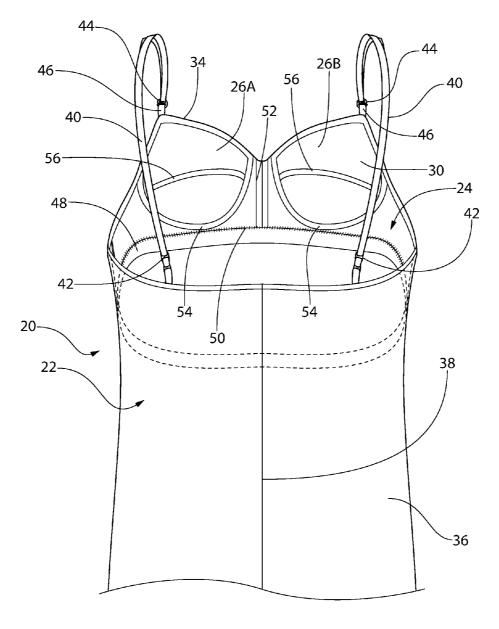


FIG. 9

WOMEN'S SLEEPWEAR, LOUNGEWEAR AND ACTIVEWEAR GARMENTS WITH INTEGRAL BREAST SUPPORT

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This non-provisional utility application claims the benefit under 35 U.S.C. §119(e) of Provisional Application Ser. No. 62/115,889 filed on Feb. 13, 2015 entitled Women's Sleep, Loungewear And Activewear Garments With Integral Breast Support, the entire disclosure of which provisional application is incorporated by reference herein.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not Applicable

INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISK

[0003] Not Applicable

FIELD OF THE INVENTION

[0004] This invention relates to women's garments and particularly to sleepwear, loungewear, and activewear, garments including an integral support system for the breasts.

BACKGROUND OF THE INVENTION

[0005] Many garments for sleepwear, loungewear or activewear are available and have been disclosed in the prior art. Such garments commonly include a simple interior bra in the form of a fabric shelf with a bottom elastic and no other support. Others have built in bras including underwires. The patent literature also includes various patents for sleepwear having built-in bra, such as U.S. Pat. No.: 2,211,549 (Semons); U.S. Pat. No. 2,624,049 (Granne); U.S. Pat. No. 2,896,630 (Adler); U.S. Pat. No. 3,316,915 (Howell); U.S. Pat. No. 3,746,007 (Hand et al.); and U.S. Pat. No. 8,403,724 (Chapin). Such prior art garments, while generally suitable for their intended purposes nevertheless leave much to be desired in the way of comfort, support, safety, simplicity of construction, etc. Thus, there presently exists a need for women's sleep, loungewear and activewear garments that provide the wearer with adequate, comfortable, safe and stabilizing support to the breasts that is healthy, while giving a natural look to the breasts.

[0006] The subject invention addresses that need, while also providing a garment that also enhances the wearer's posture, relieving neck and shoulder strain that often is experienced by women with larger breasts.

SUMMARY OF THE INVENTION

[0007] In accordance with one aspect of this invention a garment, e.g., a nightwear garment, comprising a shell and a support structure is disclosed. The shell is formed of a soft fabric. The support structure has front portion including a pair of cups configured for receipt of a wearer's breasts and a back portion configured to accommodate the wearer's back. The support structure comprises a first layer, a second layer, a pair of shoulder straps and an elastic band. The first layer is formed of a soft fabric. The second layer is formed of a soft foam material. The second layer is located between the first layer and the fabric shell. The first layer and the second layer

are secured together by plural stitch lines. The elastic band is secured to the first and second layers below the cups and configured to extend about the wearer's torso to provide support for the wearer's breasts. The shoulder straps are connected between the front portion of the support structure and the back portion of the support structure. The fabric shell is secured to the support section and has a portion extending downward below the support structure to form a skirt section of the garment.

[0008] In accordance with another aspect of this invention the shell is disposed over the support structure to form an outer layer of the garment and wherein the first layer of the support structure comprises an inner layer of the garment.

[0009] In accordance with one preferred aspect of this invention the support structure includes at least one of a front center stitch line located in the front portion between the cups, a top stitch line across a top portion of each of the cups, a bottom stitch line across a bottom portion of each of the cups, and a pair of side stitch lines located between respective ones of the cups and respective sides of the back portion of the bra section.

[0010] In accordance with one preferred embodiment of this invention the support structure includes a front center stitch line located in the front portion between the cups, a top stitch line across a top portion of each of the cups, a bottom stitch line across a bottom portion of each of the cups, and a pair of side stitch lines located between respective ones of the cups and respective sides of the back portion of the bra section.

[0011] In accordance with another preferred aspect of this invention each of the shoulder straps comprise adjustment rings located adjacent the back portion of the support structure for adjusting the length of the shoulder straps.

[0012] In accordance with still another preferred aspect of this invention the soft fabric shell is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof and the soft fabric first layer of the support structure is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.

BRIEF DESCRIPTION OF THE DRAWING FIGURES

[0013] FIG. 1 is a front elevation view of one exemplary embodiment of a garment constructed in accordance with this invention shown being worn by a woman, with the garment including an outer shell and an inner support structure;

[0014] FIG. 2 is a rear elevation view of the exemplary embodiment shown in FIG. 1;

[0015] FIG. 3 is a plan view of the inside of the garment shown in FIG. 1 laid flat, i.e., before its two lateral side edges are secured together to form the rear seam of the garment;

[0016] FIG. 4 is a front elevation view of the inner support structure of the garment of FIG. 1, with the outer shell not shown in the interest of clearly and showing features of the support structure that cooperate to provide lift, support and separation of the woman's breasts;

[0017] FIG. 5 is a rear elevation view of the support structure shown in FIG. 4;

[0018] FIG. 6 is a side elevation view of the support structure shown in FIG. 4, with the woman's arm not being shown so as not to obscure any portion of the support structure;

[0019] FIG. 7 is an enlarged front elevation view of a portion of the garment shown in FIG. 1 taken from the inside, with portions peeled back to reveal the multi-layer structure thereat:

[0020] FIG. 8 is an enlarged front elevation view of a portion of the garment shown in FIG. 1; and

[0021] FIG. 9 is an enlarged isometric view taken from the rear of the garment shown in FIG. 1 without the wearer being shown in the interest of clarity.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0022] Referring now to the drawings wherein like characters refer to like parts there is shown in FIG. 1 one exemplary embodiment of a garment 20 constructed in accordance with this invention. The garment shown constitutes sleepwear, but that is merely exemplary. Thus, the subject invention can be in the form of loungewear, activewear, etc., in addition to sleepwear. In any case this garment 20 is constructed of a fabric shell 22 and a support structure 24, each to be described in detail later, and which are secured together and configured so that when worn by a woman 10 the garment provides a safe and comfortable way to support a woman's breasts and enhance her sleeping and lounging experience. In particular, as will be seen from the discussion to follow the support structure 24 of the garment is constructed so that there is no binding pressure or flattening of the breast tissue against the chest of the wearer to distort the breasts from their natural form. Moreover, the support structure does not include any underwire, which has characterized the prior art and which frequently applies harmful pressure to the breasts to reduce blood circulation and damage the glandular tissue and supporting (stromal) tissue of the breast. The construction of the garment also aids in maintaining healthy breast tissue and prevents sagging, as commonly experienced by women as they age.

[0023] As best seen in FIGS. 4, 5 and 7, the support structure 24 basically comprises a two layer member constructed somewhat like a brassiere in that it includes a front portion 26 having a pair of cups 26A and 26B and a rear portion 28. The two layers making up the support section comprise a first layer 30 (FIG. 7) which is formed of a soft fabric, e.g., cotton, Lycra, polyester, silk, rayon and combinations thereof and a second layer 32 which is formed of a sheet of soft foam. The layers 30 and 32 are coextensive in size and shape. The first layer 30 can be formed of other fabrics than the aforementioned fabrics, if desired. In any case, the two layers 30 and 32 of the support structure are secured together by plural stitch lines or seams, to be described shortly, which configure and shape the two layers into the appropriate contour to accommodate the wearer to provide comfortable and effective support and separation for her breasts, even if large and pendu-

[0024] As best seen in FIGS. 1 and 2 the fabric shell 22 of the disclosed embodiment 20 is in the form of a nightgown and can be made up of any suitable soft fabric, e.g., cotton, Lycra, polyester, silk, rayon and combinations thereof. Like the layer 30, it can be formed of other fabrics, if desired. In the preferred embodiment shown the support section 24 is secured on the interior of the fabric shell 22 by a stitch line (not shown) extending along the top peripheral edge 34 of the shell and support structure, whereupon the shell 22 hangs down or depends from the support structure 24, with the portion of the shell located below the support structure form-

ing a skirt portion 36 of the garment. The fabric making up the shell, as shown in FIG. 3, includes a pair of side edges 38 which are joined, e.g., sewn, together to form the back seam of the shell.

[0025] The garment 20 also includes a pair of shoulder straps 40 secured to the top of the garment. The straps 40 are conventional and preferably formed of any suitable elastic material. To that end, each strap is in the form of a loop which is connected to conventional adjustable ring 42 (sometimes referred to as a "lingerie strap slide and ring" and which may be nylon coated or plastic) so that the length of the loop can be adjusted. This feature enables the wearer to adjust the straps as desired to accommodate her breast size, shape and placement. As best seen in FIG. 8, each loop also includes a hook 44 (sometimes referred to as a "bra strap open hook" which may be nylon coated or plastic), which is arranged to be releasably connected to a short strap 48 at the top portion of each cup of the support structure to enable the straps 40 to be connected and disconnected from the front of the support structure.

[0026] As best seen in FIGS. 3, 7 and 9 the lower edge of the support section is in the form of an elastic band 48. That band can be formed of any suitable material. The band is secured to the support section by a stitch line 50 and is located below the cups 26A and 26B to provide support for the wearer's breasts. In accordance with one exemplary embodiment of this invention the band is approximately 1.5 inches wide and has a sueded or plush inner surface since that surface will engage the skin of the wearer.

[0027] As mentioned above the support structure includes plural stitch lines. Those lines provide the support structure with its desired shape and contour and together with the foam layer 32 cooperate to provide the desired support and separation for the wearer's breasts. To that end, as best seen in FIGS. 7 and 9 the support structure includes a linear double stitch line seam 52 extending through the first fabric layer 30and the foam layer 32 at the center or middle of the front portion of the support structure between the cups. This double stitch line seam is configured for providing separation and shape definition. Each cup includes an arcuate shaped double stitch line 54 extending through the first fabric layer 30 and the foam layer 32 at the bottom of the cup for providing natural lift for the breasts, and eliminating the need for any underwire (particularly in view of the lift provided by the elastic band 48). Each cup also includes an arcuate shaped double stitch line 56 extending through the first fabric layer 30 and the foam layer 32 at approximately the mid-height of the cup to provide a further element of shaping the breast in a natural and flattering presentation. Lastly, as best seen in FIGS. 3, 6 and 8 the support structure includes a pair of double stitch lines 58 extending through the first fabric layer 30 and the foam layer 32 between each cup and a respective end portion of the back portion 28 of the support structure. These double stitch lines provide additional shaping and lift. [0028] The combination of the cup stitching and side stitching provide shape and lift and separation between the breasts, allowing the support structure to support and uplift the bust

[0028] The combination of the cup stitching and side stitching provide shape and lift and separation between the breasts, allowing the support structure to support and uplift the bust line in a natural and comfortable way, without the need for an underwire. The planar (non-pre-molded) foam layer 32 between the shell 22 and inner fabric layer 30, as shaped by the aforementioned stitch lines also provides an additional support element and natural structure and shape to the cups of the garment. This arrangement is unique and significantly different than the prior art, since most prior art built-in bra

garments are comprised from a pre-molded piece of padding that cause the bust line to appear unnatural, as the breast tissue must fit exactly into the molded cup which is limiting for most women, size-wise. Prior art shelf bras typically cause the bust line to appear as one unflattering tube shape.

[0029] It should be pointed out at this juncture that while the exemplary garment 20 as described above is in the form of nightwear or sleepwear, that embodiment is merely exemplary of various forms the subject invention can take. In this regard, since the garments constructed in accordance with this invention make use of a multi-seamed multilayer support structure including a foam layer that provides the required comfortable support it can be incorporated into any type of garment. That garment can be sleepwear, loungewear or activewear, and can be made by merely attaching the support structure to any type of fabric shell, be it a nightgown, t-shirt, tank top or shirt, such that the garment covers and supports the breasts and the upper back. In fact, while the exemplary disclosed embodiment makes use of the support structure 24 attached on the inside of the shell 22, it is contemplated that the support structure can be attached on the outside of the shell, if desired. In any case the garments of this invention allow the wearer to comfortably sleep and lounge while providing healthy and substantial support, stabilizing the bust. In addition, the support structure of the garments of this invention also enhance the wearer's posture, relieving neck and shoulder strain that often is experienced by women with larger breasts.

[0030] Without further elaboration the foregoing will so fully illustrate our invention that others may, by applying current or future knowledge, adopt the same for use under various conditions of service.

We claim:

- 1. A garment comprising a shell and a support structure, said shell being formed of a soft fabric, said support structure having front portion including a pair of cups configured for receipt of a wearer's breasts and a back portion configured to accommodate the wearer's back, said support structure comprising a first layer, a second layer, a pair of shoulder straps and an elastic band, said first layer being formed of a soft fabric, said second layer being formed of a soft foam material, said second layer being located between said first layer and said fabric shell, said first layer and said second layer being secured together by plural stitch lines, said elastic band being secured to said first and second layers below said cups and configured to extend about the wearer's torso to provide support for the wearer's breasts, said shoulder straps being connected between said front portion of said support structure and said back portion of said support structure, said fabric shell being secured to said support structure and having a portion extending downward below said support structure to form a skirt section of said garment.
- 2. The garment of claim 1 wherein said shell is disposed over said support structure to form an outer layer of said garment and wherein said first layer of said support structure comprises an inner layer of said garment.
- 3. The garment of claim 1 wherein said support structure includes at least one of a front center stitch line located in said front portion between said cups, a top stitch line across a top portion of each of said cups, a bottom stitch line across a bottom portion of each of said cups, and a pair of side stitch lines located between respective ones of said cups and respective sides of said back portion of said bra section.

- 4. The garment of claim 2 wherein said support structure includes at least one of a front center stitch line located in said front portion between said cups, a top stitch line across a top portion of each of said cups, a bottom stitch line across a bottom portion of each of said cups, and a pair of side stitch lines located between respective ones of said cups and respective sides of said back portion of said bra section.
- 5. The garment of claim 1 wherein said soft fabric shell is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.
- **6**. The garment of claim **1** wherein said soft fabric first layer of said support structure is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.
- 7. The garment of claim 5 wherein said soft fabric first layer of said support structure is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof
- 8. The garment of claim 7 wherein said shell is disposed over said support structure to form an outer layer of said garment and wherein said first layer of said support structure comprises an inner layer of said garment.
- The garment of claim 1 wherein said shoulder straps are elastic.
- 10. The garment of claim 4 wherein said soft fabric shell is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.
- 11. The garment of claim 4 wherein said soft fabric first layer of said support structure is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.
- 12. The garment of claim 10 wherein said soft fabric first layer of said support structure is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.
- 13. The garment of claim 12 wherein said shell is disposed over said support structure to form an outer layer of said garment and wherein said first layer of said support structure comprises an inner layer of said garment.
- 14. The garment of claim 2 wherein said shoulder straps are elastic.
- 15. The garment of claim 1 wherein said shoulder straps comprise adjustment rings located for adjusting the length of said shoulder straps.
- 16. The garment of claim 14 wherein said shoulder straps comprise adjustment rings located for adjusting the length of said shoulder straps.
- 17. The garment of claim 2 wherein said support structure is secured within said shell by a stitch line.
- 18. The garment of claim 17 wherein said plural stitch lines of said support structure comprise a front center stitch line located in said front portion of said support structure between said cups, a top stitch line across a top portion of each of said cups, a bottom stitch line across a bottom portion of each of said cups, and a pair of side stitch lines located on respective sides of said support structure adjacent respective ones of said cups.
- 19. The garment of claim 18 wherein said soft fabric shell is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.

20. The garment of claim 18 wherein said soft fabric first layer of said support structure is selected from the group consisting of cotton, Lycra, polyester, silk, rayon and combinations thereof.

* * * * *