Articles of apparel for providing improved supportive features and slimming effects to the body are provided, the articles of apparel including supportive reinforced fabric placed in specific regions of the apparel. The supportive reinforced fabric may be ‘hidden’ (e.g., by being included in an inner liner of the apparel), or may be included directly in an outer “exterior” layer of the apparel itself. The supportive reinforced fabric includes a reinforced mesh-like fabric which is stretchable and breathable, yet has highly resilient and supportive properties. Exemplary materials from which such reinforced lining may be made include spandex, Lycra and any fiber composites incorporating elasticized and/or resilient properties.
SUPPORTIVE AND SLIMMING APPAREL

CROSS-REFERENCE TO RELATED APPLICATIONS


BACKGROUND

[0002] 1. Technical Field

[0003] The present invention relates to apparel for providing supportive and slimming effects to enhance body shape and form and to improve posture and aesthetic appearance of the wearer.

[0004] 2. Description of Related Art

[0005] Synthetic elastic fibers such as spandex and Lycra have frequently been incorporated into clothing to provide greater stretch and to improve comfort. In particular, fitness apparel and/or sportswear commonly use elasticiized fabrics for providing an improved range of motion to the wearer.

[0006] Elasticiized clothing is typically form-fitting and hugs the curves of the body. However, although elasticiized clothing allows superior freedom of movement, it can cause an unflattering appearance, due to its tight-fitting qualities. Furthermore, due to its elastic nature, it can lack support in needed areas.

[0007] Accordingly, apparel that imparts an unimpeded range of motion while providing maximum supportive, slimming and toning effects to the human figure, is highly desirable.

SUMMARY OF THE INVENTION

[0008] The present invention relates to apparel, such as tank tops, sports bras, shirts and pants, for providing supportive and slimming effects to enhance body shape and form and to improve posture and aesthetic appearance of the wearer. Advantageously, apparel according to the present invention provides effective and flattering slimming and shaping effects while incorporating features desirable in clothing, such as flexibility, wicking action, breathability and durability.

[0009] According to one aspect of the present invention, an article of apparel is provided comprising a tank top having a first seam and a second seam defining a torso region, and an inner liner in at least the torso region, wherein at least said inner liner in said torso region is comprised of a supportive reinforced fabric.

[0010] According to another aspect of the present invention, an article of apparel is provided comprising a sports bra having an inner liner including a shelf bra having a center panel comprised of a supportive reinforced fabric, at least two straps for joining a front and back of the sports bra, and a back panel insert oriented in a substantially central portion of the back of the sports bra.

[0011] According to yet another aspect of the present invention, an article of apparel is provided comprising pants having two pants legs and including a waistband having a lower edge and an inner liner, said inner liner being comprised of a supportive reinforced fabric.

[0012] According to yet another aspect of the present invention, an article of apparel is provided comprising a shirt having a torso seam extending around the shirt above the abdomen area and attaching an inner torso layer to an outer torso layer, and a bottom edge, wherein the outer torso layer includes at least two torso side panels comprised of a supportive reinforced fabric.

[0013] According to yet another aspect of the present invention, an article of apparel is provided comprising leggings having two legs and including a waistband having a lower edge and an inner liner, said inner liner being comprised of a supportive reinforced fabric.

[0014] These and other aspects, features, and advantages of the present invention will be described or become apparent from the following detailed description of the preferred embodiments, which is to be read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] FIG. 1A is a front view of a supportive tank top according to one embodiment of the present invention;

[0016] FIG. 1B is a back view of the embodiment of FIG. 1A;

[0017] FIG. 1C is a front view of the inside construction of the embodiment of FIG. 1A;

[0018] FIG. 2A is a front view of a supportive tank top according to another embodiment of the present invention;

[0019] FIG. 2B is a back view of the embodiment of FIG. 2A;

[0020] FIG. 2C is a front view of the inside construction of the embodiment of FIG. 2A;

[0021] FIG. 3A is a front view of a supportive tank top according to another embodiment of the present invention;

[0022] FIG. 3B is a back view of the embodiment of FIG. 3A;

[0023] FIG. 3C is a front view of the inside construction of the embodiment of FIG. 3A;

[0024] FIG. 4A depicts a front view of a sports bra according to one embodiment of the present invention;

[0025] FIG. 4B is a back view of the embodiment of FIG. 4A;

[0026] FIG. 4C is a front view of the inside construction of the embodiment of FIG. 4A;

[0027] FIG. 5A is a front view of a pair of supportive full length pants according to one embodiment of the present invention;

[0028] FIG. 5B is a back view of the embodiment of FIG. 5A;

[0029] FIG. 5C is a front view of the inside construction of the embodiment of FIG. 5A;

[0030] FIG. 5D is a front view of a pair of supportive half-length pants according to one embodiment of the present invention;

[0031] FIG. 6A depicts a front view of a pair of leggings according to one embodiment of the present invention;

[0032] FIG. 6B is a back view of the embodiment of FIG. 6A;

[0033] FIG. 6C is a back view of the inside construction of the embodiment of FIG. 6A;

[0034] FIG. 7A is a front view of a pair of leggings according to another embodiment of the present invention;

[0035] FIG. 7B is a back view of the embodiment of FIG. 7A;

[0036] FIG. 7C is a side view of the embodiment of FIG. 7A;

[0037] FIG. 7D is a side view of the inside construction of the embodiment of FIG. 7A;
FIG. 8A is a front view of a shirt according to one embodiment of the present invention; FIG. 8B is a rear view of the shirt of FIG. 8A; FIG. 8C is a side view of the embodiment of FIG. 8A; and FIG. 8D is a front view of the inside construction of the embodiment of FIG. 8A.

FIG. 9A is a front view of a pair of leggings according to another embodiment of the present invention; FIG. 9B is a back view of the embodiment of FIG. 9A; and FIG. 9C is a side view of the embodiment of FIG. 9A.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

The apparel pieces described herein may be comprised of any type of synthetic/natural fabric and/or synthetic/natural fabric blends which impart breathability, flexibility and durability, e.g., Coolmax®, Lycra®, Elastatight®, fabrics, of various nylon/synthetic fiber and spandex blends.

Apparel according to the present invention is advantageously constructed with areas of supportive reinforced fabric at specific locations to provide shaping and slimming features. As used herein, the term “supportive reinforced fabric” preferably comprises, for example, a reinforced mesh-like fabric which is stretchable and breathable, yet has highly resilient and supportive properties. Exemplary materials from which such reinforced lining may be made include spandex, Lycra® and any fiber composites incorporating elasticized and/or resilient properties. The supportive reinforced fabric may be “hidden” (e.g., by being included in an inner liner of the apparel), or may be included directly in an outer “exterior” layer of the apparel itself.

Referring now to the Figures, FIGS. 1A, 1B and 1C show front, back and inside views, respectively, of a tank top 100 with supportive uplift and form-flattering features according to an aspect of one preferred embodiment of the present invention.

Advantageously, the tank top 100 is constructed with areas of supportive reinforced fabric at specific locations to provide shaping and slimming features.

For example, tank top 100 includes a bodice 101 lined on the inside (see FIG. 1C) with the reinforced supportive fabric 104 for providing waist cinching and slimming effects to the entire torso area of the wearer. In one exemplary embodiment, the supportive reinforced fabric 104 covers the entire torso region 101 of the tank 100, e.g., extending from a first seam 106 (which lies, e.g., right below the bustline), to a bottom edge 108 of the tank top 100, and covering both front and back sides of the tank top 100. Alternate embodiments may be contemplated in which the supportive reinforced fabric covers different areas of the torso region 101.

Preferably, the reinforced supportive fabric is cut on the cross-grain and sewn together with the outer layer fabric. In exemplary implementations, the outer layer fabric and self body fabric are made of at least spandex and/or lycra. Examples of different fabric types include, but are not limited to cotton/lycra, poly spandex, poly nylon spandex, and nylon spandex. Advantageously, the reinforced supportive fabric controls the lower torso by providing stability and support while holding the abdomen of the wearer in place.

In the exemplary implementations, the tank top 100 further includes a shelf bra 107 as an “inside layer” having a wide under band 119 for providing an interior support system imparting uplift and stability as well as comfort. The shelf bra 107 together with the tank top 100 may comprise two layers, and include a bra opening 109 on either side for inserting removable pads 111. The removable pads 111 may comprise molded bra pads (constructed of foam, silicone, etc.) which can be inserted within the shelf bra 107 for providing additional coverage, further support, and a more dramatic uplift. The shelf bra 107 is preferably compression fit for maximum stability and support and is preferably comprised of any material which is elastic yet boosts breathability and wicking action (e.g., Coolmax® fabric) to keep the body cool and dry.

Shining 113 may be provided on the inside front of the shelf bra 107 for providing extra room for shape and fuller coverage. It allows elastic to extend to its fullest extent while keeping the shape of the bra.

In the exemplary implementations, the tank top 100 includes a back panel 103 and a “hidden” center panel 105, both preferably comprised of the supportive reinforced fabric described above. The back panel 103 preferably comprises a “racerback” strap arrangement, which is comprised of the supportive reinforced fabric, advantageously providing support, flexibility in movement and superior breathability.

The center panel 105 preferably comprises a supportive reinforced fabric in the form of a strap placed on the inside of the tank top 100, e.g., substantially in a center of the shelf bra 107, which advantageously assists in firmly holding the shelf bra 107 together, providing support, allowing breathability, and flexibility of movement.

Empire waist styling may be used to give slimming effects around the rib cage and waist area, while also providing uplifting effects to the bust. The tank top 100 preferably includes at least two curved “princess” seam lines 102 running longitudinally along the front of the tank top 100, intersecting the first seam 106, and the bodice 101 to accentuate the slimming effect and the hourglass shape. According to one embodiment (as shown in FIG. 1A), each seam 102 comprises a mirror-image of the other and follows and accentuates the curvature of the torso: for example, being wider at the bust, curving inwards at the waist, and flaring out again at the hips.

A side opening 115 which may comprise a zipper or other fastening means may be included for ease of putting on/taking off the tank top 100.

For example, FIGS. 2A, 2B and 2C depict front, back, and front “inside construction” views, respectively, of a tank top 200 according to another embodiment of the present invention. Preferably, tank 200 includes shirring 205 at a center portion of the bust area to accentuate the cleavage area while adding extra flare and style. The inside of the tank preferably includes a shelf bra 207. An empire waist band 119 provides slimming around the rib cage and waist area while providing uplifting effects to the bust.

The inside of the bodice 201 is preferably comprised of the supportive reinforced fabric 204 around the torso for providing improved waist cinching effects. In one exemplary embodiment, the supportive reinforced fabric 204 covers the entire torso region 201 of the tank 200, e.g., extending from a first seam 203 to a bottom edge 208 of the tank top 200 and covering both front and back sides of the tank top 200. Alternate embodiments may be contemplated in which the supportive reinforced fabric covers different areas of the torso region 201.
FIGS. 3A, 3B and 3C show front, back and front ‘inside construction’ views, respectively, of a tank top 300 according to yet another embodiment of the present invention. The tank top 300 preferably includes a shelf bra 307 and a torso panel 303 set between horizontal seams 305, 306 situated around the bodice area which accentuates slimming effects and an hourglass shape.

In the exemplary implementations, a first horizontal seam 305 runs laterally across the tank top 300 (e.g., right below the bustline), while a second horizontal seam 306 runs laterally across the tank top proximate to a bottom edge 308 of the tank top 300. A bottom panel 309 is provided between the second seam 306 and the bottom edge 308 of the tank top 300.

The torso panel 303 is preferably lined on the inside with a supportive reinforced fabric 304 (e.g., preferably cut on the cross grain) to control and shape the lower torso by providing stability while holding the abdominals of the wearer in place. In one exemplary embodiment, the supportive reinforced fabric 304 covers the entire torso region 501 of the tank 300, e.g., extending from a first seam 305 to a second seam 306 of the tank top 300, and covering both front and back sides of the tank top 300. Alternate embodiments may be contemplated in which the supportive reinforced fabric covers different areas of the torso region 301.

As depicted, e.g., in FIGS. 3A-3C the second seam 306 is proximate to and runs substantially parallel with the bottom edge 308.

It is noted that both the shelf bra 307 and 307 in FIGS. 2C and 3C may include a wide under band 119 for providing support and uplift, as well as bra openings 109 for insertion of removable pads 111 therein. Further, both bands 200 and 300 may include a side opening 115 (e.g., a zipper) for facilitating putting on and taking off the tank.

FIGS. 4A, 4B and 4C depict front, back and front ‘inside construction’ views, respectively, of a sports bra 400 according to an aspect of the present invention. Sports bra 400 may be provided in a ‘racer back’ style and includes adjustable straps 401 for connecting the front and the back of the sports bra 400, and customizing support, uplift and comfort. Preferably, a back panel insert 403 is provided comprised of a supportive reinforced fabric for improving support, flexibility of movement, and breathability. The back panel insert 403 is preferably oriented in a substantially center portion of the back side of the bra 400, e.g., at the area in which the straps 401 adjoin.

The sports bra 400 is preferably lined with an interior shelf bra 407 which further preferably includes at least a center panel 409 comprised of a supportive reinforced fabric which advantageously firmly holds the shelf bra 407 together, provides support, allows breathability, and flexibility of movement. The center panel 409 comprises a supportive reinforced fabric in the form of a strip placed substantially in a center of the shelf bra 107.

In the exemplary implementations, the shelf bra 407 includes bra openings 109 for receiving removable pads 111 for adding extra uplift and additional coverage support. Shaping 405 may be provided on the inside of the front side of the bra for providing extra room for shape and fuller coverage. It allows the elastic of the fabric to extend to its maximum while keeping the shape of the bra. A wide under band 119 is provided for adding support, uplift, and stability while holding everything in place.

FIGS. 5A, 5B and 5C depict front, back and front ‘inside construction’ views of ‘tummy control’ pants 500 according to one embodiment of the present invention. FIG. 5D depicts a front view of a ‘tummy control’ pants 502 according to another embodiment of the present invention, with section “A” depicting an enlarged view of an inside construction of the waistband of the pants 502. Namely, pants 500 depict a full length style, while pants 502 shows a three-quarter length style. All pants 500, 502, 600 and 700 shown herein include two pants legs. The term ‘pants’ may include any type of pants, e.g., such as leggings, tights, etc.

In the exemplary implementations, both pants 500 and 502 include a waistband 501 which has an inner liner (the inner liner being in contact with the user’s body when the apparel is worn) comprised of a supportive reinforced fabric 503. The wide shape waistband 501 advantageously eliminates excess bulging, provides core stability and promotes body awareness, while providing a smooth look all around. The lining 503 of the waistband 501 is comprised of the supportive reinforced fabric to provide abdominal compression while enhancing the posture of the wearer.

FIGS. 6A, 6B and 6C provide front, back and back ‘inside construction’ views, respectively, of a ‘rear boosting and tummy control’ pants 600 according to an aspect of an exemplary embodiment of the present invention. Pants 600 includes a wide waistband 501 preferably including an inside lining 503 comprising of the supportive reinforced fabric as described above.

In the exemplary implementations, the pants 600 include a contoured rear seam 603 provided, e.g., in a curved “U-shape” to give a natural-looking boost to the shape of the rear while providing enhancement, lift and support. The rear curved seam 603 is preferably situated in the ‘buttocks region’ of the pants (the back side of the pants which contacts the user’s buttocks), e.g., with each end beginning at a lower edge of the waistband 501. A length of the seam 603 curves in U-shaped fashion around each side of the buttocks region.

Further, a back yoke 601 is preferably provided in the rear (‘buttocks region’) of the pants 600 to accentuate the shape of the backside (namely, the gluteus maximus muscles of the wearer). The back yoke 601 may comprise of a strip of fabric bound at the top by the waistband 501, extending between each end of the curved seam 603, and bound at the bottom by a yoke seam 605. The yoke seam 605 preferably intersects a center seam 607, and may be at an angle, such that the back yoke 601 is slightly wider at a center portion while tapering to narrower ends (e.g., as shown in FIG. 6B). That is, in one embodiment, the back yoke 601 includes a center portion (substantially proximate to the center seam 607), and two end portions, with the center portion is wider than the two end portions.

Preferably, the back yoke 601 includes an inner lining 503 comprised of a supportive reinforced fabric to impart supportive and shaping effects, and accentuate the user’s curves.

FIGS. 7A-7D provide front, back, side and side ‘interior construction’ views, respectively, of ‘thigh slenderizer and tummy control’ pants 700 according to another embodiment of the present invention. Pants 700 includes the wide waistband 501 preferably lined on the inside with the supportive reinforced fabric 503. A back yoke 601 is provided in the rear of the pants 700, preferably lined on the inside with supportive reinforced fabric 503 for further accentuating the user’s shape and to provide support. In one embodiment (e.g., as shown in FIGS. 7B and 7D), the back yoke 601 is bound at the top by the bottom edge of the waistband 501, extends to...
each side panel 701 (described below), and is bound at the bottom by the yoke seam 605 (as described above).

[0074] In the exemplary implementations, a side panel 701 is provided running longitudinally along the outer side of each pant leg. The side panel 701 is preferably lined on the interior side with (i.e., includes a lining comprised of) the supportive reinforced fabric 703 to improve compression of the thigh area and provide a slenderized, toned look.

[0075] Pants 700 preferably includes a plurality of pant leg seams 705, 707 and 709 which advantageously flatten the shape of the legs and provide slimming and toning effects. Namely, the side panel 701 is bound on the top by the lower edge of the waistband 501, on either side by side seams 705, and bounded at the bottom by a knee seam 707. There are preferably at least two knee seams; each knee seam 707 has one end beginning at an inseam of the pants (seam of the inner leg) proximate to the knee area of each pant leg, and slants downwards in a substantially straight line until it meets with the calf seam 709. There are preferably at least two calf seams; each calf seam 709 also has one end beginning at an inseam of the pant near the knee area of each pant leg, and curves around the back of the leg and then downwards to the end of each pant leg.

[0076] The arrangement of seams 705, 707 and 709 advantageously enhance the curves of the quadriceps and hamstring muscles of the wearer, thus providing a visual elongating and toning effect to the legs. Furthermore, advantageously, the wide waistband 501 and back yoke 601 lined with the reinforced fabric 503, together with the side panels 701 lined with reinforced fabric 703 provides abdominal tightening and thigh slimming effects to the user.

[0077] It is noted that all the pants 500, 502, 600 and 700 shown herein preferably may include a gusset lined with any breathable fabric having wicking action to keep the body cool and dry.

[0078] FIGS. 8A, 8B, 8C and 8D are front, back, side and front ‘inside construction’ views, respectively, of a shirt 800 according to one embodiment of the present invention. The shirt 800 includes a torso seam 803 extending around the shirt below the abdomen area, and attaching an inner torso layer 807 to the outer torso layer 802.

[0079] A pair of torso side panels 801 running along each side of the shirt 800 is advantageously provided for shape enhancement and slimming effects to the waistline of the user, and each is preferably comprised of the supportive reinforced fabric as heretofore described. Each torso side panel 801 comprises a graduated ‘S-shaped’ strip of fabric running from the torso seam 803 to a bottom edge 808 of the shirt preferably on the shirt’s front side (e.g., as shown in FIGS. 8A-8C). Each side panel 801 is defined at a top end by a first seam 805 which preferably comprises a curved seam running from a neckline of the shirt on the shirt’s back side, intersecting the torso seam 803 in the back side of the shirt, and continuing to the bottom edge 808 of the shirt on the shirt’s front side.

[0080] In the exemplary implementations, a bottom end of each side panel 801 is defined by a second seam 806 which comprises a curved seam running from the torso seam 803 in the back side of the shirt, to the bottom edge 808 of the shirt on the front side (e.g., substantially meeting the second seam 805 thereon).

[0081] Advantageously, the seams 803, 805, 806 in conjunction with the torso side panels 801 enhance the curves of the torso and the waist, thus providing a slimming effect.

[0082] FIGS. 9A, 9B and 9C are front, back and front ‘inside construction’ views, respectively, of a pair of pants, namely leggings 900 according to another embodiment of the present invention. Leggings 900 include a waistband 901 preferably lined on the inside (the side in contact with the user’s body when the apparel is worn) with a supportive reinforced fabric 903. The wide shape waistband advantageously eliminates excess bulging, provides core stability and promotes body awareness, while providing a smooth look all around. The lining 903 of the waistband 901 is comprised of the supportive reinforced fabric to provide abdominal compression while enhancing the posture of the wearer.

[0083] Although illustrative embodiments of the present invention have been described herein with reference to the accompanying drawings, it is to be understood that the present invention is not limited to those precise embodiments, and that various other changes and modifications may be affected therein by one skilled in the art without departing from the scope or spirit of the present invention. All such changes and modifications are intended to be included within the scope of the invention as defined by the appended claims.

What is claimed is:

1. An article of apparel comprising:
a tank top having
a first seam and a second seam defining a torso region;
and
an inner liner in at least the torso region, wherein at least said inner liner in said torso region is comprised of a supportive reinforced fabric.

2. The article of claim 1, wherein the supportive reinforced fabric comprises a reinforced mesh-like fabric having resilient and breathable properties.

3. The article of claim 1, wherein said first seam is provided right below the bustline, and said second seam comprises at least one of a bottom edge of the tank top or a seam above and proximate to the bottom edge of the tank top.

4. The article of claim 1, wherein said inner liner further comprises a shelf bra having at least a center panel comprising a supportive reinforced fabric in the form of a strip placed substantially in a center of the shelf bra.

5. The article of claim 1, wherein the tank top includes a back panel comprised of the supportive reinforced fabric.

6. An article of apparel comprising:
a sports bra having
an inner liner including a shelf bra having a center panel comprised of a supportive reinforced fabric;
at least two straps for joining a front and back of the sports bra; and
a back panel insert oriented in a substantially center portion of the back of the sports bra.

7. The article of claim 6, wherein the back panel insert is located at the back of the sports bra where the at least two straps adjoin.

8. An article of apparel comprising:
parts having two pants legs and including a waistband having a lower edge and an inner liner, said inner liner being comprised of a supportive reinforced fabric.

9. The article of claim 8, further comprising a buttocks region including a rear seam having two ends, each end of the rear seam beginning at the lower edge of the waistband and having a length curving around the buttocks region.

10. The article of claim 9, wherein the buttocks region further comprises a back yoke including an inner lining comprised of a supportive reinforced fabric, said back yoke com-
prising an area bound at the top by the lower edge of the waistband, extending between each end of the curved seam, and bound at the bottom by a yoke seam.

11. The article of claim 10, wherein the back yoke includes a center portion and two end portions, wherein the center portion is wider than said two end portions.

12. The article of claim 8, further comprising at least one side panel running longitudinally along an outer side of each pants leg, each side panel including a lining comprised of the supportive reinforced fabric.

13. The article of claim 12, wherein each side panel is bounded on a top side by the lower edge of the waistband, on either lateral side by a side seam, and bounded at a bottom side by a knee seam.

14. The article of claim 13, wherein each knee seam has one end beginning at an inseam of the pants near a knee area of each pants leg, and slants downwards in a substantially straight line to meet with a calf seam.

15. The article of claim 14, wherein each calf seam has one end beginning at an inseam of the pants near the knee area of each pants leg, and curves around the back of the pants leg and downwards to the end of the pants leg.

16. The article of claim 12, further including a back yoke including an inner lining comprised of a supportive reinforced fabric, said back yoke comprising an area bound at the top by the lower edge of the waistband, extending between each of said two side panels, and bound at the bottom by a yoke seam.

17. An article of apparel comprising:
   a. a shirt having
   a. a torso seam extending around the shirt above the abdomen area and attaching an inner torso layer to an outer torso layer; and
   b. a bottom edge;
   wherein the outer torso layer includes at least two torso side panels comprised of a supportive reinforced fabric.

18. The article of claim 17, wherein each torso side panel comprises a graduated 'S-shaped' strip running from the torso seam to the bottom edge of the shirt on a front side of the shirt.

19. The article of claim 17, wherein each torso side panel is defined at a top end by a first seam, and defined at a bottom end by a second seam.

20. The article of claim 19, wherein the first seam comprises a curved seam running from a neckline of the back side of the shirt, intersecting the torso seam in the back side of the shirt, and continuing to the bottom edge of a front side of the shirt, and the second seam comprises a curved seam running from the torso seam in the back side of the shirt, to the bottom edge of the front side of the shirt.

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