

[54] **MATERNITY PANTY HOSE GARMENT AND METHOD**

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[72] Inventor: **John R. Smith**, Burlington, N.C.

[73] Assignee: **Alamance Industries, Inc.**, Burlington, N.C.

Primary Examiner—H. Hampton Hunter
Attorney—Parrott, Bell, Seltzer, Park & Gibson

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[21] Appl. No.: **88,655**

[57] **ABSTRACT**

[52] U.S. Cl.2/224 R

[51] Int. Cl.A41b 9/00, A41b 11/00

[58] Field of Search ..2/224 R, 224 A, 227, 237, 221, 2/78 C, 225, 226, 243; 66/177

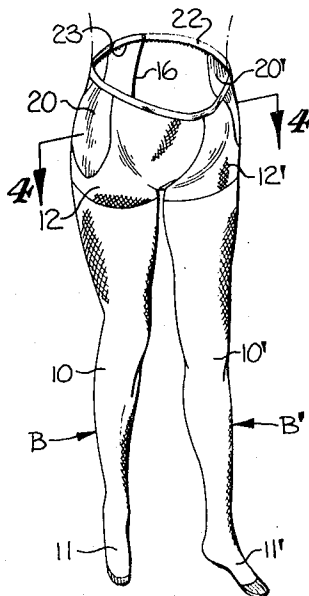
This garment is formed of a pair of elongate stocking blanks which are each slit in a walewise direction and downwardly from the upper ends and along the inner and outer side portions. The edges of the inner slits are connected together to form the crotch area. Substantially U-shaped elastic gusset panels are connected in the outer slits at opposite sides of the garment to provide substantial expansion and support in the panty area without unduly constricting the abdomen of the wearer as it increases in size during pregnancy.

[56] **References Cited**

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6 Claims, 4 Drawing Figures



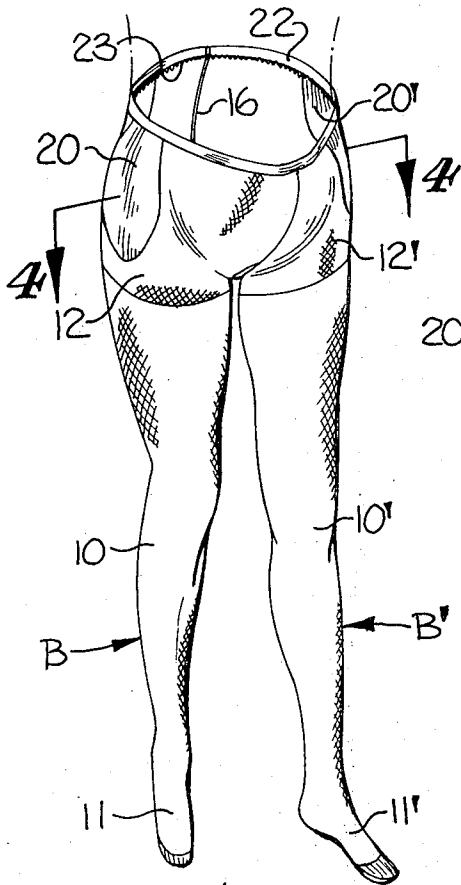


FIG-1

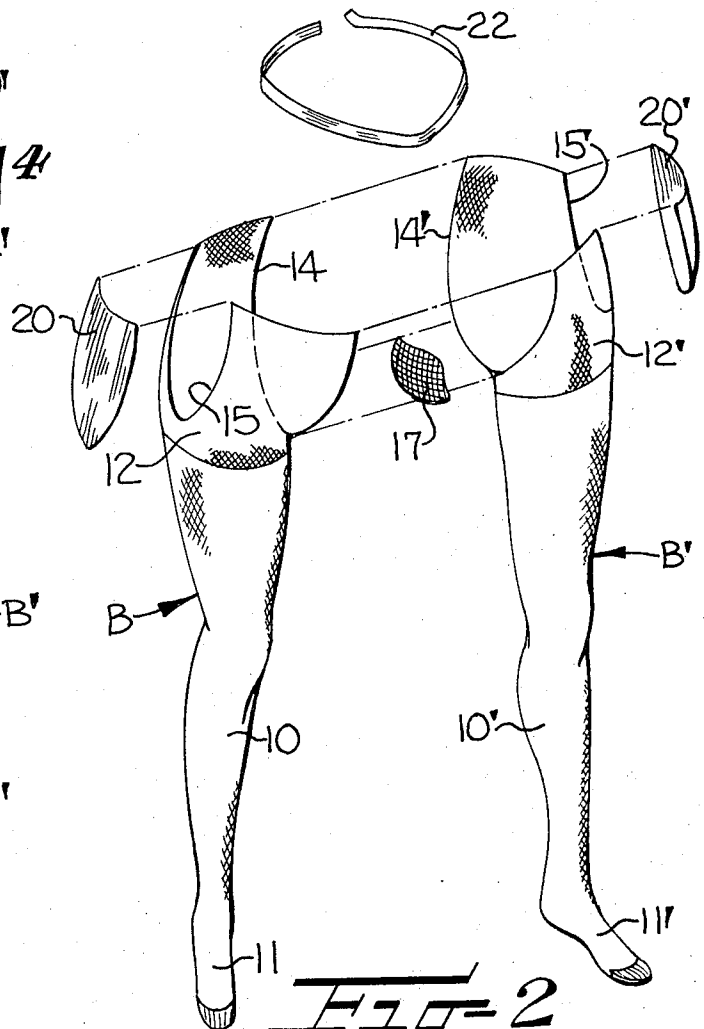


FIG-2

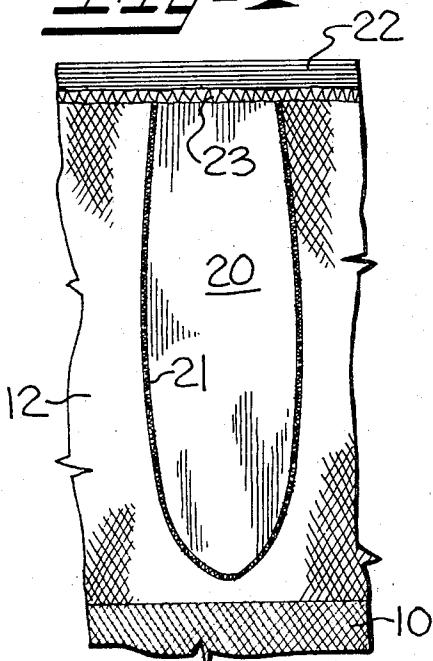


FIG-3

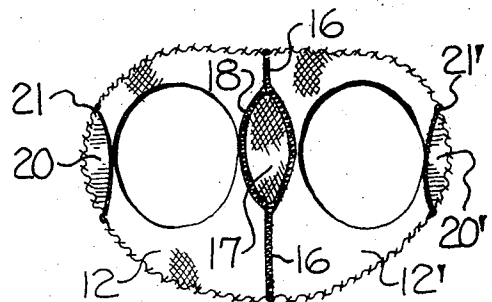


FIG-4

INVENTOR:
JOHN R. SMITH

BY *Barrett, Bell, Seltzer, Park & Libson*
ATTORNEYS

MATERNITY PANTY HOSE GARMENT AND METHOD

This invention relates generally to a panty hose type garment and more particularly to a panty hose of the type especially adapted for wear by women during pregnancy to provide support in the panty area without unduly constricting the wearer.

It is the normal practice to form panty hose garments by slitting the inner portions of a pair of elongate seamless stocking blanks in a walewise direction and then seaming the corresponding slit edges of the pair of blanks together to form the body portion of the garment. A crotch patch or panel may be connected between the stocking blanks to provide more fullness in the crotch of the garment and the stocking blanks are usually knit of stretchable yarn so that the garment will fit a variety of different sizes of wearers. However, the body portion of a conventional panty hose will not stretch sufficiently to fit many large women or to fit over the abdomen of women in the final months of pregnancy.

With the foregoing in mind, it is an object of the present invention to provide a panty hose garment which includes a substantially U-shaped elastic gusset panel extending downwardly from the waist of the garment and at opposite sides of the body portion to provide substantial expansion and support in the panty area without unduly constricting the wearer.

It is another object of the present invention to provide a method of forming a maternity panty hose which does not require extensive retraining of experienced sewing machine operators since the manufacture of this panty hose merely requires the formation of two additional slits on the outer portions of the stocking blanks and the sewing of substantially U-shaped elastic gusset panels in these slits.

In accordance with a preferred embodiment of the invention, the panty portion of the maternity panty hose is knit of one type of stretchable yarn to provide substantial stretchability in the front and rear portions while the U-shaped elastic side panels are knit of another type of stretchable yarn to provide more restricted stretch at opposite sides of the panty portion.

Other objects and advantages will appear as the description proceeds when taken in connection with the accompanying drawing, in which:

FIG. 1 is a front elevational view of the maternity panty hose garment of the present invention, being illustrated as it appears when worn;

FIG. 2 is an exploded view of the panty hose garment, illustrating the various parts which make up the garment;

FIG. 3 is a fragmentary elevational view looking at the inside of the body portion and illustrating the configuration of the substantially U-shaped elastic gusset panel connected in the body portion; and

FIG. 4 is a horizontal sectional view taken substantially along the line 4—4 in FIG. 1 and looking downwardly on the inside of the panty hose garment.

The present maternity panty hose garment comprises a pair of elongate seamless stocking blanks, broadly indicated at B and B' and each of which includes leg portions 10, 10', foot portions 11, 11', and upper body portions 12, 12'. The elongate stocking blanks B are preferably knit on circular hosiery knitting machines and the leg portions are preferably knit of some type of stretchable yarn.

The legs may be knit with suitable yarn and stitch construction to provide support on the leg of the wearer. Many different types of support stockings are known to provide a compressive force against the leg and any of these constructions may be employed. One known support construction which has been found to be particularly desirable is the one disclosed in U. S. Pat. No. 3,250,092. In knitting a support stocking according to this patent, an inelastic body yarn is knit on every needle in alternate courses and a covered spandex yarn is knit on every other needle in intervening courses. The lower ends of the stocking blanks are closed in any suitable manner to form toe pockets and the upper body portions 12, 12' are preferably knit of a yarn which is textured to make it stretchable while a spandex type yarn is inlaid in certain courses to provide a substantial degree of stretchability thereto.

To form the maternity panty hose garment, the upper ends of the blanks B, B' are slit in a walewise direction and downwardly from the upper open ends, as illustrated in FIG. 2, to form corresponding inner slits 14, 14' and outer slits 15, 15'. The inner and outer slits 14, 15 preferably extend downwardly from the upper ends substantially equal distances and terminate slightly above the juncture between the body portions 12 and the leg portions 10. The corresponding edges of the slits 14, 14' are connected together by an overedge seam 16 (FIGS. 1 and 2) which also attaches one side portion of a diamond crotch patch 17 between the lower portion of the slit 14, 14'. An overedge seam 17 joins the other side of the crotch patch 17 to the lower portion of the slit 14 (FIG. 4).

Corresponding substantially U-shaped elastic insert gusset panels 20, 20' are connected in the corresponding slits 15, 15' by suitable overedge seams 21, 21'. The panels 20, 20' are preferably knit entirely of covered spandex yarn and are cut to the substantially U-shaped configuration shown in FIG. 3 before they are sewn into position in the slits 15, 15'. The panels 20, 20' thus provide a more restricted stretch than the front and rear portions of the panty portion. An elastic waistband 22, preferably in the form of a woven elastic tape, is connected to the upper ends of both stocking blanks and the U-shaped panels 20, 20' by an expandable seam, indicated at 23 in FIG. 3.

Thus, the completed panty hose garment includes a panty portion adapted to fit the lower body portion of the wearer and the panty portion has integrally formed stocking leg portions 10, 10' depending therefrom. The elastic waistband 22 extends around and defines an upper waist opening and is adapted to encircle the waist of the wearer. The elastic gusset panels 20, 20' extend downwardly from the waistband and at opposite sides of the panty portion of the garment. The elastic gusset panels 20, 20' extend downwardly to substantially a level equal to or level with the crotch of the panty portion.

When the garment is worn by a woman in the early stages of pregnancy, or by other women, the elastic gusset panels are not stretched to an appreciable degree and the front and rear portions of the stretchable panty portion stretch sufficiently to provide a comfortable fit. As the abdomen increases in the advanced stages of pregnancy, the elastic gusset panels are stretched and provide additional expansion so that the panty portion provides substantial expansion and com-

comfortable support without unduly constricting the abdomen of the wearer.

Although the garment of the present invention is particularly adapted for wear by pregnant women, it is to be understood that the garment is not limited to use by pregnant women, but may be worn by and provides a comfortable fit to very large women.

In the drawings and specification, there has been set forth a preferred embodiment of the invention, and although specific terms are employed, they are used in a generic and descriptive sense only and not for purposes of limitation.

I claim:

1. A maternity panty hose garment including a lower body panty portion including a crotch portion and front and rear portions knit of stretchable yarn to permit the body portion to expand to the body of the wearer, integrally formed stocking leg portions depending from said panty portion, an open upper waist opening adapted to encircle the waist of the wearer, and elastic gusset panels separating said front and rear portions of said panty portion and extending downwardly from said waist opening and at opposite sides of the body portion of said garment a sufficient distance to provide for additional expansion in the panty portion without unduly constructing the abdomen of the wearer.

2. A maternity panty hose garment according to claim 1 wherein each of said elastic gusset panels are substantially U-shaped.

3. A maternity panty hose garment according to claim 2 wherein said lower body panty portion includes a connecting seam extending through the crotch por-

tion, and wherein said elastic gusset panels extend downwardly on opposite sides to substantially the same level as the crotch portion.

4. A maternity panty hose garment according to claim 1 wherein said integrally formed depending stocking leg portions are support stockings knit of an inelastic body yarn [nd compressive force on the legs of the wearer.

5. A method of forming a maternity panty hose type garment which includes the steps of

- a. slitting inner and outer opposite side portions of two individual stretchable stocking blanks downwardly from the upper open ends thereof,
- b. connecting together the corresponding edges of the inner slits of the two stocking blanks to form a crotch portion and front and rear panels providing sufficient stretchability in the panty portion to conform to the body of the wearer,
- c. attaching substantially U-shaped elastic gusset panels in the outer slits at opposite sides of the front and rear panels of the panty portion, said elastic gusset panels being of sufficient length to provide for additional expansion in the panty portion without unduly constricting the abdomen of the wearer, and
- d. attaching an elastic waistband to the upper portions of the stocking blanks and the elastic gusset panels to provide a stretchable waist opening.

6. A method according to claim 5 wherein the inner and outer opposite side portions are slit downwardly substantially equal distances.

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UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,694,816 Dated October 3, 1972

Inventor(s) JOHN R. SMITH

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

Column 3, Line 22: cancel "panty", first occurrence.

Column 4, Line 7: cancel "[nd"; insert -- and a spandex yarn and providing a --.

Signed and sealed this 6th day of March 1973.

(SEAL)
Attest:

EDWARD M. FLETCHER, JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents

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