# United States Patent [19]

**Sherwood**

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[54] **MASTECTOMY BRASSIERE**


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**Related U.S. Application Data**

[63] Continuation-in-part of Ser. No. 786,668, Oct. 11, 1985, Pat. No. 4,637,398.

[51] **Int. Cl.**[4] ..... **A41C 3/10**

[52] **U.S. Cl.** ..... **450/54**

[58] **Field of Search** ..... 128/478, 479, 480, 482, 128/470, 473, 510, 462



[56] **References Cited**

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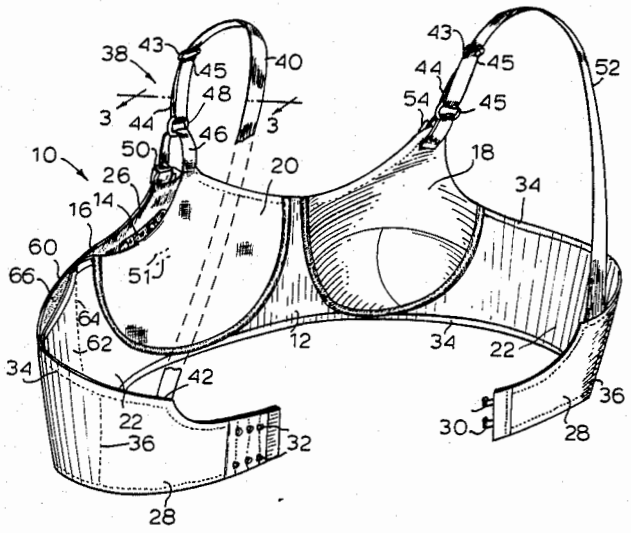
[57] **ABSTRACT**

A mastectomy garment includes an underbra, a prosthetic breast pad, and an outerbra. The underbra has a supporting cup for the normal breast and a substantially flat band portion to fit to the chest of the removed breast, enabling a firm, flat-fitting garment over the remaining chest surface of the removed breast. The prosthesis or false breast pad is removably adhered to the outer surface of the flat, binding portion. The outerbra, such as a conventional off-the-shelf brassiere, that overlies and is secured to the underbra forming a composite unitary prosthetic brassiere with the prosthetic breast pad positioned therebetween and means for adjustment of the brassiere to the wearer and individual adjustment of the prosthetic breast pad.


**14 Claims, 4 Drawing Figures**



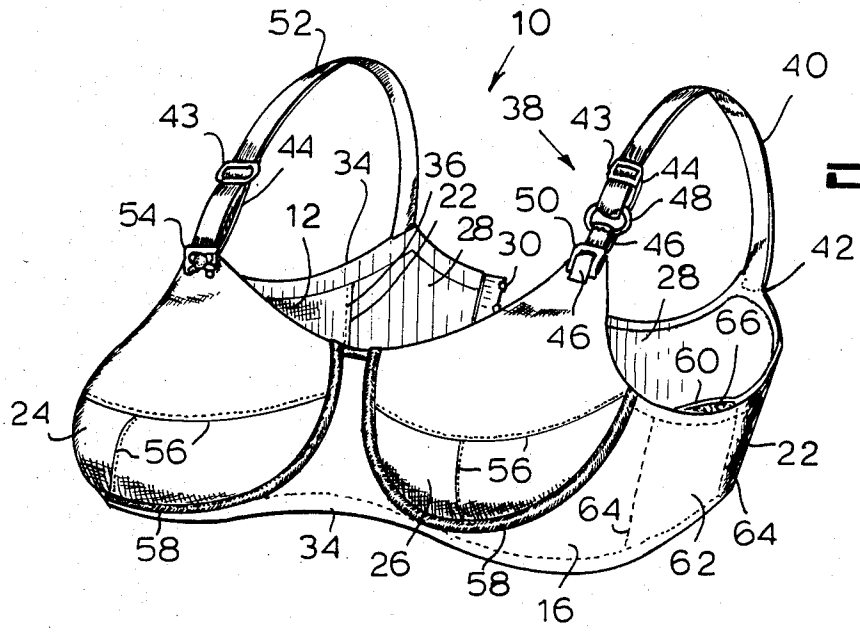

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Fig. 1

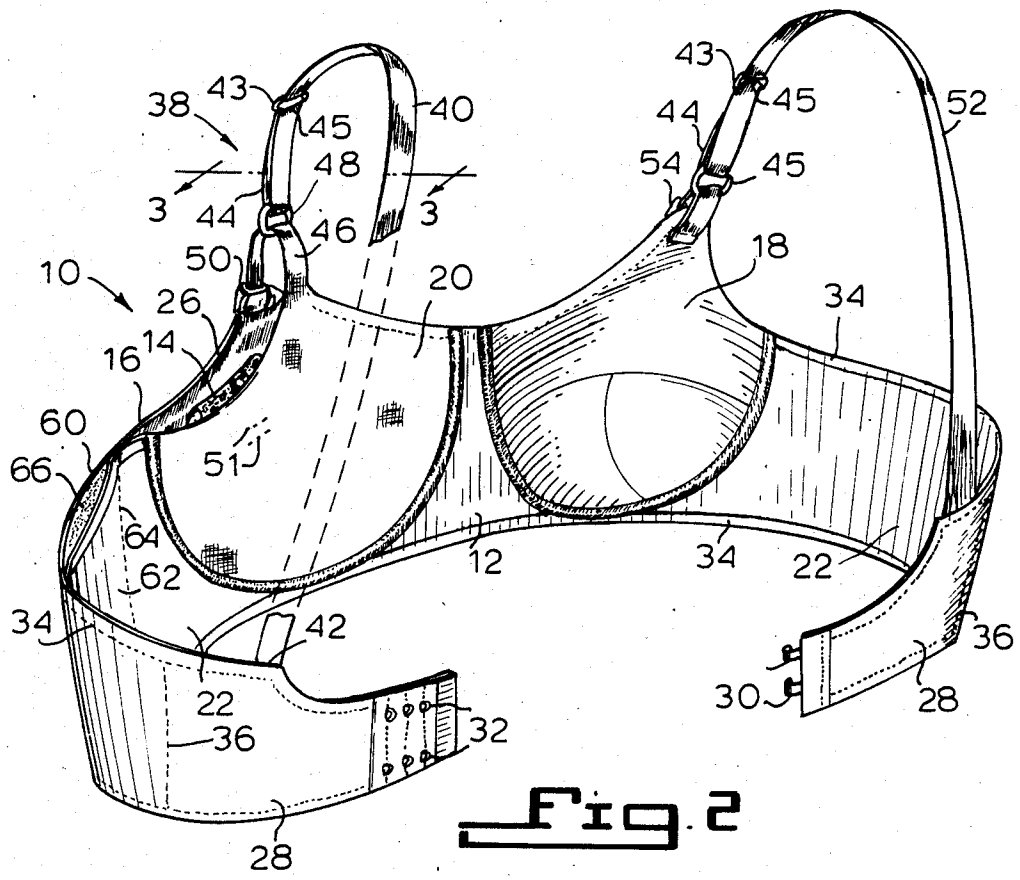
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Fig. 2

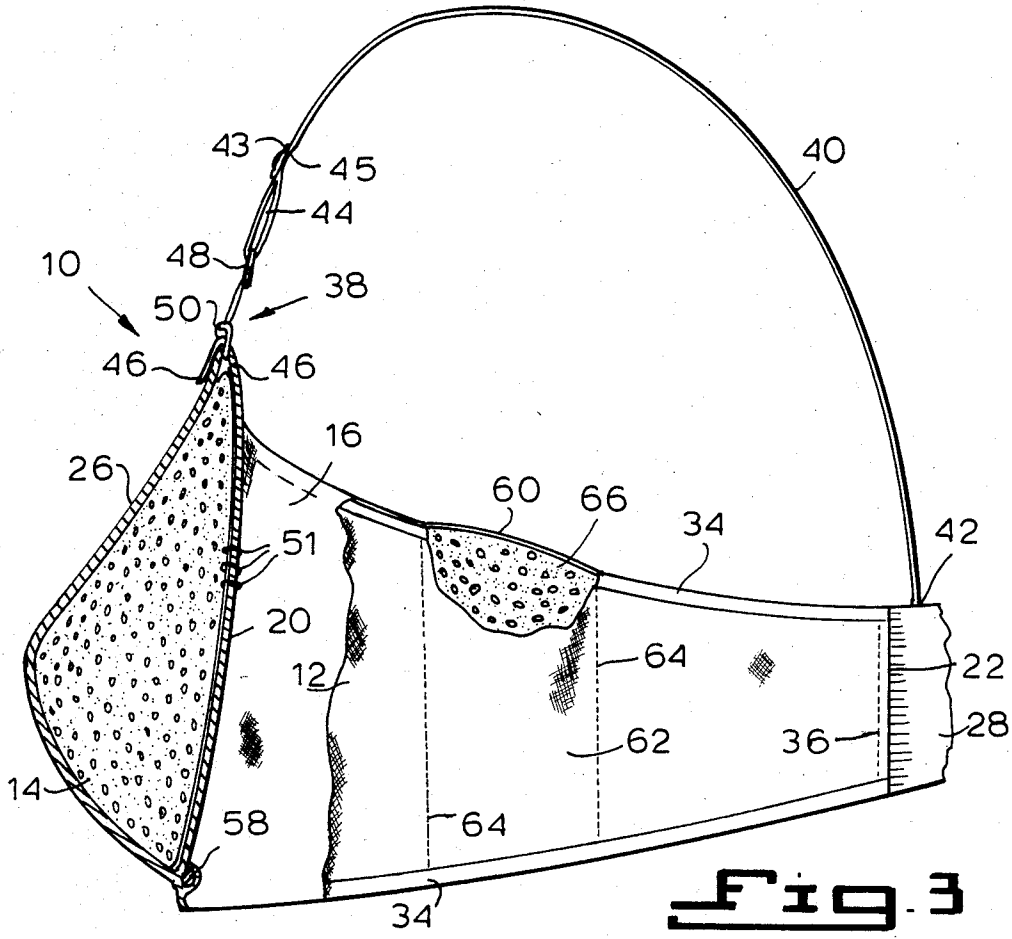
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Fig. 3

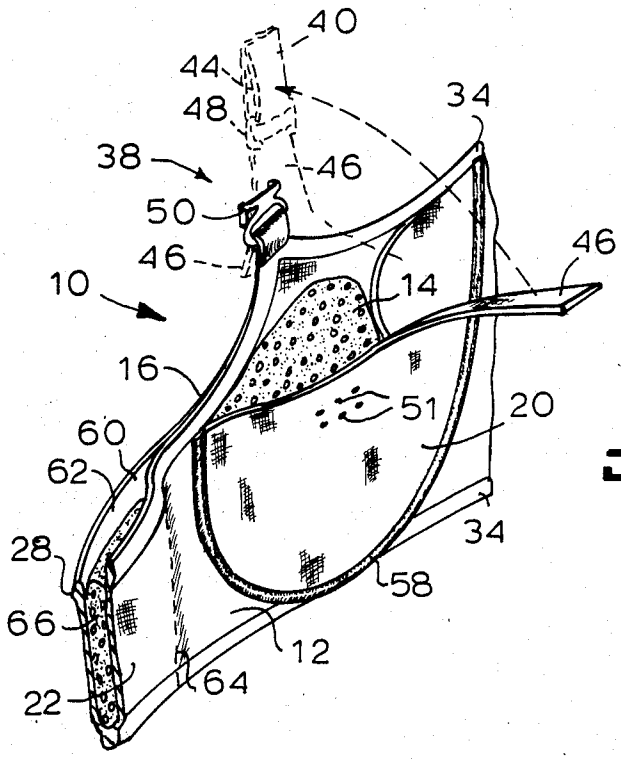
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Fig. 4

## MASTECTOMY BRASSIERE

### BACKGROUND OF THE INVENTION

This application is a Continuation-In-Part of application Ser. No. 786,668, filed Oct. 11, 1985, now U.S. Letters Pat. No. 4,637,398 issued on Jan. 20, 1987.

The present invention relates to a prosthetic brassiere garment and in particular to an improved prosthetic brassiere garment for use by a person having a mastectomy where one or both breasts have been removed or altered.

Many attempts have been made to enable the patient suffering from a mastectomy to overcome the mental and physical shock associated therewith by attempting to reconstruct her physical being by providing mastectomy brassieres constructed to provide the appearance of having a pair of complete natural breasts. It has been suggested to provide mastectomy brassieres which are capable of being stuffed with sanitary pads, absorbing cotton or rubber forms simulating one or both breasts. It has also been suggested to provide brassieres with built in pockets in which such filling material can be located. Plastic forms filled with liquid have also been recommended as have inflatable plastic balloons. Reference may be made to U.S. Pat. Nos. 2,637,851; 3,447,538; 3,489,153; 4,363,144; and 4,185,332 for examples of such attempts. These references being illustrative further of the problems involved in providing mastectomy prosthetic brassieres of only limited success in solving such problems. Other prosthetic brassieres are disclosed in U.S. Pat. Nos. 2,661,470, 4,261,366, and Swiss Pat. No. 479,290.

Current mastectomy prosthesis have been designed namely to provide pseudo-architecturally simulated breast structures. They are generally heavy, uncomfortable, and expensive, as well as cosmetically less than optimum. Another group of prosthesis currently available, make use of pre-molded or pre-shaped plastics and although not heavy or expensive, are similarly less than desirable for aesthetic purposes, since they are generally mass produced and shaped in conformity with standard figures, rather than being shaped to conform to that of the woman wearing the garment.

For all such classes of prosthesis, the ability to wear aesthetically pleasing outer garments is virtually impossible, and outer garments such as high fashion dress wear, lower cut necklines, or the like cannot be worn and have been unusable until the present invention.

In particular, all of the prosthesis known to date have a tendency to pull or fall away from the chest wall of the removed breast as the woman moves or changes position, especially when the woman bends or even leans slightly forward. Another problem of the prior art arises from the fact that the breast prosthesis the woman wears often extends visually beyond the edges or border of the brassiere thereby revealing that the wearer has experienced disfiguringmastectomy surgery.

Still another problem existing with the current or prior known prosthesis is the fact that because of the expense incurred in constructing such prosthetic brassieres, they are not readily adaptable to changing brassiere styles, and the woman having had a mastectomy has relatively little choice in the form of the brassiere she can wear. This is particularly irksome to women who before having had the mastectomy have been accumstomed to having virtual infinite choice in updated designer brassiere styles and shapes, so as to go along with both her mood as well as the type of outer garment being worn.



It is an object of the present invention to overcome the problems heretofore mentioned and to provide a prosthesis which will be able to provide the woman with a large range of up to date brassiere shapes and styles. It is a further object of the present invention to provide a mastectomy prosthesis which fits both comfortably, accurately and will not shift in position or part or fall away from the chest wall to reveal the fact that the wearer has suffered the embarrassing removal of one or more breasts.

The foregoing objects and advantages together with numerous others will be apparent from the foregoing disclosure.

### SUMMARY OF THE INVENTION

According to the present invention, a mastectomy brassiere garment is provided comprising in combination an inner or underbra, a prosthetic breast pad, and an outerbra. The underbra is of lightweight garment foundation material having a receiving and supporting cup for the normal breast, should one remain, and a substantially flat band portion for close fit against the chest wall of the removed breast so as to obviate any visual separation between the same and the chest of the wearer. The prosthesis breast pad itself is formed in the desired shape of a substantial mirror image to the remaining breast and is removably positioned between the underbra and outerbra at the flat band portion of the underbra. The outerbra may be a conventional off-the-shelf brassiere of any modern, up to date designer style and/or fashion that the wearer wishes. The outerbra is then placed over the underbra, with its natural breast receiving and supporting cups overlying respective any breast receiving and supporting cup of the underbra and respective flat portion of the underbra. The underbra and outerbra may be sewn or otherwise secured together to form a composite brassiere of unitary, singular construction with openings beneath the wearer's arms and in the areas of means for adjustment of the brassiere to the wearer and of the prosthetic breast pad. The ability to select a modern off-the-shelf bra, no longer limits or restricts the wearer to the use of stereotyped surgically appearing bras of one matronly appearing style.

By providing an underbra which conforms accurately and surely to the surface of the chest, at the point where the breast has been removed, and by placing the prosthesis and the outer brassiere thereover, the unitary garment prosthesis of the present invention maintains contact with the chest wall thereby obviating telltale separation therefrom no matter what position the woman assumes or movements that she performs.

By providing the underbra, the same can be more easily fit to the wearer to support the proper positioning of the prosthetic breast pad to and against the chest of the removed breast. Similarly, by removing the decorative function of the outerbra from that of the prosthesis and the inner fitting underbra garment, the user is not limited to an outerbra of any one style, shape or appearance. By combining the two (innerbra and outerbra) into a single, unitary brassiere structure only a single shoulder strap for each shoulder, and a single rear or back torso encompassing strap is required.

Full details of the present invention are set forth in the following description of the preferred embodiment and are illustrated in the accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings,

FIG. **1** is a front perspective view showing the underbra and outerbra forming the composite prosthetic brassiere according to the teaching of the present invention;

FIG. **2** is a rear elevational view with a portion thereof cut away to provide a fuller illustration of the details;

FIG. **3** is a cross-section of FIG. **2** taken substantially in the direction of lines **3**—**3** and with a portion thereof broken away to reveal details of side panel pockets; and

FIG. **4** is a partial perspective view of the means enabling individual adjustment of the prosthetic breast pad positioned between the underbra and outerbra.

## DESCRIPTION OF THE INVENTION

The composite prosthetic brassiere of the present invention is generally identified by the numeral **10** and comprises three basic components, namely, a base garment or underbra **12**, a prosthetic breast simulating pad **14** and a decorative outerbra **16**.

Specifically, the base garment or underbra **12**, although appearing to conform closely in most respects to a regular brassiere, i.e. having right and left chest portions **18** and **20**, and side or underarm and rearwardly encompassing side band portions or panels **22**. The rearward extent of the side panels **22** is less than sufficient to fully encompass and fully enclose the torso of the wearer, however, they do extend aloang the side of the wearer to enable the same to cooperate with the corresponding sides of the outerbra to form pockets as will be explained.

As in a conventional brassiere the underbra **12** is preferably made of slightly expandable or resilient material, such as Spandex, nylon or the like so that when placed on the patient's torso will have a fully conforming fit as will be explained in greater detail later. The underbra **12**, as shown in the Figures is made for a patient having only one breast removed, and therefore for illustration the right chest section **18** is shown completely formed with a natural breast receiving and supporting cup while the left chest section **20** is substantially flat. Should a garment be required for a patient having both breasts removed, then the illustrated cup, here the right section would appear identical to the flat or left chest section **20**. Although the breast cup **18** is fully formed for a breast, the innerbra **12** is not specifically intended to provide a breast uplift support all by itself.

The base underbra **12** is formed to the contours of the torso of the patient. In sizing the underbra **12** the flat portion **20** covering the flat chest portion from which the breast has been removed, is designed in size, so as to lie fitting essentially flat in engagement against the chest wall as described and as seen in FIG. 2 of my co-pending patent application. The flat portion **20** may be made of a material that more readily absorbs moisture and feels more comfortable when held snug against the skin for long periods. Cotton has been found to be preferred although other materials may also be used.

The outerbra **16** is preferably an attractive decorative conventional commercially available brassiere since its purpose is indeed to be decorative, modernly attractive and cosmetic. Its purpose is also to provide a functional uplift and foundation support for the remaining and full breast of the wearer, as well as to provide the architectural support for the prosthetic or pseudo-breast pad **14** positioned between it and the underbra **12**. Since, in fact, this is the specific function of the commercially available brasssiere **16**, they need be manufactured no differently than those presently manufactured and can be in any of the current or future available models.

Being of substantial conventional construction the outerbra **16** is provided with a pair of right and left breast receiving and supporting cups **24** and **26** respectively, and oppositely directed and rearwardly extending side panels or band portions **28** that usually encompass and enclose the torso of the wearer by engagement at the hooks and fastener loops **30** and **32**. The inner bra **12** and the outerbra **16** are secured together to form the unitary composite prosthetic brassiere **10** by sewing the same along their peripheral edges **34**. Inasmuch as the side band portions or panels **22** of the underbra **12** are shorter than the corresponding side band panels or portions **28** of the outerbra **16**, the ends of the portions **22** may be closed and secured to the respective portions **28** by vertical stitching **36** as an seen in FIGS. **1** and **2**.

When so secured together to form the unitary composite brassiere **10**, the right cup **24** will overlie its respective cup **18** of the underbra while the left cup **26** will overlie its respective flat portion **20** so that the two brassieres **12** and **16** effectively become a single composite brassiere **10** bound together at their peripheral edges **34**. During the peripheral securement the overlying cup **26** and the underlying portion **20** are left free of stitching and securement and are therefore separated at their tops one from the other, in the area under the arm of the wearer and in the area of the adjustment means generally identified by the numeral **38**.

Referring to the left cup **26** and the chest portion **20** it will be seen that the adjustment means **38** comprises a shoulder strap **40** of substantially conventional construction for a brassiere in that its rear end or back is securely joined with its respective band portion **28** as at **42**. The strap **40** is connected at its other front end **45** to a central bar of a slide adjustment buckle **43** to form a loop **44** in the strap. As the buckle **43** is slid up and down along the length of the strap **40**, the length of the strap is increased or decreased or shortened. This enables the adjustment of the composite prosthetic brassiere **10** as a whole to the upper torso of the wearer to enable the proper positioning of the breast cups **24** and **26**.

Included as an integral part of the adjustment means **38** is a further means to precisely and individually adjust the position of the prosthetic breast simulating pad **14** positioned in the cup **26** and between such cup and the chest portion **20**. The prosthetic breast pad individual adjustment means comprises a strap **46** that extends upward from the top portion of the panel **20** to extend through a connecting loop **48** retained in the loop **44** of the strap **40**. The free end of the strap **46** then extends through a clasp or buckle **50** of any conventional construction which forms no part of the present invention that permits sliding movement of the strap **46** therethrough and locks the same in any selected position of adjustment. Inasmuch as the clasp or buckle **50** forms no part of the present invention, its specific details are not shown in the drawings. However, the buckle **50** is commonly used for lengthwise adjustment of lingerie straps.

The prosthetic breast simulating pad **14** is preferably molded foam plastic sponge or the like and may be

constructed in the manner as taught in my co-pending patent application to simulate and match as closely as possible to the natural breast. The breast pad **14** is inserted into position between the cup **26** and the flat chest portion **20**. Once it is selectively located between the underbra and the outerbra to correctly simulate the natural remaining breast, the opening originally left at the top between the chest portion **20** and the overlying cup **26** is then sewn closed or closed in any other convenient and attractive manner. The finite individual adjustment of the prosthetic brast pad **14** relative to the chest of the wearer is accomplished by initial adjustment of the shoulder strap **40** and then by the selective adjustment of the additional individual adjustment strap **46**.

In practice it has been found that the breast pad **14** will retain its adjusted position even during prolonged periods of use and also discontinuous periods of use if it is affixed to the facing surface of the panel **20**. As described in my co-pending application, various forms of affixation may be used. It has been found that a simple basting stitch **51** as seen in FIG. **3** is adequate for such purpose. Thus, when the pad **14** is affixed to the panel **20** the operation of the individual adjusting strap **46** will adjust the position of the same relative to the outerbra **16** and to the chest of the wearer. When the pad **14** is affixed to the inner surface of the cup **26**, adjustment of the individual adjustment strap **46** will adjust the position of the pad **14** relative to the panel **20** and also relative to the chest of the wearer to achieve the same effect.

It will be noted that the description of the double adjustment means **38** was confined to that of the prosthetic breast pad **14** only because the same finite and selective adjustment is not required for the cup **24** for the natural breast. For that reason, the strap **52** is shown connected directly with a false clasp or buckle **54** having the same structural details and appearance as the adjustment clasp or buckle **50** used for individual and finite selective adjustment of the prosthetic breast pad **14**. Thus, the viewer cannot readily discern any difference between the adjustment means for the natural breast cup and that used for the prosthetic breast pad **14**. The breast cups **24** and **26** may have the same outward, appearance with breast shaping and supporting darts **56** and fabric covering uplift wire supports **58**. However, should it be desired that the natural breast also have the finite adjustment that the prosthetic breast pad **14** is supplied with in the present invention, then the same structure as used for adjustment of the breast pad **14** and as described above may also be used for that of the natural breast cup **24**.

Mastectomy surgery often requires the removal of nodes and tissue that leaves disfiguring hollows and depressions or cavities in the side of the body adjacent to the removed breast. In the past, the application to the torso of a mastectomy brassier merely accentuates such disfigurements by the brassier fitting snugly within the hollows or cavities and thereby displaying the disfigurements. During the joining of the underbra and the outerbra together to form the singular composite prosthetic brassiere **10**, portion **60** at the top periphery of the two brassieres is left unsecured to form an entranceway to one or more vertically extending pockets **62** that are formed by vertically disposed stitchings **64** that secure together the side panel band portions **22** and **28**.

When the composite brassiere is custom fit to the wearer, selected amounts of prosthetic material **66** of the same or different characteristics as that of the prosthetic breast pad **14** may be inserted into the pocket or pockets **62** to fill out the contour of the band portion **28** to hide any deformity that may exist therebeneath. Thereafter, the entrance **60** may be stitched or otherwise secured closed to enclose the material therein. The same is also for the enclosure of the prosthetic breast pad **14** between the underbra flat portion **20** and the cup **26** of the outerbra **16**. That is to say, after the prosthetic breast pad is properly positioned between the inner and outer bras, the opening left at the top thereof in the area beneath the arm of the wearer and in the area of the adjustment means **38** may now be stitched or otherwise secured closed to enclose the breast prosthetic pad therewithin. Adjustment of the band portions **28** and their securement about the torso properly and accurately retains the pockets **62** over the disfiguring hollows or cavities that the wearer may have and retains the prosthetic material **66** in place therein.

Various modificiations and changes have been suggested, others will be apparent to those skilled in the art. It is intended, therefore, that the present disclosure be taken as illustrative of the invention and not limiting its scope.

What is claimed is:

**1**. A singular composite prosthetic brassiere garment compensating for the loss of a woman's breast consisting of the the combination of an underbra, a breast prosthesis and an outerbra, with said breast prosthesis between and affixed to one of said underbra or outerbra one of the underbra and outerbra having a band portion to enclose the torso, said underbra having a breast supporting cup for supporting the natural breast of the wearer when the wearer has a remaining breast, and a flat portion or portions fitting against the chest wall from which one or both breasts have been removed, said outerbra comprising a substantially conventional brassiere having a pair of natural breast supporting cups overlying the natural breast supporting cup or flat portions of said underbra, first adjustment means to adjust said singular composite brassiere as a whole to the wearer and including individual adjustment means connected with said flat portion and said overlying natural breast supporting cup to adjust the same relative to each other independenly of said first adjustment means and to adjust said prosthetic breast relative to the chest wall of the wearer from which the natural breast has been removed.

**2**. A singular composite prosthetic brassiere as in claim **1**, said band portion having pockets along the sides of the torso for the receipt of prosthetic material therein to fill hollow areas of the torso thereat.

**3**. A singular composite prosthetic brassiere as in claim **2**, said substantially conventional outerbra having said torso enclosing band portion.

**4**. A singular composite prosthetic brassiere as in claim **3**, said underbra having partial side encircling portions underlying respective portions of said torso encircling portion of said outerbra to form said pockets therebetween.

**5**. A singular composite prosthetic brassiere as in claim **1**, said flat portion or portions being formed of a material different from that of the remainder of said underbra.

**6**. A singular composite prosthetic brassiere as in claim **1**, said underbra and outerbra being secured together to form said singular composite prosthetic brassiere with an opening therebetween in the area of said

adjustment means for positioning said prosthetic breast relative to the outer surface of said flat portion of said underbra.

7. A singular composite prosthetic brassiere as in claim 1, said prosthetic breast being affixed to one of said flat portion and its respective supporting cup for selective adjustment of said prosthetic breast relative to the other.

8. A composite prosthetic brassiere for a woman having one or more breasts removed from her body comprising inner and outer brassieres, said inner brassiere having at least one or more substantially flat portions to cover and to lie in close fit with and against the torso of the wearer and the chest wall from which one or both breasts were removed and having a natural breast cup receiving and supporting a remaining breast, said outer brassiere having a pair of natural breast receiving and supporting cups and back encompassing bands to retain said natural breast cups in close fit against the wearer and with each of said natural breast cups overlying the substantially flat portion or portions and natural breast cup of said inner brassiere, a prosthetic breast pad or pads simulating the contour of the removed breast and positioned between said substantially flat band portion or portions of said inner brassiere and said natural breast cup of said outer brassiere to be held in close fit against the chest wall of the removed breast to appear as the natural breast of the wearer, and first adjustable means to adjust said composite prosthetic brassiere relative to the wearer and including second means to individually adjust said substantially flat portion or portions and respective overlying cup or cups relative to each other and said respective prosthetic pad or pads relative to the respective chests of the wearer.

9. A composite prosthetic brassiere as in claim 8, said inner and outer brassieres being secured together to form the composite brassiere as a unitary brassiere.

10. A composite prosthetic brassiere as in claim 8, said unitary brassiere having an opening between said flat portion of said inner brassiere and said overlying breast cup of said outer brassiere in the area of said adjustable means to receive said prosthetic breast pad for positioning therebetween.

11. A prosthetic brassiere for a woman having one or more breasts removed comprising a conventional outerbra having two breast receiving and supporting cups overlying an innerbra having a substantially flat portion conforming to the chest portion from which a breast has been removed, and a breast prosthesis to simulate the natural removed breast and received in the respective breast cup of said outerbra and against said flat portion and fastened to one of said innerbra and outerbra, one of said bras having at least a band portion to enclose the torso of the wearer and extending about the sides and back of the wearer, the other of said bras having band portions extending partially about the torso, pockets formed along said band portions along the sides of the wearer, prosthetic padding insertable in said pockets to cause the pockets to fill and hide hollow areas of the torso of the wearer to prevent the outward appearance of telltale depressions in said prosthetic brassiere when the same is fitted to tne hollow areas of the torso, and adjustable strap means for adjusting the whole of said prosthetic brassiere to the wearer and including separate means to adjust said innerbra relative to said outerbra selectively to position said breast prosthesis relative to the chest of the wearer to conform to the position of the natural breast.

12. A prosthetic brassiere as in claim 11, said innerbra and outerbra secured together to form said prosthetic composite brassiere.

13. A prosthetic brassiere as in claim 12, said outerbra being a substantially conventional brassiere having said band portion, and said innerbra having band portions partially encircling the sides of the wearer secured to said outerbra to form said pockets therebetween.

14. A prosthetic brassiere as in claim 11, said adjustable strap means to selectively position said breast prosthesis including buckle means and a tab extending through said buckle means for adjustable movement relative thereto, one of said buckle means and tab being on and joined with a selected one of said flat portions of said underbra and said respective overlying breast supporting cup of said outerbra, and a strap connected with said buckle means and with one of said band portions and having buckle means thereon for adjustment of the length of said strap.

* * * * *