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(57) ABSTRACT
A brassiere cup having a 3D cup shaped member including at least one layer of first and/or second material located on the convex side of the 3D cup shaped member, and at least one layer of first and/or second material located on the concave side of the 3D cup shaped member. The 3D cup shaped member is shaped according to a desired size and/or shape. The at least one layer of first material or second material is joined onto the 3D cup shaped member by sewing, fusing, fastening, adhering and/or molding.
3D BRASSIERE CUP AND MANUFACTURING METHOD THEREFOR

CROSS-REFERENCE TO RELATED APPLICATION

[0001] The present application claims priority to Hong Kong Application No. 13113316.5, filed Nov. 28, 2013, the disclosure of which is incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] The present invention relates to a brassiere cup. The invention more particularly, although not exclusively, relates to a brassiere cup having a specially formed 3D cup shaped member and a method of manufacturing a brassiere cup using the specially formed 3D cup shaped member.

OBJECTS OF THE INVENTION

[0003] It is an object of the present invention to improve the shape of a brassiere cup formed according to a standard shape and/or size. In particular, an object of the present invention is to provide a brassiere cup that is firm and durable.

SUMMARY OF THE INVENTION

[0004] The traditional way to make brassiere cup is to lay layer(s) of material(s) on flat 2D layer(s) of same or other material(s), and then transform it into a 3D brassiere cup, by sewing, fusing, fastening, adhering and/or molding the combined layers of material(s).

[0005] The present invention relates to a brassiere cup of which a 3D cup shaped member is pre-shaped, providing a firm and durable structure.

[0006] There is disclosed herein a brassiere cup comprising a 3D cup shaped member; at least one layer of first and/or second material located on the convex side of the 3D cup shaped member; and at least one layer of first and/or second material located on the concave side of the 3D cup shaped member.

[0007] Preferably, the 3D cup shaped member is made of polymer or foam.

[0008] It is preferred that the 3D cup shaped member is shaped according to a desired size and/or shape.

[0009] Preferably, the 3D cup shaped member is skived according to a desired size and/or shape.

[0010] The first/second material may be fabric, polymer, or foam.

[0011] Preferably, the at least one layer of first/second material is joined onto the 3D cup shaped member by sewing, fusing, fastening, adhering and/or molding.

[0012] There is further disclosed herein a method of manufacturing a brassiere cup comprising the steps of:

(a) designing and shaping a 3D cup member according to a desired size and/or shape;
(b) placing at least one layer of first and/or material on the convex side of the 3D cup shaped member;
(c) placing at least one layer of first and/or second material on the concave side of the 3D cup shaped member; and
(d) sewing, fusing, fastening, adhering and/or molding the layers of first and/or second material on the 3D cup shaped member to form the brassiere cup.

[0017] It will be appreciated that various other methods can be used to join the layer(s) of first/second material onto the 3D cup shaped member, which are also within the scope of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] Preferred forms of the present invention will now be described by way of example with reference to the accompanying drawings, wherein:

[0019] FIG. 1 is a perspective illustration of 2D layers to make a brassiere cup;
[0020] FIG. 2 is a perspective illustration of a prior art brassiere made from the 2D layers of FIG. 1;
[0021] FIG. 3 is a perspective illustration of a 3D cup shaped layer placed between layers to make a brassiere cup in accordance with an embodiment of the invention; and
[0022] FIG. 4 is a perspective illustration of a brassiere made from the 3D cup shaped layer of FIG. 3.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0023] In FIGS. 1 and 2 of the accompanying drawings there is depicted that 2D layers 20, 30, 40 and 50 to be used to form a brassiere cup 10 of the prior art.

[0024] Layers 20, 30, 40 and 50 are laid in a form of sandwich. By sewing, fusing, fastening, adhering and/or molding, the combined layers 20, 30, 40 and 50 are bended to form a 3D brassiere cup. Due to the nature of the process, at least some of the layers 20, 30, 40 and 50 are stretched when bended; causing the thickness of the finished 3D brassiere cup to be uneven. As a result, some parts of the finished 3D brassiere cup 10 are thinner and fragile, such as, the apex/tip area 70 of the brassiere cup 10. Since the apex/tip area 70 of the brassiere cup 10 is so thin, the shape of the nipples of the wearer of the brassiere cup 10 may be seen through the apex/tip area 70 from the outside.

[0025] FIGS. 3 and 4 show an embodiment of the 3D brassiere cup 100 of the present invention having 3D cup shaped member 130, placed in between layers 110, 120 and 140, 150. The 3D cup shaped member 130 is pre-formed/shaped according to a desired size and/or shape. In this embodiment, the 3D cup shaped member is skived according to a desired size and/or shape.

[0026] The layers 110, 120 and 140, 150 can be made of fabric, polymer, foam, or any suitable material. The layers 110, 120, 140, 150 are joined onto the 3D cup shaped member 130, one by one or together, to form the 3D brassiere cup 100 by sewing, fusing, fastening, adhering and/or molding.

[0027] As the 3D cup shaped member 130 is pre-formed/shaped, it provides a firm structure for the 3D brassiere cup 100 to form, allowing a consistent thickness throughout the 3D brassiere cup 100. As a result, the apex/tip area 170 is not stretched and is not thin enough for the nipples to be seen.

[0028] Accordingly, it is intended that the present invention not be limited to the described embodiments, but that it has the full scope suggested by the above-language, as well as equivalents thereof.

What is claimed is:

1. A brassiere cup comprising:
   a 3D cup shaped member;
   at least one layer of first and/or second material located on
   the convex side of the 3D cup shaped member; and
at least one layer of first and/or second material located on the concave side of the 3D cup shaped member.

2. The brassiere cup of claim 1, wherein the 3D cup shaped member is made of polymer or foam.

3. The brassiere cup of claim 1, wherein the 3D cup shaped member is shaped according to a desired size and/or shape.

4. The brassiere cup of claim 1, wherein the 3D cup shaped member is skived according to a desired size and/or shape.

5. The brassiere cup of claim 1, wherein the first material is fabric, polymer, or foam.

6. The brassiere cup of claim 1, wherein the second material is fabric, polymer, or foam.

7. The brassiere cup of claim 1, wherein the at least one layer of first material is joined onto the 3D cup shaped member by sewing, fusing, fastening, adhering and/or molding.

8. The brassiere cup of claim 1, wherein the at least one layer of second material is joined onto the 3D cup shaped member by sewing, fusing, fastening, adhering and/or molding.

9. A method of manufacturing a brassiere cup comprising the steps of:
   (a) designing and shaping a 3D cup member according to a desired size and/or shape;
   (b) placing at least one layer of first and/or second material on the convex side of the 3D cup shaped member;
   (c) placing at least one layer of first and/or second material on the concave side of the 3D cup shaped member; and
   (d) sewing, fusing, fastening, adhering and/or molding the layer(s) of first and/or second material on the 3D cup shaped member to form the brassiere cup.

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