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KIM(10) **Pub. No.: US 2021/0007418 A1**(43) **Pub. Date: Jan. 14, 2021**(54) **VOLUME-ADJUSTABLE COMPENSATION
BRASSIERE**(52) **U.S. Cl.**CPC **A41C 3/0028** (2013.01)(71) Applicant: **Kwang Su KIM**, Seongnam-si (KR)(72) Inventor: **Kwang Su KIM**, Seongnam-si (KR)(21) Appl. No.: **16/853,755**(22) Filed: **Apr. 21, 2020**(30) **Foreign Application Priority Data**

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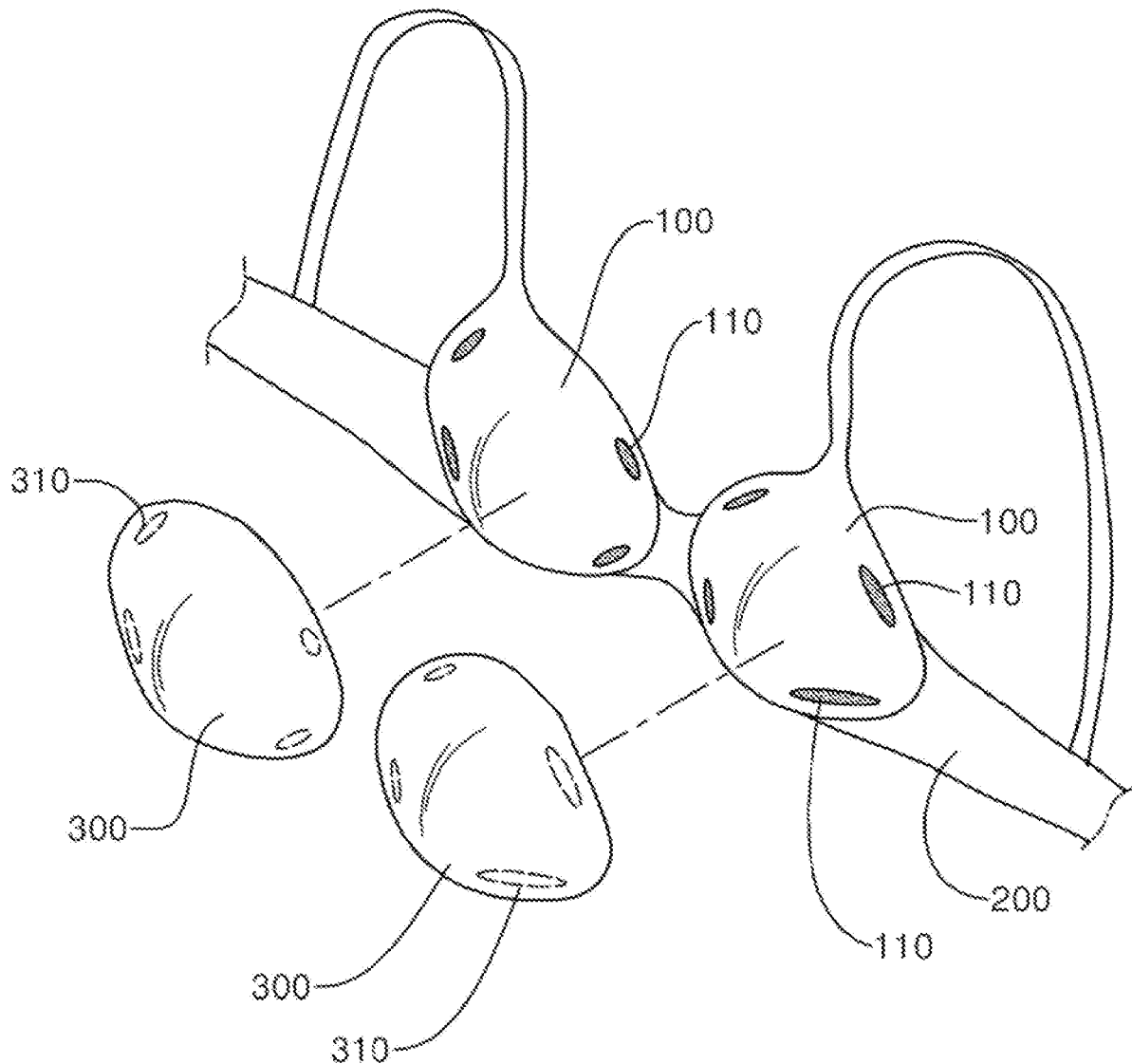
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ABSTRACT

The present invention relates to a volume-adjustable compensation brassiere that is configured such that a user can conveniently adjust the brassiere to a desired volume. The volume-adjustable compensation brassiere includes: a pair of bra cups formed by arc-shaped lines in a form surrounding the overall protruding breasts; and a wearing band configured to connect the bra cups, to be worn around the chest, and to be fastened at both ends thereof through hook-eye fastening. A plurality of first coupling means is formed on the front of each of the bra cups, and compensation covers are each teamed in a shape covering the overall front of a corresponding one of the bra cups and are each provided with second coupling means configured to be coupled with the first coupling means.



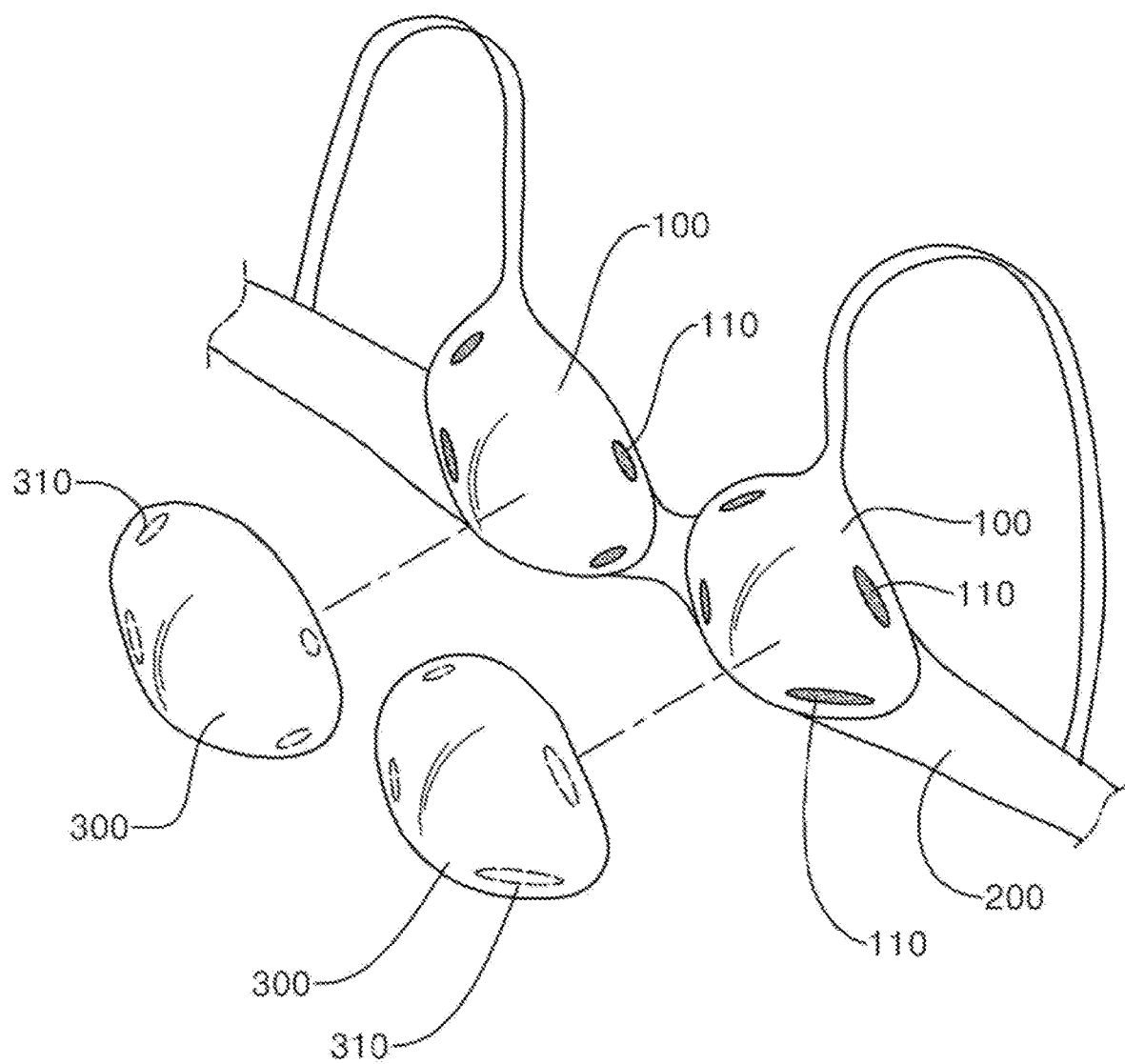


FIG. 1

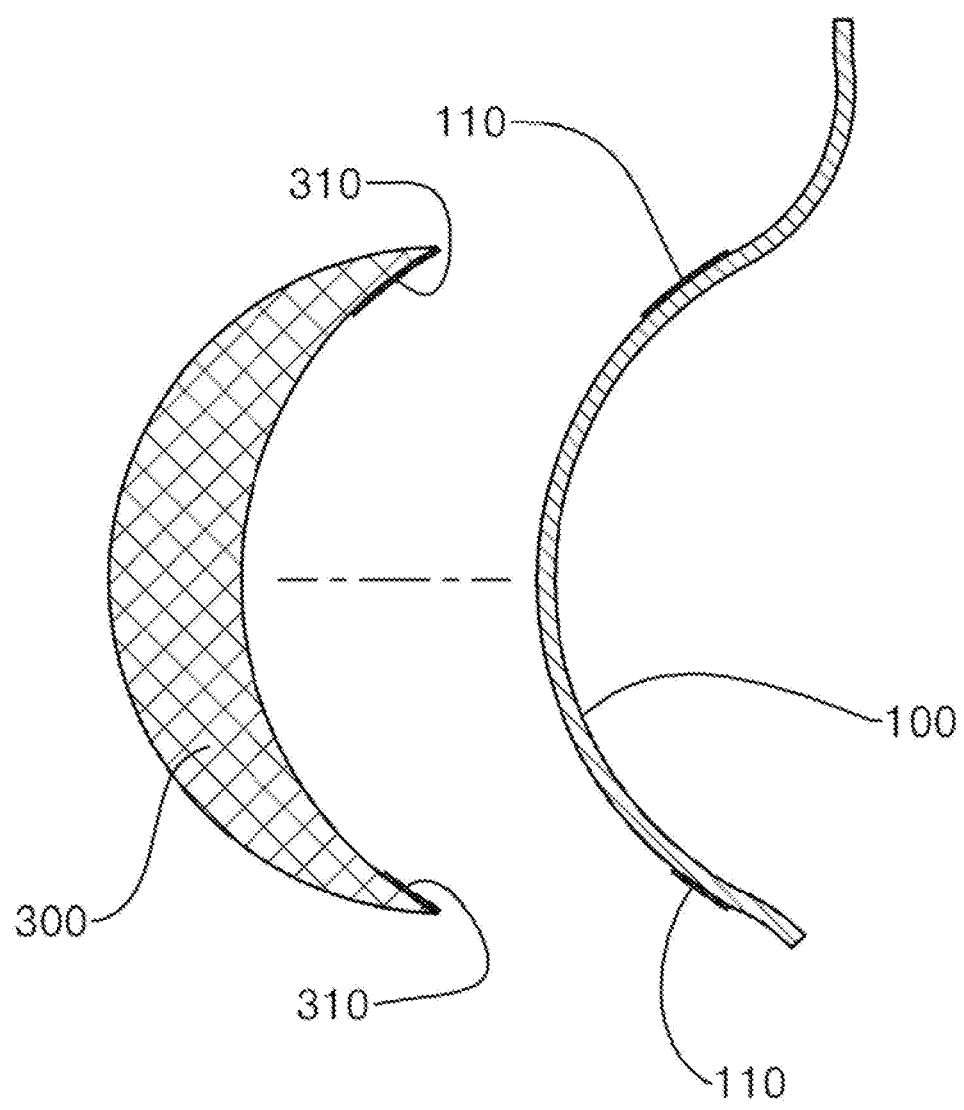


FIG. 2

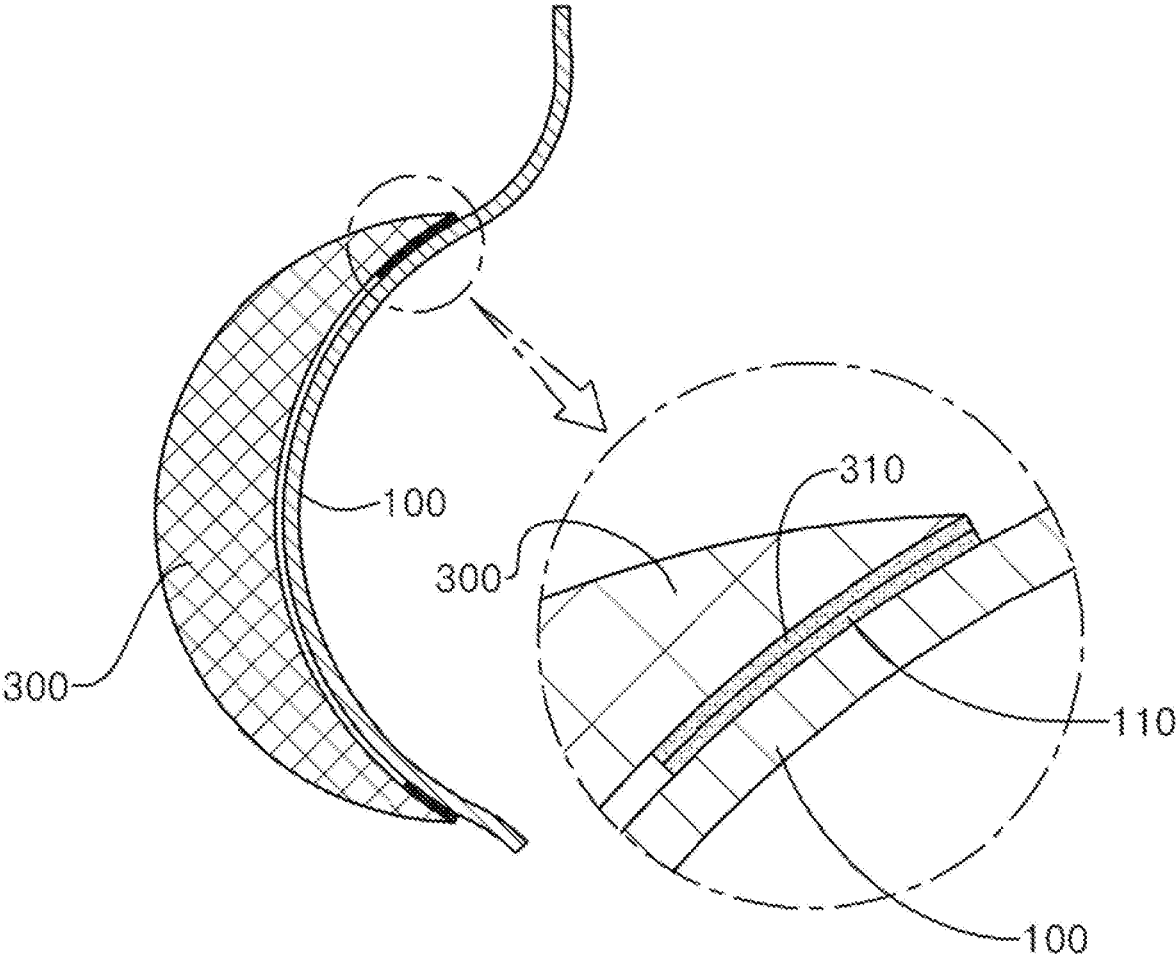


FIG. 3

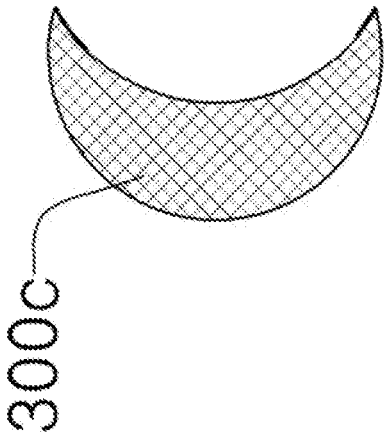


FIG. 4C

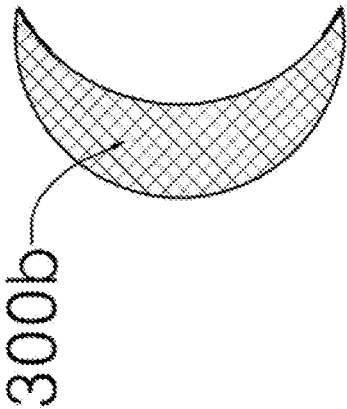


FIG. 4B

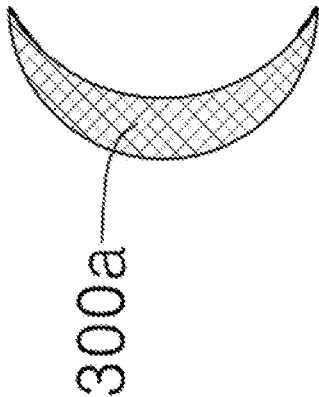


FIG. 4A

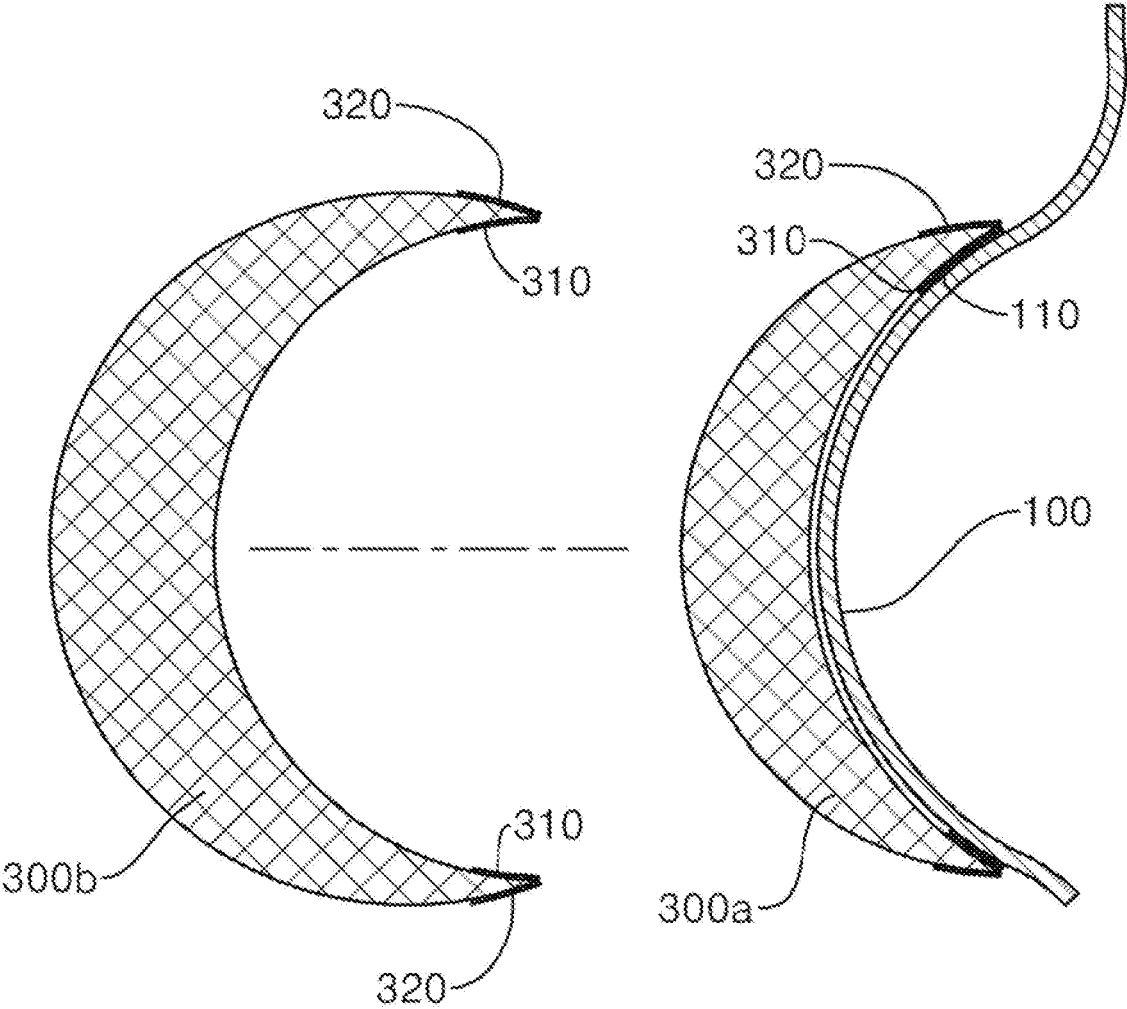


FIG. 5

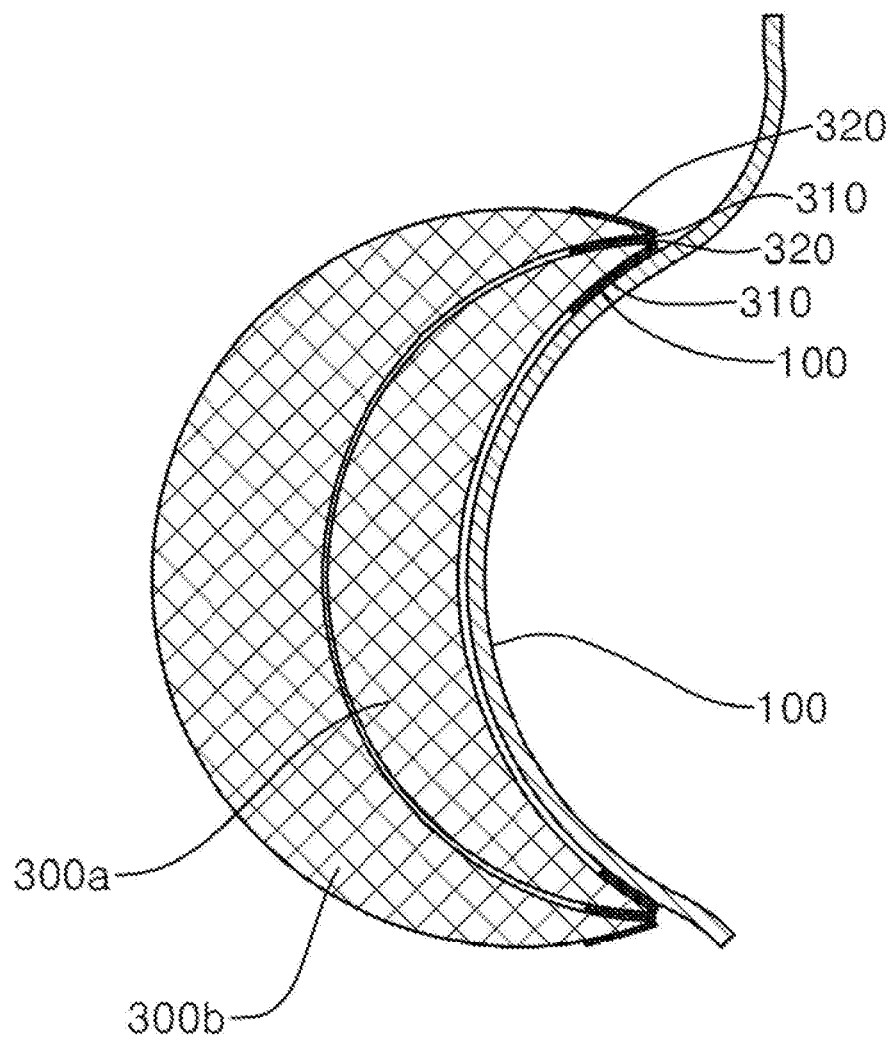


FIG. 6

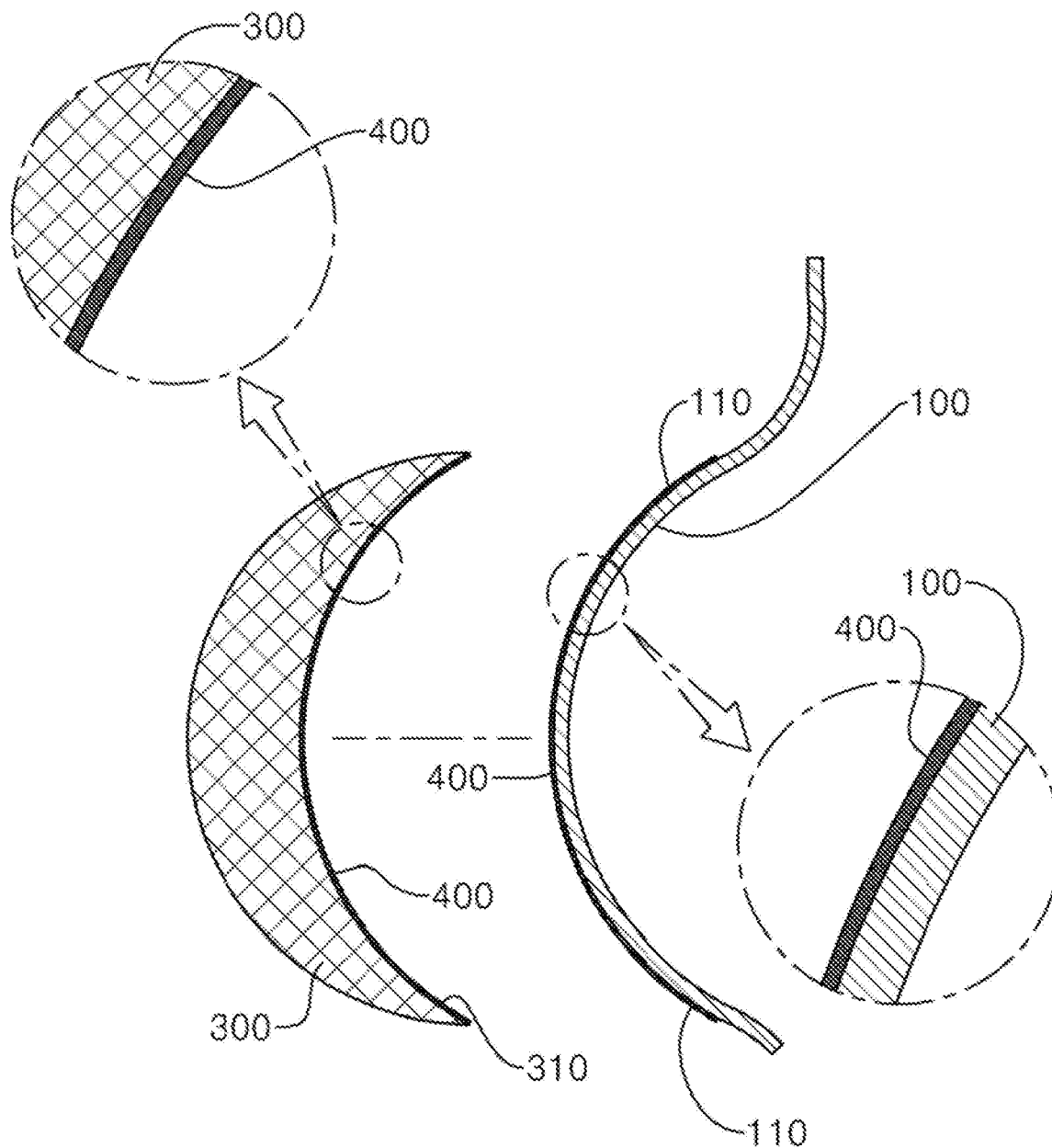


FIG. 7

VOLUME-ADJUSTABLE COMPENSATION BRASSIERE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the benefit of Korean Patent Application No. 10-2019-0083842 filed on May 11, 2019, which is hereby incorporated by reference herein in its entirety.

BACKGROUND OF INVENTION

Technical Field

[0002] The present invention relates generally to a volume-adjustable compensation brassiere, and more particularly to a volume-adjustable compensation brassiere that is configured such that a user who wears a brassiere can conveniently adjust the brassiere to a desired volume, thereby enabling the user to adjust a fit to suit clothes while removing the inconvenience caused by the wearing of separate pads and also increasing the confidence of a user by making her breasts appear as voluminous breasts.

Description of the Related Art

[0003] In general, a brassiere corresponds to an undergarment that is worn on a woman's upper body and functions to protect her breasts or shape her breasts. Such brassieres provide not only the functional effect of protecting or supporting the breasts but also the aesthetic effect of enhancing external beauty by increasing the volume of the breasts or having confidence in her body accordingly.

[0004] In recent years, although the number of surgical operations for inserting implants into the breasts in order to increase the volume of the breasts has increased, people are reluctant to such operations due to the cost of the operations and concerns about various side effects.

[0005] However, in the case where compensation pads are used, the compensation pads are inserted inside a brassiere, and thus a problem arises in that a user has a feeling of irritation caused by foreign objects. Furthermore, the pads need to be spread or seated according to the shape of the brassiere after being inserted, and thus a problem arises in that an insertion process is cumbersome. Accordingly, even when pads having various thicknesses are provided, a problem arises in that it is difficult for a user to easily replace existing pads with pads having a desired size.

[0006] Furthermore, due to the structural limitation in which the pads need to be inserted inside the brassiere, a problem arises in that the overall volume of the cup portions of the brassiere is not increased but only parts of the brassiere are protruded. Accordingly, in the case where pads having an excessive thickness are inserted, there arises the problem of looking unnatural. Furthermore, a problem arises in that a feeling of wearing is poor because the chest is pressed by the thickness increased due to the insertion of the pads.

[0007] As a related technology, Korean Patent No. 10-1778061 discloses a brassiere having volume pads, the brassiere including: an inner lining configured to come into close contact with the breasts of a person who wears the brassiere and to accommodate the breasts of the person and provided with a depression formed by depressing the center portion thereof, an outer layer configured to be mounted on

the outer side of the inner lining while accommodating the outer side of the inner lining; volume pads configured to be mounted between the inner lining and the outer layer in order to support and raise the breasts of the person who wears the brassiere; and two-layer inner volume pads configured to be mounted between the inner lining and the volume pads in order to separate the inner lining and the volume pads while supporting and raising the breasts of the person who wears the brassiere.

[0008] The related technology is configured in such a manner that the two-layer inner volume pads are provided between the outer layer and the inner lining. Accordingly, it is difficult to selectively attach and detach the volume pads as desired, and thus a problem arises in that it is difficult for a user to adjust the degree of the volume of the brassiere. Furthermore, the volume pads having a multilayer structure are fastened to each other, and thus a problem arises in that the volume pads are moved to one side when there is a run or a considerable movement.

[0009] Additionally, women's breasts may vary in size depending on their menstrual cycle, a change in their body weight, breastfeeding, or the like, and there is a need to vary the volume of the breast portions according to the concept of clothing. Accordingly, it will be apparent that the volume of the brassiere should be easily and instantaneously adjusted according to the above change.

SUMMARY OF INVENTION

[0010] The present invention has been conceived to overcome the above-described problems, and an object of the present invention is to provide a volume-adjustable compensation brassiere that enables a user to easily adjust the volume thereof to a desired size by adjusting the volume by an attachment method rather than by a volume adjustment method via the insertion of pads, thereby enabling the adjustment of the volume that is optimized for the concept of clothes or the body condition of a user.

[0011] According to an aspect of the present invention, there is provided a volume-adjustable compensation brassiere including: a pair of bra cups formed by arc-shaped lines in a form surrounding the overall protruding breasts; and a wearing band configured to connect the bra cups, to be worn around the chest, and to be fastened at both ends thereof through hook-eye fastening; wherein a plurality of first coupling means is formed on the front of each of the bra cups, and compensation covers are each formed in a shape covering the overall front of a corresponding one of the bra cups and are each provided with second coupling means configured to be coupled with the first coupling means.

[0012] The first coupling means of the bra cups and the second coupling means of the compensation covers may be each applied as any one of a Velcro tape, a button, and a hook-eye fastener.

[0013] The compensation covers may include first compensation covers, second compensation covers and third compensation covers having different thicknesses, and thus a user may select and couple the compensation covers having a desired thickness.

[0014] The thickness of the compensation covers may be adjusted by superimposing two or more of each of the first compensation covers, each of the second compensation covers, and each of the third compensation covers on each other in a longitudinal direction.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] The above and other objects, features, and advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which;

[0016] FIG. 1 is a perspective view showing a volume-adjustable compensation brassiere according to the present invention;

[0017] FIG. 2 is a sectional view showing an example of the coupling between a bra cup and a compensation cover according to the present invention;

[0018] FIG. 3 is a sectional view showing a state in which the bra cup and the compensation cover have been coupled to each other according to the present invention;

[0019] FIGS. 4(A), 4(B) and 4(C) are views showing first, second and third compensation covers having different thicknesses according to the present invention;

[0020] FIG. 5 is a sectional view showing an example in which first and second compensation covers are coupled to a bra cup according to the present invention;

[0021] FIG. 6 is a sectional view showing a state in which the first and second compensation covers have been coupled to the bra cup according to the present invention; and

[0022] FIG. 7 is a view showing still another embodiment in which resin coating layers are further formed on the portions where the bra cup and the compensation cover according to the present invention come into contact with each other.

DETAILED DESCRIPTION

[0023] Embodiments of the present invention will be described in detail below with reference to the accompanying drawings. Furthermore, in the following description of the present invention, when it is determined that a detailed description of a related well-known function or component may make the gist of the present invention unnecessarily obscure, the detailed description will be omitted.

[0024] As shown in FIG. 1, the present invention provides a volume-adjustable brassiere including: a pair of bra cups 100 formed by arc-shaped lines in a form that surrounds overall protruding breasts; and a wearing band 200 configured to connect the bra cups 100, to be worn around the chest, and to be fastened at both ends thereof through hook-eye fastening; wherein a plurality of first coupling means 110 is formed on the front of each of the bra cups 100, and compensation covers 300 are each formed in a shape covering the overall front of a corresponding one of the bra cups 100 and are each provided with second coupling means 310 configured to be coupled with the first coupling means 110.

[0025] The bra cups 100 are each configured in a form surrounding an overall portion protruding from the chest, i.e., an overall breast, and are each thinner than each of the compensation covers 300. Each of the bra cups 100 includes an inner lining, an outer layer, and a basic pad disposed therebetween. Since this sectional configuration corresponds to a general configuration, detailed descriptions thereof in the specification and detailed illustrations thereof in the drawings will be omitted.

[0026] The first coupling means 110 are formed on the front of each of the bra cups 100 corresponding to the outer side of the bra cup 100, and function to be coupled with the second coupling means 310 of a corresponding one of the

compensation covers 300 and fasten the compensation cover 300. The first coupling means 110 are formed at at least 4 or 5 spots on the front of the bra cup 100. The reason for this is that coupling force is weak when the number of coupling portions is excessively small and the inconvenience of coupling and separation is serious when the number of coupling portions is excessively large.

[0027] Furthermore, the coupling between the first coupling means 110 and the second coupling means 310 is preferably implemented by any one of a Velcro tape, a button (a snap button or a circular button), and a hook-eye fastener. A Velcro tape is preferably applied in order to facilitate the coupling and separation of the compensation covers 300 and to maintain a predetermined level of coupling force.

[0028] The second coupling means 310 are formed on the inner side of the compensation cover 300 according to the present invention, as described above. Furthermore, since the compensation covers 300 are thicker than the bra cups 100 and coupled in a form covering the overall fronts of the compensation covers 300, the compensation covers 300 are shown as the shapes of the bra cups 100 when they are coupled. Accordingly, an advantage arises in that a natural appearance is obtained even when the compensation covers 300 are coupled. When the color or pattern of the compensation covers 300 is different from that of the bra cups 100, it may be possible to have an effect of replacing underwear only by coupling the compensation covers 300.

[0029] FIGS. 2 and 3 are views showing an example of the coupling of the compensation covers 300 and a state in which the coupling of the compensation covers 300 has been completed. The compensation covers 300 are coupled in such a manner that the first coupling means 110 formed on the outer sides (fronts) of the bra cups 100 are coupled with the second coupling means 310 formed on the inner sides of the compensation covers 300. The coupling between the first coupling means 110 and the second coupling means 310 may be performed via any one of a Velcro tape, a button (a snap button or a circular button), and a hook-eye fastener. A Velcro tape is preferably applied in order to provide the convenience of the coupling of the compensation covers 300, as shown in the drawings.

[0030] As shown in FIG. 4, according to the present invention, the compensation covers 300 may include first compensation covers 300a, second compensation covers 300b, and third compensation covers 300c having different thicknesses, and thus a user may select and couple the compensation covers 300 having a desired thickness.

[0031] Additionally, as shown in FIGS. 5 and 6, the thickness of the compensation covers 300 may be adjusted by superimposing two or more of each of the first compensation covers 300a, each of the second compensation covers 300b, and each of the third compensation covers 300c on each other in a longitudinal direction. In other words, the volume may be adjusted by using only each of the first compensation covers 300a, by combining each of the second compensation covers 300b and each of the first compensation covers 300a and using them, or by combining each of the first compensation covers 300a, each of the second compensation covers 300b, and each of the third compensation covers 300c depending on the degree of adjustment of the thickness.

[0032] In order to combine the first, second and third compensation covers 300a, 300b and 300c, third coupling means 320 configured to be coupled with the second coupling

pensation covers **300b** need to be formed on the outer sides of the first compensation covers **300a**. Furthermore, it will be apparent that third coupling means **320** configured to be coupled with the third compensation covers **300c** are formed on the outer sides of the second compensation covers **300b** in the same manner.

[0033] FIG. 7 shows still another embodiment of the present invention, in which resin coating layers **400** are formed on the outer side of each of the bra cups **100** and the inner side of each of the compensation covers **300**, and thus the bra cups **100** and the compensation covers **300** come into close contact with each other and thus prevent a slip therebetween and increase coupling force. In other words, the remaining portions excluding the portions where the first coupling means **110** and the second coupling means **310** are coupled to each other may have low coupling force. Accordingly, this may be solved by further forming resin coating layers **400** having high frictional force on the portions, where coupling force is not applied, in order to compensate for the coupling force of the compensation covers **300**.

[0034] Additionally, when the resin coating layers **400** are formed throughout the overall corresponding surfaces of the bra cups **100** and the compensation covers **300**, air permeability may be deteriorated. Accordingly, it is preferable to circulate internal and external air while maintaining coupling force by forming a plurality of fine hole-shaped through holes (not shown) through each of the resin coating layers **400**.

[0035] Furthermore, the resin coating layers **400** are preferably applied in a transparent color in order to prevent the original designs and colors of the bra cups **100** and the compensation covers **300** from being spoiled.

[0036] According to the present invention, the first coupling means are formed on the fronts of bra cups and the second coupling means configured to be coupled with the first coupling means are formed on the compensation covers, and thus the compensation covers are coupled with the outsides of the bra cups, thereby providing the effect of facilitating coupling and separation and the effect of offering a comfortable fit.

[0037] Furthermore, the compensation covers according to the present invention are configured to compensate for the overall bra cups, and thus there provided the effect of

looking natural when a user wears clothes even when the thickness of the brassiere is increased.

[0038] Although the above description has been given with reference to the embodiments of the present invention, various modifications may be made without departing from the scope of the technical spirit of the present invention

What is claimed is:

1. A volume-adjustable compensation brassiere comprising:

a pair of bra cups (**100**) formed by arc-shaped lines in a form surrounding overall protruding breasts; and

a wearing band (**200**) configured to connect the bra cups (**100**), to be worn around a chest, and to be fastened at both ends thereof through hook-eye fastening;

wherein a plurality of first coupling means (**110**) is formed on a front of each of the bra cups (**100**), and compensation covers (**300**) are each formed in a shape covering the overall front of a corresponding one of the bra cups (**100**) and are each provided with second coupling means (**310**) configured to be coupled with the first coupling means (**110**).

2. The volume-adjustable compensation brassiere of claim 1, wherein the first coupling means (**110**) of the bra cups (**100**) and the second coupling means (**310**) of the compensation covers (**300**) are each applied as any one of a Velcro tape, a button, and a hook-eye fastener.

3. The volume-adjustable compensation brassiere of claim 1, wherein the compensation covers (**300**) comprise first compensation covers (**300a**), second compensation covers (**300b**), and third compensation covers (**300c**) having different thicknesses, and thus a user selects and couples the compensation covers (**300**) having a desired thickness.

4. The volume-adjustable compensation brassiere of claim 3, wherein a thickness of the compensation covers (**300**) is adjusted by superimposing two or more of each of the first compensation covers (**300a**), each of the second compensation covers (**300b**), and each of the third compensation covers (**300c**) on each other in a longitudinal direction.

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