

[DESCRIPTION]

[TITLE OF INVENTION]

BRASSIERE

[Technical Field]

5 [0001]

The present invention relates to a brassiere.

[Background Art]

[0002]

Conventionally, a brassiere of a half-top type utilizing elastic cloth has been
10 provided. Since a brassiere of the half-top type has less feeling of pressure during
wearing, it is widely used as a first brassiere for growing girls and for sports.

[0003]

There are cases in which a pad is provided in a cup part of a brassiere. For
example, a brassiere in which an outer cloth and an inner cloth are superposed to form a
15 cup part and a pad is accommodated between the two cloths has been proposed (see
Patent Literature 1). Since a bust top can be covered with the pad, a bust that shakes
during exercise also can be supported steadily.

[Citation List]

[Patent Literature]

20 [0004]

[Patent Literature 1]

Japanese Patent Laid-open No. 2001-303309

[Summary of Invention]

[Technical Problem]

25 [0005]

However, when a pad is merely accommodated between two cloths, the pad may be easily moved and the pad may become bent during washing. A position of the pad may become significantly deviated from the bust during intense exercise. A shape and a position of the pad may have to be adjusted occasionally, and this causes inconvenience.

5 [0006]

It is also possible to fix a pad to a cup part by sewing bust circumferences of two cloths accommodating the pad or adhering the pad to the cup part with an adhesive.

[0007]

However, since the pad moves in a front-rear direction, busts of different sizes
10 can be supported by one pad. When a position of the pad is fixed, movement of the pad in the front-rear direction is also limited, and therefore it is necessary to provide pads of different sizes in advance according to several sizes of busts.

[0008]

Also, when an adhesive is used, the softness of the pad may be impaired by
15 hardening of the adhesive, and a wearer may feel a sense of discomfort.

[0009]

An objective of the present invention is to provide a brassiere that can support busts of different sizes and has excellent comfort during wearing.

[Solution to Problem]

20 [0010]

In one aspect of the present invention, a brassiere (1), in which a pad (6) is provided in each of a pair of cup parts (2) covering a bust, includes a plurality of first connection parts (7) having a fixed length. The pad (6) is fixed to the cup part (2) via the plurality of first connection parts (7), and all or a part of the plurality of first
25 connection parts (7) are elastic members.

[Advantageous Effects of Invention]

[0011]

According to the present invention, it is possible to provide a brassiere that can support busts of different sizes and has excellent comfort during wearing.

5 [Brief Description of Drawings]

[0012]

Fig. 1 is a perspective view illustrating an external appearance of a brassiere of the present embodiment.

Fig. 2 is a cross-sectional view illustrating a configuration of a front body.

10 Fig. 3 is a plan view illustrating the brassiere from which a lining has been removed viewing the inner side.

Fig. 4 is a plan view illustrating a modified example of the brassiere.

[Description of Embodiments]

[0013]

15 Hereinafter, embodiments of a brassiere of the present invention will be described with reference to the drawings. A configuration described below is one embodiment of the present invention, and the present invention is not limited thereto.

[0014]

In the following description, upward means a direction Y1 in the drawings and
20 downward means a direction Y2 in the drawing. Also, right means a direction X1 in the drawings, and left means a direction X2 in the drawings. Forward from a wearer means a direction Z1 and rearward from a wearer means the direction Z2.

[0015]

(Brassiere)

25 Fig. 1 is a perspective view illustrating an external appearance of a brassiere 1 of

one embodiment of the present invention.

As illustrated in Fig. 1, the brassiere 1 includes a pair of cup parts 2, a back-surface part 3 and a pair of shoulder parts 4.

[0016]

5 The cup parts 2 cover a bust of a wearer. The back-surface part 3 extends from both left and right armpits of the cup parts 2 to a back surface of the wearer to cover the back surface. The shoulder parts 4 connect the cup parts 2 and the back-surface part 3 and are hung on the left and right shoulders of the wearer.

[0017]

10 The brassiere 1 can be formed by connecting, for example, shoulders and armpits of a front body 51 and a back body 52 each having a neckline and an armhole. Positions of lower ends of the front body 51 and the back body 52 may be referred to as, for example, a lower side of the bust.

[0018]

15 Fig. 2 illustrates a configuration of the front body 51. Fig. 2 is a cross-sectional view along line A-A in Fig. 1.

As illustrated in Fig. 2, the front body 51 includes an outer fabric 51A and a lining 51B.

[0019]

20 Shapes of the outer fabric 51A and the lining 51B are the same, and necklines, armholes, armpits, and lower ends thereof are sewn together. The lining 51B is positioned on an inner side which is in contact with the wearer, and the outer fabric 51A is positioned on an outer side opposite to the wearer.

[0020]

25 Materials of the front body 51 and the back body 52 preferably have flexibility

and elasticity. Thereby, it is easy for the wearer to move and comfort is enhanced.

Also, a material having sweat absorbency improves comfort during wearing and is also preferable. As such a material, for example, cotton, acrylic, nylon, polyurethane, or the like may be exemplified.

5 [0021]

The brassiere 1 of the present embodiment includes an elastic member 53 such as a rubber provided at the lower ends of the front body 51 and the back body 52. The elastic member 53 facilitates fitting of the brassiere 1 to the wearer's body.

[0022]

10 Fig. 3 illustrates the brassiere 1 from which the lining 51B has been removed viewing the inner side that is in contact with the wearer.

As illustrated in Fig. 3, the brassiere 1 includes a pad 6, a plurality of first connection parts 7, and a second connection part 8 between the outer fabric 51A and the lining 51B of the cup parts 2.

15 [0023]

(Pad)

Although the pad 6 of the present embodiment has a triangular shape, the pad 6 may have a shape in which left or right corner portions of the triangular shape extend to the armpit side to cover not only the bust but also a part of the armpit. According to
20 such a shape, a vicinity of the armpit in which lymph glands are present can also be supported by the pad 6, and comfort of a wearer in a growth phase is particularly improved.

[0024]

Further, the shape of the pad 6 is not particularly limited as long as it can cover
25 the bust. For example, the pad 6 may have a simple triangular shape, a circular shape,

an elliptical shape, a rectangular shape, a lemon shape, or the like, or may have an irregular shape.

[0025]

As illustrated in Fig. 2, when the pad 6 has a convex shape that curves with a top 6a as a center, the pad 6 fits a shape of the bust and the supportability is improved.

[0026]

As a material of the pad 6, a material having softness and elasticity such as, for example, urethane, silicon, or cotton can be used.

[0027]

10 (First connection part)

The pad 6 is fixed to the cup part 2 via the plurality of first connection parts 7. In the present embodiment, one end portions of the plurality of first connection parts 7 are sewn to the pad 6 and the other end portions thereof are sewn to the cup part 2, and thereby the pad 6 is fixed to the cup part 2.

15 [0028]

Since the pad 6 is fixed at a plurality of positions, bending of the pad 6 and positional deviation of the pad 6 from a bust position can be effectively curbed during washing or exercise. Since an adhesive is not used for fixing, the pad 6 can also be prevented from being hardened by the adhesive, and comfort during wearing is

20 improved.

[0029]

The first connection part 7 has a fixed length d1. The pad 6 is fixed to the cup part 2 at a position away from the cup part 2 by the length d1. Therefore, the pad 6 is movable within a fixed range while being fixed to the cup part 2.

25 [0030]

For example, the pad 6 is movable in a front-rear direction (direction Z1 and direction Z2) with respect to the wearer according to a bust size of the wearer.

Therefore, the pad 6 is movable forward in a case of a large bust size, and busts of different sizes can be supported by one-size pad 6.

5 [0031]

Also, the pad 6 is also movable in a vertical direction (direction Y1 and direction Y2) and a lateral direction (direction X1 and direction X2) conforming to a bust that shakes during exercise. Therefore, the brassiere 1, which allows the wearer to move easily and has excellent comfort, can be provided.

10 [0032]

The length d1 from the end portion of the first connection part 7 on the pad 6 side to the end portion thereof on the cup part 2 side can be set as appropriate in consideration of an allowable movable range of the pad 6. The length d1 of each first connection part 7 may be the same as or different from each other.

15 [0033]

All or a part of the plurality of first connection parts 7 are elastic members.

The first connection part 7, which is the elastic member, allows the pad 6 to move the length d1 of the first connection part 7 or more, and thus supportability for the bust is enhanced. Also, since the length d1 of the first connection part 7, which is an elastic

20 member, can be reduced, a sense of discomfort due to slackening thereof can be reduced, and comfort can be enhanced.

[0034]

The number of first connection parts 7 is preferably three or more. When the number is three or more, the pad 6 is easily fixed and does not easily bend. The number

25 of first connection parts 7 in the present embodiment is five.

[0035]

The plurality of first connection parts 7 are preferably disposed at positions in which a length (distance) d_2 of a perpendicular line from a center of a line connecting two adjacent first connection parts 7 to an end portion of the pad 6 is 1 cm or less.

- 5 Thereby, the number of the first connection parts 7 disposed can be reduced while effectively suppressing bending of the pad 6.

[0036]

Although the first connection parts 7 of the present embodiment are each a tape member, the first connection part 7 is not limited to a tape form and may be another form as long as it has a fixed length d_1 .

10

[0037]

(Second connection part)

A pair of pads 6 are connected to each other via the second connection part 8.

In the present embodiment, the pads 6 are connected by sewing both ends of the second connection part 8 onto end portions of the pads 6 on a front center M side.

15

[0038]

Bending of the pads 6 on the front center M side can be prevented by the connection. Also, since the pads 6 are fixed to each other, positional deviation of each of the pads 6 toward the armpit side can be curbed.

20

[0039]

Since the second connection part 8 has a fixed length d_3 , the pads 6 are each movable within a fixed range while being fixed to each other. The pads 6 are movable according to a size or movement of the bust. Therefore, busts of different sizes can be supported by one-size pad 6, and the brassiere 1 that allows easy movement of the wearer and is comfortable can be provided.

25

[0040]

When a position of the second connection part 8 in the vertical direction is close to the top 6a, rotation of the pad 6 is more easily curbed.

[0041]

- 5 The length d3 from an end portion of the second connection part 8 on the left cup part 2 side to an end portion thereof on the right cup part 2 side can be set as appropriate in consideration of an allowable movable range of the pads 6.

[0042]

- 10 The second connection part 8 may or may not be an elastic member. As the elasticity of the second connection part 8 increases, it becomes easier for the pad 6 to move and it becomes easier for the wearer to move. On the other hand, as the elasticity decreases, it becomes easier to suppress positional deviation of the pad 6 to the armpit side.

[0043]

- 15 The second connection part 8 of the present embodiment is a tape member, but the form is not limited thereto as long as it has a fixed length d3.

[0044]

- 20 When the pads 6 are fixed via the second connection part 8, the first connection part 7 and the second connection part 8 adjacent to each other are preferably disposed at positions in which a length (distance) d2 of a perpendicular line from a center of a line connecting the first connection part 7 and the second connection part 8 to an end portion of the pad 6 is 1 cm or less. Thereby, the number of first connection parts 7 disposed can be reduced while effectively suppressing bending of the pad 6.

[0045]

- 25 In the present embodiment, a position of the pad 6 is fixed in six directions by

five first connection parts 7 and one second connection part 8. The length d2 of the perpendicular line from the line connecting two adjacent connection parts is 1 cm or less. Therefore, there is little room for the pad 6 to bend.

[0046]

5 Further, the number and positions of the first connection parts 7 can be set according to a shape and size of the pad 6. For example, in a case of a circular pad, the number of first connection parts 7 can be set to three. Even with the same circular shape, when a size of a bust is large, the number of first connection parts 7 may be set to five.

10 [0047]

Also, the number of second connection parts 8 is not limited to one and may be a plural number.

[0048]

The first connection parts 7 and the second connection part 8 of the present
15 embodiment are separate members from the pad 6 but may be an integrated member with respect to the pad 6.

[0049]

Fig. 4 illustrates an example of a brassiere 1B in which the second connection part 8 is a part of the pad 6.

20 In a pad 6B illustrated in Fig. 4, left and right circular pad portions 61 and a second connection part 8B connecting the pad portions 61 are configured by one member.

[0050]

In the case of the pad 6B illustrated in Fig. 4, bending on the front center M side
25 is small. Therefore, the number of first connection parts 7 can be reduced and, for

example, three first connection parts 7 may be disposed on the armpit side.

[0051]

As described above, in the brassiere 1 of the present embodiment, the pad 6 is fixed to the cup part 2 by the plurality of first connection parts 7. Therefore, bending and positional deviation of the pad 6 can be reduced. Also, an adhesive is not used to fix the pad 6 so that softness of the pad 6 can be maintained.

[0052]

Since the first connection parts 7 have the fixed length d1 and all or a part of the plurality of first connection parts 7 are elastic members, the pad 6 is movable within a fixed range while being fixed. Therefore, the pad 6 can move in a front-rear direction to support busts of different sizes. Also, since the pad 6 can be moved in a vertical direction or a lateral direction according to a bust, a fitting feeling is enhanced and comfort during wearing is enhanced.

[0053]

While preferred embodiments of the present invention have been described above, the present invention is not limited to these embodiments, and various variations and modifications can be made within the scope of the gist of the present invention.

[0054]

For example, the present invention can be applied not only to a brassiere but also to any garment as long as it has cup parts that support a bust of a wearer and can shape a bust such as shape retaining, shape forming, or the like with a pad. As such a garment, for example, a body suit, a three-in-one, a leotard, or swimming wear can be exemplified in addition to a tank top, a slip, a camisole, and a dress which have cups.

[0055]

Priority is claimed on Japanese Patent Application No. 2019-173864, filed in

Japan on September 25, 2019, and all the contents described in the Japanese patent application are incorporated herein by reference.

[Reference Signs List]

[0056]

- | | |
|----|--------------------------|
| 5 | 1 Brassiere |
| | 2 Cup part |
| | 6 Pad |
| | 7 First connection part |
| | 8 Second connection part |
| 10 | 51 Front body |
| | 51A Outer fabric |
| | 51B Lining |

[CLAIMS]

[Claim 1]

A brassiere (1), in which a pad (6) is provided in each of a pair of cup parts (2) covering a bust, comprising:

- 5 a plurality of first connection parts (7) having a fixed length,
 wherein the pad (6) is fixed to the cup part (2) via the plurality of first
connection parts (7), and
 all or a part of the plurality of first connection parts (7) are elastic members.

[Claim 2]

- 10 The brassiere (1) according to claim 1,
 wherein the number of first connection parts (7) is three or more.

[Claim 3]

- The brassiere (1) according to claim 1 or 2,
 wherein the pad (6) fixed to the cup part (2) is movable in a front-rear direction
15 with respect to a wearer of the brassiere (1).

[Claim 4]

 The brassiere (1) according to any one of claims 1 to 3,
 wherein the plurality of first connection parts (7) are sewn to the pad (6) and the
cup part (2).

- 20 [Claim 5]

 The brassiere (1) according to any one of claims 1 to 4, comprising:
 a second connection part (8) having a fixed length,
 wherein the pads (6) are connected to each other via the second connection part
(8).