A clothing end part structure (10) of the present invention has block-like second regions (11) that expand or contract at a second elongation in a length direction of an end part, and block-like first regions (12) that expand or contract at a first elongation that is lower than the second elongation, in the length direction of the end part. The second regions and the first regions are disposed alternately in the length direction of the end part.
Fig. 4
CLOTHING END PART STRUCTURE, BOTTOM CLOTHING, CLOTHING WITH CUPS, AND STRUCTURE OF CLOTHING WITH CORRECTIVE FUNCTION

TECHNICAL FIELD

[0001] The present invention relates to a clothing end part structure, a bottom clothing, a clothing with cups, and a structure of clothing with a corrective function.

BACKGROUND ART

[0002] Among bottom clothes, there is a pair of shorts (a pair of panties) comprising the body parts formed with an elastic fabric and having a waist power fabric stitched to the front body part on the skin side (see Patent Literature 1, for example). This pair of shorts disclosed in Patent Literature 1 not only enhances the strength of the waist band to shape the abdomen but also improves the durability of the waist band.

[0003] Another type of bottom clothing is a girdle in which only the either side of the waist section is provided with a fabric material having elasticity different from that of the other parts of the girdle (see Patent Literature 2, for example). This girdle disclosed in Patent Literature 2 is so configured as to be able to reduce constriction of the body textiles.

[0004] Among upper body clothes, there is women’s underwear in which a brassiere part and waist upper part are integrated (see Patent Literature 3, for example). The underwear disclosed in Patent Literature 3 is provided with a plurality of cores (bones) extending in the length direction, improving the correction effect of the underwear.

CITATION LIST

Patent Literature


SUMMARY OF INVENTION

Technical Problem

[0008] An upper end section (an end part structure) on the waist of a bottom clothing is, normally, designed to pass through the girth section near the bellybutton. The girth section near the bellybutton is located between each upper end part of the pelvis and the ribs, into which the clothing constricts more easily compared to the part around the pelvis or ribs. In the conventional bottom clothes, it is difficult to form a beautiful line of the lower body of a wearer when the bottom clothes are put on the wearer, because constriction of the end parts between the pelvis and the ribs causes the flesh to bulge out at the both sides and around the abdomen.

[0009] For example, a bottom clothing with a corrective function provides a greater pressure than a bottom clothing without a corrective function and is therefore likely to cause end parts thereof to constrict a body part of the wearer, as described above.

[0010] In addition, regarding a brassiere (a clothing with cups), base the portions thereof that extend from the cup parts to the underarms of the wearer and the end part structures configured by the rubber-finished upper and lower sides of the back parts are likely to constrict the bust of the wearer wearing the brassiere, as with the bottom clothing end part structure described above. Such constriction occurs similarly at the end parts of other clothing as well. Such constriction makes it difficult to create a beautiful line of the body of the wearer.

[0011] The present invention was contrived in order to solve these problems, and an object thereof is to provide a clothing end part structure capable of reducing constriction caused on a wearer’s body while keeping an adequate amount of pressure, a bottom clothing with this end part structure, a clothing with cups having this end part structure, and a clothing having a corrective function.

Solution to Problem

[0012] A clothing end part structure according to the present invention is formed such that a clothing main body is in close contact with a skin by being stretched out when worn so as to be retained in a predetermined worn state, and has a base part. The base part at least partially has a constriction reduction structure. The constriction reduction structure is formed by first regions with low elasticity and second regions with elasticity higher than that of the first regions. The constriction reduction structure is formed by at least three of the first regions provided in parallel along a length direction of the base part, and two of the second regions individually formed therebetween.

[0013] Stretching out a general clothing end part structure in a length direction in a worn state reduces the thickness of the fabric of the clothing, and reduces the width in a direction intersecting with the length direction, resulting in folding the clothing. This is what causes the folded part of the clothing to constrict the body part of the wearer.

[0014] According to the clothing end part structure of the present invention, on the other hand, in a worn state, even when the first regions with high elasticity are stretched out in the length direction and consequently the fabric of the clothing becomes thin, the second regions with low elasticity that are provided adjacent to the first regions are not stretched out as much as the first regions. For this reason, the thickness of the second regions does not change much, and the width in a direction intersecting with the length direction is not reduced much, preventing the folding described above.

[0015] Therefore, even when the first regions are stretched, the stiffness or rigidity of the second regions adjacent to the first regions can reduce the possibility of the first regions being folded. As a result, the clothing end part structure according to the present invention can alleviate the sense of discomfort of the constriction on the wearer while keeping an adequate amount of pressure.

[0016] The clothing end part structure of the present invention may be an end part structure to form a finished waist seam in a lower body clothing, and the constriction reduction structure may be provided in at least right and left sides of the finished waist seam. According to such a configuration, the right and left sides of the finished waist seam of the lower body clothing, which are likely to constrict the waist of the wearer, can be inhibited from constricting the waist of the wearer.

Advantageous Effects of Invention

[0017] The present invention can provide a clothing end part structure, a bottom clothing, a clothing with cups, and a
clothing with a corrective function which are capable of alleviating the sense of discomfort of the constriction on a wearer while keeping an adequate amount of pressure.

BRIEF DESCRIPTION OF DRAWINGS

[0018] FIG. 1 is a side view showing a state in which a bottom clothing with an end part structure according to a first embodiment of the present invention is put on a wearer;

[0019] FIG. 2(a) is a diagram showing the end part structure, elongated, according to the embodiment of the present invention, and FIG. 2(b) is a diagram showing a conventional end part structure, elongated;

[0020] FIG. 3(a) is a schematic diagram showing a distribution of pressure acting on the waist of the wearer wearing a bottom clothing according to the embodiment of the present invention, and FIG. 3(b) is a schematic diagram showing a distribution of pressure acting on the waist of the wearer wearing a conventional bottom clothing;

[0021] FIGS. 4(a) and 4(b) are diagrams each showing a state in which the bottom clothing according to the embodiment of the present invention is put on the wearer, and FIGS. 4(c) and 4(d) are diagrams each showing a state in which the conventional bottom clothing is put on the wearer;

[0022] FIGS. 5(a), 5(b) and 5(d) show a state in which the end part structure according to the embodiment of the present invention is elongated, and FIG. 5(c) show a state in which the conventional end part structure is elongated;

[0023] FIG. 6 is a rear view showing a state in which the bottom clothing with an end part structure according to a second embodiment of the present invention is put on the wearer;

[0024] FIG. 7 is an enlarged view showing the end part structure of the bottom clothing according to the second embodiment of the present invention;

[0025] FIG. 8 is a perspective view showing a clothing with cups according to a third embodiment of the present invention;

[0026] FIG. 9 is a perspective view showing a modification of the clothing with cups according to the third embodiment of the present invention; and

[0027] FIG. 10 is a front view of a waist nipped according to a fourth embodiment of the present invention.

DESCRIPTION OF EMBODIMENTS

[0028] Preferred embodiments of the present invention are described hereinafter in detail with reference to the accompanying drawings. The terms indicating such directions as “upper,” “lower” and the like are based on the conditions illustrated in the drawings and used herein for the sake of convenience.

[0029] First, a clothing end part structure 10 according to a first embodiment of the present invention is described. As shown in FIG. 1, the clothing end part structure according to the present embodiment is adopted as a tape part 10 forming the waist-side edge of a bottom clothing 20 such as a pair of spats. Examples of the bottom clothing include leggings, girdles, spats, athletic tights, pants, and swimwear.

[0030] The bottom clothing 20 has a main body textile 21 (clothing main body) formed so as to cover at least part of the lower body of the wearer 100, and the tape part 10 (base part) being an end part adjacent to the main body textile 21 and forming a rim of an opening of an upper end section 20a for inserting the waist (hip) of the wearer 100. The tape part 10 is in the shape of a band that has a predetermined length in a width direction intersecting with a length direction. The length of the tape part 10 in the width direction W (see FIG. 2) in the present embodiment is, for example, approximately 40 mm when the bottom clothing 20 is placed flat where no tightening force acts thereon.

[0031] The main body textile 21 has a front body part covering the front side of the lower body of the wearer 100 and a back body part covering the back of the lower body of the wearer 100. The main body textile 21 is made of elastic material. In the state in which the bottom clothing 20 is put on the wearer 100, the main body textile 21 may or may not tightly be attached to the wearer 100.

[0032] The tape part 10 has a block-like high-elasticity part 11 (second region) that expands or contracts at a second elongation in a circumferential direction D1 (a length direction of the end part) of the opening of the upper end section 20a and a block-like low-elasticity part 12 (first region) that expands or contracts at a first elongation that is lower than the second elongation, in the circumferential direction of the opening. Twelve to fourteen of these high-elasticity parts 11 and low-elasticity parts 12 are disposed alternately in the circumferential direction D1 of the opening throughout the entire circumference of the upper end section 20a to form a constriction reduction structure 13.

[0033] The present embodiment describes the example in which the number of high-elasticity parts 11 and low-elasticity parts 12 is twelve to fourteen; however, the present invention is not limited to this configuration. For instance, the number of high-elasticity parts 11 and low-elasticity parts 12 may be set appropriately in accordance with the specification of the tape part 10 and the degrees of elongation of the low-elasticity parts 12 and the high-elasticity parts 11. Note that only the tape part 10 (the end part structure, the base part) may be in close contact with the wearer when the bottom clothing 20 is put on the wearer. In addition, the tape part 10 may tightly be attached directly to the skin of the wearer or indirectly thereto through a different textile.

[0034] The present embodiment describes the example in which the constriction reduction structure 13 is provided over the entire circumference of the upper end section 20a; however, the present invention is not limited to this configuration. For instance, the constriction reduction structure 13 may be formed only in a certain region, such as both right and left sides of the upper end section 20a, which are likely to constrict the waist of the wearer. For example, the constriction reduction structure 13 may include at least three of the low-elasticity parts 12 and two of the high-elasticity parts 11 which can be disposed so as to alternate with the three low-elasticity parts 12. In such a case as well, these high-elasticity parts 11 can be designed not to be easily folded.

[0035] The low-elasticity parts 12 are disposed at equal intervals in the circumferential direction D1 of the opening of the upper end section 20a. However, the low-elasticity parts 12 may not necessarily be disposed at equal intervals in the circumferential direction D1 of the opening of the upper end section 20a. For example, the space between the low-elasticity parts 12 may be made narrower in each of the sides of the tape part 10 that has a high curvature, than in front and back portions of the tape part 10 having a low curvature. The number of low-elasticity parts 12 to be disposed can be increased at the high-curve sections.

[0036] As shown in FIG. 2, the high-elasticity parts 11 and the low-elasticity parts 12 are formed in the area between an
upper end 10a and a lower end 10b of the tape part 10 in the width direction W. In the state in which the bottom clothing 20 is placed flat where no tightening force acts thereon, the high-elasticity parts 11 and the low-elasticity parts 12 are disposed in such a manner that trapezoids of the same shape are alternately inverted. The shapes of the high-elasticity parts 11 and the low-elasticity parts 12 do not have to be identical. The width of each of the high-elasticity parts 11 may vary depending on, for example, the circumferential positions thereof. The same is true for the low-elasticity parts 12.

The block-like high-elasticity parts 11 and low-elasticity parts 12 are in the shape of, for example, a trapezoid when no tightening force acts on the bottom clothing 20. In each of the trapezoidal low-elasticity parts 12, a shorter side 12a of the two parallel sides is disposed at the upper end 10a of the tape part 10, whereas a longer side 12b of the two parallel sides is disposed at the lower end 10b of the tape part 10. On the other hand, in each of the trapezoidal high-elasticity parts 11, a shorter side 11a of the two parallel sides is disposed at the lower end 10b of the tape part 10, whereas a longer side 11b of the two parallel sides is disposed at the upper end 10a of the tape part 10. Due to this configuration, the upper end 10a is more elastic than the lower end 10b.

The term “block-like” applies to any shape that has a predetermined area. Furthermore, depending on the specification, the shorter sides 12a of the low-elasticity parts 12 may be disposed at the lower end 10b of the tape part 10, and the longer sides 12b of the low-elasticity parts 12 at the upper end 10a of the tape part 10.

As shown in FIG. 2, the low-elasticity parts 12 are formed by adhering (applying) resin 14 to the textile constructing the tape part 10. For this reason, the low-elasticity parts 12 have lower elongation than the high-elasticity parts 11 to which resin is not adhered.

Because the low-elasticity parts 12 are formed by adhering the resin 14 to the textile of the tape part 10, the low-elasticity parts 12 are harder than the high-elasticity parts 11 to which resin is not adhered. Due to the low elongation and high hardness of the low-elasticity parts 12, the low-elasticity parts 12 are formed so as not to be deformed as compared to the high-elasticity parts 11. The low-elasticity parts 12 function as a core in the tape part 10 to provide a so-called bone effect for reducing the possibility of the tape part 10 being folded.

The method for forming the low-elasticity parts 12 is not limited to the one in which dot-like resin is adhered to the tape part, and therefore other methods can be employed. For example, the low-elasticity parts 12 that are less elastic than the high-elasticity parts 11 may be formed by stitching a patch on the textile of the tape part 10.

The low-elasticity parts 12 having lower elongation than the high-elasticity parts 11 may be formed by changing the degrees of elongation of the high-elasticity parts 11 and the low-elasticity parts 12 by means of a method for changing a knitting structure. The low-elasticity parts 12 may also be formed by switching the degrees of elongation between a knitted fabric constructing the high-elasticity parts 11 and a knitted fabric constructing the low-elasticity parts 12. In addition, the high-elasticity parts 11 and the low-elasticity parts 12 may be formed by applyingopal (etching agent) to the tape part 10 when cellulosic fiber or other material that can be applied with opal-finishing (etching processing, erosion removal processing) is used as the material of the tape part 10.

FIG. 2(a) is a plan view showing the tape part 10 (the clothing end part structure), elongated, according to the embodiment of the present invention. FIG. 2(b) is a plan view showing a conventional tape part 1, elongated. In FIG. 2, the two-dot chain lines schematically represent the degrees of elongation of the tape parts 10, 1 that are obtained when the equal level of tension is applied to the tape parts 10, 1 in the length direction D1 thereof. Note that contraction of the tape parts 10, 1 in a direction intersecting with the length direction D1 is not illustrated in FIG. 2 for the sake of simplicity.

As shown in FIG. 2(a), there is a difference in the degree of elongation between the upper end 10a and the lower end 10b of the tape part 10 in which the high-elasticity parts 11 and the low-elasticity parts 12 are alternately disposed. The difference reduces the tightening force on the upper end 10a. In the length direction D1, the degree of elongation is greater in the upper end 10a having a high ratio of the high-elasticity parts 11 than in the lower end 10b having a high ratio of the low-elasticity parts 12. In the width direction W of the tape part 10, the degree of elongation in the length direction D1 gradually becomes low from the upper end 10a toward the lower end 10b.

As shown in FIG. 2(b), in the conventional tape part 1 there is no difference in the degree of elongation between an upper end 1a and a lower end 1b.

FIG. 3(a) is a schematic diagram in which the arrows represent a relative level of pressure per unit area that acts around the waist of the wearer when the bottom clothing 20 having the tape part 10 according to the embodiment of the present invention is put on the wearer.

FIG. 3(b) is a schematic diagram in which the arrows represent a relative level of pressure per unit area that acts around the waist of the wearer when a bottom clothing with the conventional tape part 1 is put on the wearer.

Due to the uniform elasticity in the entire circumference of the tape part 1, sections around sides 100 of the tape part 1 that have a high curvature are more likely to be stretched out than a front part 100b and back part 100c with a low curvature when the bottom clothing is put on the wearer, constricting the waist of the wearer.

In case of the tape part 10, on the other hand, the low-elasticity parts 12 and the high-elasticity parts 11 are provided alternately at a predetermined interval around sides 100 having a high curvature, as shown in FIG. 3(a). For this reason, due to the short length of each high-elasticity part 11 in the length direction thereof, the tape part 10 configured in the manner described above cannot be stretched out as easily as when the tape part 10 is configured by disposing the high-elasticity parts 11 over the entire circumference thereof. Moreover, the low-elasticity parts 12 provided on either side of each high-elasticity parts 11 make it difficult for the low-elasticity parts 12 to be folded when the bottom clothing 20 is put on the wearer.

By forming the less stretchy section (core) of the tape part 10 into a shape of a block, pressure that is focused on the sides 100a of the waist of the wearer 100 can favorably be distributed.

FIGS. 4(a) and 4(b) are each a diagram showing a state in which the bottom clothing 20 according to the embodiment of the present invention is put on the wearer. FIG. 4(a) is a front view of the bottom clothing 20, and FIG. 4(b) is a rear view of the bottom clothing 20. As shown in the bottom clothing 20 of the present embodiment in FIGS. 4(a) and 4(b), the high-elasticity parts 11 and the low-elasticity
parts 12 are alternately disposed so that the highly elastic parts generating a tightening force are sandwiched by the parts with low elasticity that reduce the possibility of the tape part 10 being folded. Therefore, such a configuration can not only reduce the possibility of the tape part 10 being folded, but also prevent the tape part 10 from constricting the waist of the wearer.

[0052] FIGS. 4(c) and 4(d) are each a diagram showing a state in which the conventional bottom clothing 2 is put on the wearer. FIG. 4(c) is a front view of the bottom clothing 1, and FIG. 4(d) a rear view of the bottom clothing. As shown in FIGS. 4(c) and 4(d), the tape part 1 of the bottom clothing 1 is folded and easily constricts the waist of the wearer.

[0053] FIG. 5(a) is a plan view showing the tape part 10 to which tension is not applied. FIG. 5(b) is a plan view showing the tape part 10 that is stretched by the action of tension. FIG. 5(c) is a plan view showing the conventional tape part 1 that is stretched by the action of tension.

[0054] As shown in FIG. 5(b), the tape part 10 is configured in such a manner that the action of tension in the length direction thereof stretches the high-elasticity parts 11, whereas the low-elasticity parts 12 are less likely to be stretched. The low-elasticity parts 12 are not to be deformed easily and do not contract much in the width direction so that the tape part 10 is prevented from being folded in the width direction.

[0055] In the conventional tape part 1, on the other hand, as shown in FIG. 5(c), the action of tension in the length direction thereof results in significant contraction of the tape part 1 in the width direction and local application of pressure, constricting the waist of the wearer, which makes the bottom clothing 2 uncomfortable to wear.

[0056] The present embodiment describes the example in which the high-elasticity parts 11 and low-elasticity parts 12 of the tape part 10 are formed into a trapezoid; however, the present invention is not limited to this configuration. For instance, the high-elasticity parts 11 (11B) and the low-elasticity parts 12 (12B) may be formed into the same rectangle, as shown in FIG. 5(d). Alternatively, the high-elasticity parts 11 and the low-elasticity parts 12 may be formed into rectangles of different sizes in accordance with the specification. For example, a short side 12Ba of each rectangular low-elasticity part 12 is disposed on the end side (upper end side) 10Ba.

[0057] According to the bottom clothing 20 of the present embodiment, the tape part 10 disposed in the upper end section 20a on the waist side has the high-elasticity parts 11 and the low-elasticity parts 12 disposed alternately along the circumferential direction D1 of the upper end section 20a. According to such a configuration where the low-elasticity parts 12 that have lower elasticity than the high-elasticity parts 11 generating a tightening force are disposed adjacent to the respective high-elasticity parts 11, an adequate amount of pressure can be kept easily, resulting in reduction of constriction of the tape part 10. Furthermore, in the tape part 10 of the bottom clothing 20 of the present embodiment, the block-like low-elasticity parts 12 of a predetermined length are disposed adjacent to the respective high-elasticity parts 11 in the length direction D1 of the tape part 10, allowing the low-elasticity parts 12 to produce a fold reduction function. Therefore, the bottom clothing 20 can keep an adequate amount of pressure in the tape part 10 disposed in the upper end section 20a on the waist side, preventing the tape part 10 from constricting the waist of the wearer.

[0058] In addition, owing to the low-elasticity parts 12 formed in the entire region in the width direction between the upper end 10a and the lower end 10b of the tape part 10, the fold reduction function can be exerted to prevent the tape part 10 from constricting the waist of the wearer.

[0059] By disposing the low-elasticity parts 12 at equal intervals in the length direction of the tape part 10, not only is it possible to distribute pressure in the length direction easily, but also the low-elasticity parts 12 can easily exert the fold reduction function.

[0060] In the configuration in which the trapezoidal low-elasticity parts 12 have the short sides thereof disposed at the upper end 10a: the low-elasticity parts 12 are formed in such a manner as to fan out from the upper end 10a toward the lower end 10b. The pressure applied in the width direction W of the tape part 10 can favorably adjusted by changing the shape of such low-elasticity parts 12. Consequently, the possibility of the tape part 10 being folded can be reduced, preventing the tape part 10 from constricting the waist of the wearer.

[0061] A bottom clothing with a tape part (a clothing end part structure, a base part) according to a second embodiment of the present invention is described next. The descriptions provided in the first embodiment are omitted in this second embodiment. FIG. 6 is a rear view showing a state in which the bottom clothing 20 with a tape part 10B according to the second embodiment of the present invention is put on the wearer. FIG. 7 is an enlarged view showing the tape part 10B of FIG. 6. The difference between the tape part 10B of the second embodiment and the tape part 10 of the first embodiment is that the tape part 10B has rectangular high-elasticity parts 11B (second regions) and low-elasticity parts 12B (first regions) in place of the trapezoidal high-elasticity parts 11 and low-elasticity parts 12.

[0062] The rectangular high-elasticity parts 11B and low-elasticity parts 12B are formed in an area between an upper end of the tape part 10B and a place near the main body textile 21. A small gap is formed between the main body textile 21 and the high- and low-elasticity parts 11B and 12B. The present embodiment describes the example in which the gap is formed between the main body textile 21 and the edges of the high- and low-elasticity parts 11B and 12B that are adjacent to the main body textile 21; however, the present invention is not limited to this configuration. For example, a gap may be formed between the upper end of the tape part 10B and upper ends of the high- and low-elasticity parts 11B and 12B in the width direction W. However, when such a gap is formed between the upper end of the tape part 10B and the upper ends of the high- and low-elasticity parts 11B and 12B, an upper end section of the tape part 10B continues along the circumferential direction D1 at the upper end part of the bottom clothing and ends up stretching out. Thus, it is preferred that the high-elasticity parts 11B and the low-elasticity parts 12B be formed up to the position of the upper end of the tape part 10B.

[0063] In the bottom clothing 20 that has the tape part 10B of the second embodiment with such a configuration, arranging the high-elasticity parts 11B and the low-elasticity parts 12B alternately in the circumferential direction D1 can allow the high-elasticity parts 11B to produce a tightening force and the low-elasticity parts 12B to exert the fold reduction function. As a result, the bottom clothing 20 can prevent the tape part 10B from constricting the waist of the wearer, while keeping an adequate amount of pressure in the tape part 10B.
Due to the simple shape of the high-elasticity parts 11B and the low-elasticity parts 12B, the cost of manufacturing the bottom clothing can be kept low. Note that parts that have third elongation different from the second and first elongation may be provided between the high-elasticity parts 11B and the low-elasticity parts 12B.

A clothing with cups according to a third embodiment of the present invention is described next. The descriptions provided in the aforementioned embodiments are omitted in this third embodiment. FIG. 8 is a perspective view showing a clothing with cups according to the third embodiment of the present invention. The present embodiment describes the use of the end part structure on the clothing with cups.

A brassiere 40 (the clothing with cups) shown in FIG. 8 has a pair of right and left cup parts 41, a base fabric 42 (a cup support part), back fabrics 43 (underarms), and shoulder straps 44. This brassiere 40 is symmetric; thus, either the right side or the left side of the brassiere 40 is described below.

The cup part 41 is in the shape of a bowl conforming to the shape of a breast so as to cover the front side of a breast of the wearer. The cup part 41 is made of material having a certain level of firmness and resilience, such as a nonwoven fabric or polyurethane foam. The non-elastic base fabric 42 is stitched to a lower part of the cup part 41, whereby the cup part 41 is supported by the base fabric 42. The elastic back fabric 43 is stitched to the underarm side of the base fabric 42. The shoulder strap 44 is removable attached to an underarm-side upper end 41a of the cup part 41. A tape member 41b with a wire embedded therein is stitched to the boundary between the base fabric 42 and the cup part 41. The tape member 41b and the base fabric 42 correspond to the cup support part. In a configuration without the base fabric 42, the tape member 41b corresponds to the cup support part.

The back fabric 43 is formed into a band extending from a lower side 41b of the cup part 41 through the underarm of the wearer toward the center of the back of the wearer. The back fabric 43 is made of elastic material such as a power net. A back-side end part of the back fabric 43 is provided with a hook 45. The right and left back fabrics 43 are detachably coupled to each other by the hook 45. The shoulder strap 44 is coupled to a back-side upper end of the back fabric 43. In the present embodiment, the back fabric 43 can be connected to both an underarm section of the cup part 41 and the base fabric 42 but may be connected either the underarm section of the cup part 41 or the base fabric 42.

The shoulder strap 44 is connected to an underarm-side upper part of the cup part 41 and to the back fabric 43 to couple an upper part of the cup part 41 and the back side of the back fabric 43 to each other. Moreover, a length adjuster (not shown) is inserted in the shoulder strap 44, enabling adjustment of the length of the shoulder strap 44 in accordance with the body type of the wearer.

Tape parts 10C (the clothing end part structure, the base part) are disposed in upper and lower sides 43a and 43b of the back fabric 43 of the brassiere 40 according to the present embodiment. The tape parts 10C each have a constriction reduction structure 13C that has block-like high-elasticity parts 11C (second regions) and low-elasticity parts 12C (first regions) disposed alternately in a length direction of the upper side 43a and the lower side 43b.

In the brassiere 40 according to the present embodiment, because the high-elasticity parts 11C and the low-elasticity parts 12C are alternately disposed in the upper side 43a and the lower side 43b of the back fabric 43, respectively, in such a manner that the low-elasticity parts 12C that have lower elasticity than the high-elasticity parts 11C generate a tightening force are disposed adjacent to the respective high-elasticity parts 11C, an adequate amount of pressure can be kept, resulting in reduction of constriction of the upper side 43a and the lower side 43b. Furthermore, in the back fabric 43 of the brassiere 40 according to the present embodiment, the block-like low-elasticity parts 12C of a predetermined length are disposed adjacent to the respective high-elasticity parts 11C in the length direction of the upper side 43a and the lower side 43b, thereby exerting the tightening force of the high-elasticity parts 11C and the fold reduction function of the low-elasticity parts 12C. Therefore, the brassiere 40 can prevent the back fabric 43 from constraining the bust of the wearer, while keeping an adequate amount of pressure, and form a beautiful line of the wearer's bust wearing the brassiere 40.

The high-elasticity parts 11C and the low-elasticity parts 12C may be in the shape of a rectangle, a trapezoid, or any other shapes. The tape part 10 may be disposed in at least either the upper side 43a or the lower side 43b.

The tape part 10C may be disposed in the lower side of the base fabric 42.

FIG. 9 is a diagram showing a modification of the brassiere according to the third embodiment. Similarly to the brassiere 40, a brassiere 50 (the clothing with cups) has the pair of right and left cup parts 41, a base fabric 52 (the cup support part), back fabrics 53 (underarms), and the shoulder straps 44.

A configuration of the brassiere 50, different from the configuration of the brassiere 40, is described hereinafter. The base fabric 52 is coupled to the base fabric 42 at the underarm-side sections of the cup parts 41. Each of the back fabrics 53 has a constriction reduction structure 63 at an area covering the shoulder-side section when the brassiere 50 is put on the wearer. The constriction reduction structure 63 is configured by three low-elasticity parts 62 (first regions) provided along a girth direction and high-elasticity parts 61 (second regions) provided so as to alternate with the low-elasticity parts 62.

In this case as well, the stiff or rigid low-elasticity parts 62 reduce the possibility of the low-elasticity parts 61 being folded when the brassiere 50 is put on the wearer, preventing the brassiere from constraining the bust of the wearer.

The present embodiment describes the example in which the constriction reduction structure 63 is configured by the three low-elasticity parts 62 and the two high-elasticity parts 61, but the number of the low- and high-elasticity parts 62 and 61 configuring the constriction reduction structure 63 may be increased in accordance with the specification of the brassiere.

Furthermore, the constriction reduction structure 63 of the present embodiment is formed across the full width from the upper side to the lower side of each back fabric 53; however, the present invention is not limited to this configuration. For instance, the constriction reduction structure 63 may be formed in the area from the upper side to the central part in each back fabric 53 or from the lower side to the central part in the same. Although the present embodiment describes that the constriction reduction structure 63 is formed only in the place that covers the underarm-side section of each back
fabric 53, the constriction reduction structure 63 may be provided in the entire back fabric.  

[0078] FIG. 10 is a front view of a waist nipper 80 according to a fourth embodiment. The waist nipper 80 is a corrective clothing for correcting the shape of a hip region. The waist nipper 80 in the present embodiment has a body part 83 (a main body part) that covers the area between the lower side of a bust and a hip region. The body part 83 is configured by twelve high-elasticity parts 81 and twelve low-elasticity parts 82 that are disposed alternately along a girth direction, as well as a constriction reduction structure 84. Note that the constriction reduction structure 84 may be provided in the area from the upper end side to the central part in the body part 83 or from the lower end side to the central part in the same.  

[0079] In this case, constriction of the body part can be reduced while making the shape of the body of the wearer look smooth.  

[0080] The present embodiment describes the example in which the whole body part 83 configures the constriction reduction structure 84; however, the present invention is not limited to this configuration. For example, the constriction reduction structure 84 may be provided only in a part of the body part 83, in accordance with the specification of the corrective clothing. In this case as well, a constriction reduction effect can be attained by forming at least three of the low-elasticity parts 82 and the high-elasticity parts 81 in such a manner that these elasticity parts alternately do not match each other. More specifically, the constriction reduction structure 84 can be provided only in the area such as the right and left sides and other area where extra flesh is likely to bulge out when the corrective clothing is put on the wearer. In this case, the correction ability of the body part 83 can smoothen the bulging extra flesh to create a smooth, curvy body when the corrective clothing is put on the wearer.  

[0081] The present embodiment describes the example of a waist nipper, but the present invention can also be applied to a different type of clothing having a corrective function, such as a girdle and a bodysuit.  

[0082] For illustrative purposes, in FIGS. 1, 2, 5 and 7 to 10 the low-elasticity parts 12, 12B, 12C, 62 and 82 are hatched.  

[0083] The above has specifically described the present invention based on the embodiments thereof; however, the present invention is not limited thereto. For example, although the high-elasticity parts 11 and the low-elasticity parts 12 are alternately disposed in the upper end section 20a on the waist side of the bottom clothing to configure the tape part, the tape part of the present embodiment may be adopted in items 20b for inserting the legs as shown in FIG. 6.  

[0084] The clothing end part structure of the present invention may be applied to an end part structure of a clothing other than a bottom clothing, a clothing with cups, and a clothing with a corrective function. For example, the end part structure of the present invention may be employed in a hem of an upper body clothing.  

INDUSTRIAL APPLICABILITY  

[0085] The clothing end part structure, bottom clothing, and clothing with cups according to the present invention are capable of reducing constriction caused on a wearer while keeping an adequate amount of pressure. The clothing end part structure, bottom clothing, clothing with cups, and clothing with a corrective function according to the present invention can prevent the end parts from being folded.
9. The clothing end part structure according to claim 1, wherein the end part structure forms an opening for inserting a part of a body of the wearer, and the constriction reduction structure is provided around an entire circumference of the opening.

10. A bottom clothing having the clothing end part structure according to claim 1, comprising:
a main body textile formed so as to cover at least a part of a lower body of the wearer; and
the end part structure being an end part adjacent to the main body textile and forming an opening for inserting a hip of the wearer.

11. A clothing with cups that has the clothing end part structure according to claim 1, comprising:
a pair of right and left cup parts formed to cover a bust; a cup support part for supporting the cup parts; and
a pair of right and left underarm parts coupled to at least underarm-side rim parts of the cup parts or the cup support part,
wherein the end part structure is formed at least in upper and lower sides of each of the underarm parts or a lower side of the cup support part.

12. A clothing with cups, comprising:
a pair of right and left cup parts formed so as to cover a bust; a cup support part for supporting the cup parts; and
a pair of right and left underarm parts coupled to at least underarm-side rim parts of the cup parts or the cup support part,
wherein a constriction reduction structure is provided in whole or part of at least one of the underarm parts or the cup support part, the constriction reduction structure formed by at least three first regions with low elasticity provided in parallel along a girth direction in a worn state, and two second regions with elasticity higher than that of the first regions and individually formed therebetween.

13. A structure of a clothing with a corrective function having a section that is in close contact with a skin in a worn state is provided at least in a part of a main body part, wherein the section that is in close contact with the skin at least partially has a constriction reduction structure formed by at least three first regions with low elasticity arranged in parallel along a girth direction in a worn state, and two second regions with elasticity higher than that of the first regions and formed therebetween.

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