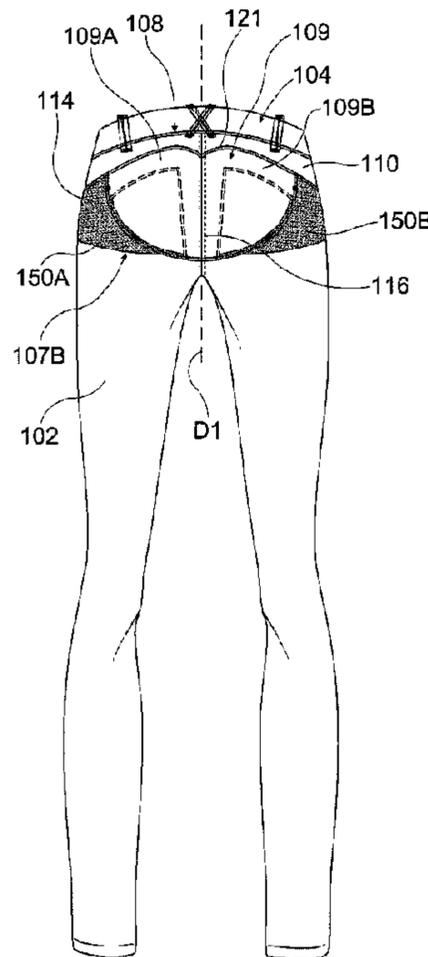




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(54) Titre : PANTALON, PERMETTANT EN PARTICULIER DE SCULPTER LES FESSES ET HANCHES FEMININES
 (54) Title: PANTS, IN PARTICULAR FOR SHAPING THE FEMALE BUTTOCKS AND HIPS



(57) **Abrégé/Abstract:**

Pants for shaping the female buttocks and hips, of the type comprising: a first rear part (2, 102, 202) adapted to at least partially cover the buttocks, said first part (2, 102, 202) comprising: at least one first element (7B, 107B, 207B) adapted to cover at least a lower terminal portion (S1) and lateral portion (S2) of the buttocks, at least one second element (9, 109, 209) adapted to cover at least a central portion (S3) of the buttocks, and at least one third element (4, 10; 104, 110; 204, 210) adapted to cover at least an upper terminal portion (S5) of the buttocks, in which: said first (7B, 107B, 207B), second (9, 109, 209) and third (10, 4, 110, 104, 210, 204) element comprise a knitted fabric, and that said second element (9, 109, 209) comprises two parts (9A, 9B; 109A, 109B; 209A, 209B), each adapted to cover only one of the two central parts (S3) of the buttocks, said two parts being secured together along respective lateral edges (9F, 109F, 209F) provided at the intergluteal cleft (S4) of the buttocks by a central seam (16) adapted to be positioned at said cleft (S4).

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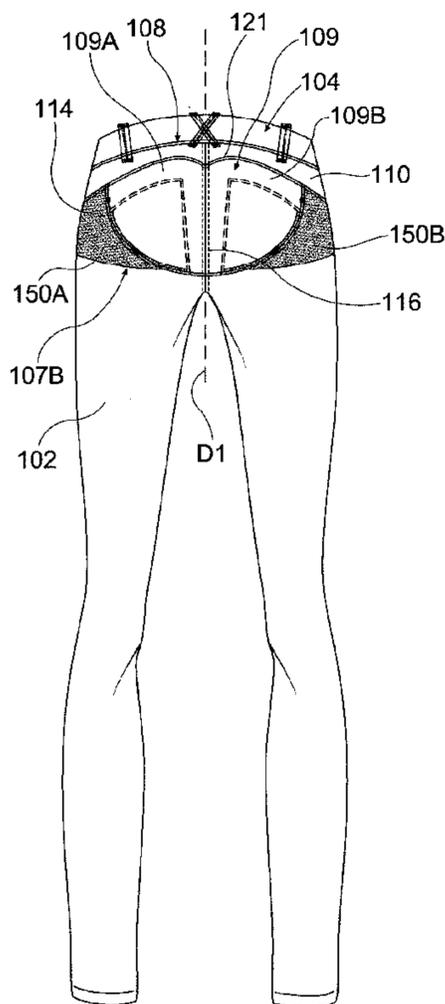
(54) **Title:** PANTS, IN PARTICULAR FOR SHAPING THE FEMALE BUTTOCKS AND HIPS

FIG. 10C

(57) **Abstract:** Pants for shaping the female buttocks and hips, of the type comprising: a first rear part (2, 102, 202) adapted to at least partially cover the buttocks, said first part (2, 102, 202) comprising: at least one first element (7B, 107B, 207B) adapted to cover at least a lower terminal portion (S1) and lateral portion (S2) of the buttocks, at least one second element (9, 109, 209) adapted to cover at least a central portion (S3) of the buttocks, and at least one third element (4, 10; 104, 110; 204, 210) adapted to cover at least an upper terminal portion (S5) of the buttocks, in which: said first (7B, 107B, 207B), second (9, 109, 209) and third (10, 4, 110, 104, 210, 204) element comprise a knitted fabric, and that said second element (9, 109, 209) comprises two parts (9A, 9B; 109A, 109B; 209A, 209B), each adapted to cover only one of the two central parts (S3) of the buttocks, said two parts being secured together along respective lateral edges (9F, 109F, 209F) provided at the intergluteal cleft (S4) of the buttocks by a central seam (16) adapted to be positioned at said cleft (S4).

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PANTS, IN PARTICULAR FOR SHAPING THE FEMALE BUTTOCKS AND HIPS

The present invention relates to pants for shaping the female buttocks and
5 hips, in accordance with the pre-characterizing part of the main claim.

In the present context the term "pants" means a garment to be used as an
article of clothing which remains in view when worn, i.e. not an article of
underclothing, and which can have or not have parts adapted to cover the
legs. The term "pants" in the present context also includes shorts (i.e.
10 pants without parts for covering the legs), short pants and pants with legs
of any form and length.

Pants for shaping the buttocks and hips of the wearer have been known
for some time, these known pants generally comprising a body-shaping
garment or corset provided inside the pants and adapted to shape the
15 buttocks or hips, and secured to the actual pants, see for example
US2007118954 A1 or US5888118 or EP 1872675. Although these known
pants are adapted to shape the wearers hips and buttocks, they do not
cause the fabric of the pants to also adhere to the buttocks and hips such
as to display them and highlight the shape of those parts of the body.

20 Known body-shaping pants or garments, for example those described in
US 4 392 259, US 3 996 622, US2006/253960, US 3 068 871, have
always been produced up to the present time in fabrics presenting good
retentive characteristics, for example shuttle-woven fabrics.

Up to the present time the expert of the art has not produced buttocks and
25 hip shaping pants in a knitted fabric because this type of fabric is
considered to be unsuitable for retaining and shaping the female body, it
being considered a "yielding" fabric, i.e. with constructional characteristics
not suitable or sufficient to sustain or shape anatomical parts and
therefore not suitable for use in an article of clothing which has to bind,
30 retain and shape the buttocks and hips.

An object of the present invention is to provide pants which while having at
least that part adapted to cover the buttocks and hips made of knitted

fabric, is nevertheless able to shape the buttocks and hips of the wearer, while at the same time causing the fabric of the pants to adhere to the buttocks and hips such as to highlight the shapes of said parts of the body. A further object is to provide pants able to highlight each of the two parts
5 of the buttocks separated by the intergluteal cleft.

A further object is to provide pants which comprise a limited number of components, are easy and quick to produce and can be manufactured industrially with fabrics of conventional type.

A further object is to provide a set of pants which for the appropriate size
10 are adaptable to the different forms of the buttocks of the wearer of the pants.

In accordance with one aspect, the invention provides pants for shaping the female buttocks and hips, of the type comprising:

- a first rear part adapted to at least partially cover the buttocks,
 - 15 - a second front part adapted to at least partially cover the abdomen,
 - said first part comprising
 - at least one first element adapted to cover at least a lower terminal portion and lateral portion of the buttocks,
 - at least one second element adapted to cover at least a central
20 portion of the buttocks,
 - and at least one third element adapted to cover at least an upper terminal portion of the buttocks,
- characterised in that
- said first, second and third element comprise a knitted fabric,
 - 25 - said first and third element define a central aperture, outer edges of said second element being secured to edges defining said aperture of said first and third element so as to close said aperture,
 - and that said second element comprises two parts, each adapted to cover only one of the two central parts of the buttocks, said two
30 parts being secured together along respective lateral edges provided

2a

at the intergluteal cleft of the buttocks by a central seam adapted to be positioned at said intergluteal cleft.

These and other objects which will be apparent to an expert of the art are attained by pants or by a set of pants in accordance with the
5 accompanying claims.

The present invention will be better understood from the accompanying drawings, which are provided by way of non-limiting example and in which: Figures 1, 2, 3 are respectively a rear, front and lateral schematic view of pants according to the invention,

10 Figure 1B shows pants in the same view as Figure 1 but with that part of the pants adapted to cover a central portion of the buttocks removed to better show the shape of the rear part of the pants,

Figures 4A, 4B show a plan view of the main elements for producing the pants of Figures 1-3, before being sewn together,

15 Figure 5 shows an enlargement of a detail of Figure 4B,

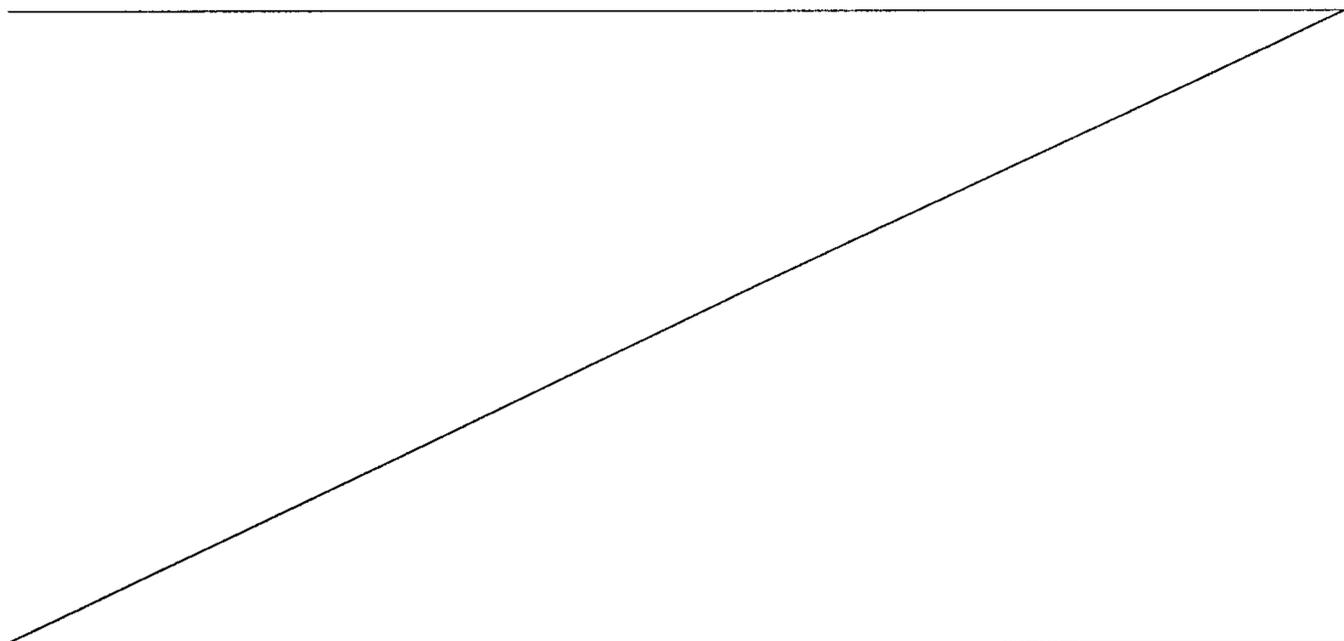
Figure 6 shows a perspective schematic design of female buttocks,

Figures 7A, B, C show schematic plan and sectional views of a detail of the pants according to the invention,

Figures 8 and 9 show enlarged views of a detail of the pants indicated in

20 Figure 2 by the arrow L, in two different embodiments,

Figures 10, 12 are front, lateral and rear views of two further embodiments of pants according to the invention,



Figures 11A, 11B and 13A and 13B show a plan view of the main elements for producing the pants of Figures 10 and 12, before being sewn together.

Figures 10A, 10B, 10C show a first embodiment of pants according to the invention for shaping female buttocks and hips, which in the particular embodiment illustrated are women's sports pants of the type adapted to completely cover the legs. It should be noted that according to the invention, the pants can have legs of any length, width and shape, and can also be substantially without legs (for example to produce pants of "shorts" type).

The pants according to the invention are of the type comprising: a first rear part 102 adapted to at least partially cover the buttocks, and a second front part 101 adapted to at least partially cover the abdomen. The first part 102 comprises: at least one first element 107B adapted to cover at least one lower terminal portion S1 (Figure 6) and lateral portion S2 of the buttocks, at least one second element 109 adapted to cover at least one central portion S3 of the buttocks, and at least one third element 104, 110 adapted to cover at least one upper terminal portion S5 of the buttocks.

According to the invention:

- a) the first element 107B, second element 109 and third element 110, 104, comprise a knitted fabric,
- b) the first element 107A and third element 110 define a central aperture 140 (visible in Figure 10D),
- c) the outer edges 109C, 109D, 109E of said second element 109 are secured to the edges 107H, 110A defining said aperture of said first element 107B and third element 110, 104, so as to close said aperture,
- d) said second element 109 comprises two parts 109A, 109B each adapted to cover only one of the two central parts S3 of the buttocks,
- e) said two parts are joined together along lateral edges 109F provided at the intergluteal cleft S4 of the buttocks, by a central seam 116 to be positioned at said cleft S4.

Preferably the rear part 102 of the pants also comprises a lower portion 107A adapted to cover the rear of the legs.

Preferably the first element 107 and the third element 110 of the first rear part 102 of the pants have a two-dimensional form and are therefore flat elements when not associated with the other pants elements, whereas the two second parts 109A, 109B of the element 109 can have either a flat form or a cup-shaped three-dimensional form (as explained hereinafter). According to the invention, the upper portion 107B of the first element 107, provided at the buttocks, presents two regions (visible in Figure 11B):

- 10 - a first lower region 100Z1, extending substantially horizontal, adapted to position itself at and cover a terminal lower portion S1 (Figure 6) of the buttocks at the lower edge of the buttocks, and bounded upperly by a first arched edge 107H having a first radius of curvature and laterally, at the fork C of the pants, by an inclined rectilinear edge 107I to be inserted into
- 15 the intergluteal cleft (as explained hereinafter),
- and a second region 100Z2 connected to the first and extending substantially vertical, adapted to position itself at, and cover, a central lower portion S2 of the buttocks in the lower part of the pants and a lower front band of the hips in the front part of the pants, said region 100Z2
- 20 being bounded laterally, in its part closest to the intergluteal cleft S4, by a second arched edge 107H', connected to the first and having a second radius of curvature slightly less than the first.

Said zones 100Z1 and 100Z2 are adapted to position themselves at the lower lateral part of the buttocks, about the two most projecting and convex central portions S3 (Figure 6) of the buttocks, separated by the intergluteal cleft.

A prolongation 100P2 is provided in the region 100Z2 (Figure 11B) of the element 107, to extend into the front part of the pants.

The elongate element 107 terminates upperly with an inclined edge to be sewn to a corresponding portion of the inclined edge 110A' of the upper element 110, these two edges having substantially the same inclination and being sewn together to form an inclined or arched seam or dart 114

(Figure 11B), which extends from the rear part 2 of the pants to the front part 1, and connects to the front pockets and, in the rear part of the pants, to the seam of the central part 109.

Preferably, as visible in Figure 10B, the dart 114 in lateral view has an inclination to a vertical axis such as to form an angle $100Y2$ of between 5 110° and 165° and preferably equal to about 140° . Preferably the minimum point of the dart 114 coincides with the lower starting point of the front edge of the front pockets 111 of the pants.

The upper portion 107B of the elongate element 107 has its arched edge 10 $107H$ (Figure 11B) substantially of compressed-C shape, adapted to be sewn to a corresponding arched edge 109C of the parts 109A, 109B of the element 109, adapted to cover and support the most projecting and convex central portion S3 of the buttocks.

The rectilinear edge 107I, provided at the fork C, is advantageously 15 inclined to the vertical V of the element 107 by an angle N3 between 10° and 50° (the angle N3 is represented only with reference to the embodiment shown in Figure 5).

Finally the elongate element 107 presents a conventional edge 107L 20 which extends from the fork C to a usual lower end edge 107M of the element 107, and is adapted to be sewn to a corresponding edge 105C (Figure 1A) of the elongate element 105 of the front part of the pants.

According to this first embodiment, the part 107 comprises two inserts 150A, 150B (which in Figures 10A-10D are shown grey, although in reality they are not visible from the outside, being inside the pants), to make the 25 two bands of said part 107B comprising said inserts less elastic and more tenacious, and hence more retentive. These inserts preferably have a shape and dimensions such as to overlie the upper part 100Z2 of the part 107B as far as the edges 107H', 107G and 107G' of said part 100Z2, such that when the pants are worn, the greater thickness due to the presence of 30 the insert will be noted only at the lower arched edge 151 of the insert, which however preferably extends along the lower portion of the buttocks, i.e. of that portion most curved towards the interior and is therefore less

visible, such that when the pants are worn, this thickness difference is virtually not visible. The two inserts are dimensioned and shaped such as to cover: a portion of the hips, a lateral portion S2 of the buttocks and a lower lateral portion S7, preferably at the horizontal cleft S8 of the buttocks without however reaching the intergluteal cleft S4. These inserts are preferably made of a plastic material, preferably of polyurethane and more preferably of silicone, which is made to adhere to the inner face of the pants fabric. These inserts preferably present the following characteristics: weight between 30 and 130 g/m²; thickness between 0.02 and 0.5 mm; surface continuous or presenting a plurality of holes (to facilitate breathability). These inserts are preferably made to hot-adhere under pressure by techniques conventional to the expert of the art. For example the inserts are made of a material marketed by the Italian company A. R. T. Line s.r.l. According to this embodiment of the pants, all its parts, or at least all those parts adapted to cover the buttocks and hips are made of the same knitted fabric, preferably a weft knitted fabric, double jersey, (alternatively the weft knitted fabric could also be of jersey, or ribbed knitting, or 1:1 ribbed, or interlock or plush).

The fabric preferably has a weight between 200 and 300 g/m² and more preferably between 230 and 270 g/m². Preferably the yarn of the knitted fabric comprises a natural fibre, for example cotton, and an elastomer, for example Lycra, the elastomer percentage in the yarn being between 15% and 30% and is preferably about 20%. Although the entire pants or at least their part covering the buttocks and hips are made of the same knitted fabric, the presence of the inserts 150A and 150B means that those fabric portions to which these inserts are secured present a greater elastic modulus and greater tenacity than those parts of the pants surrounding said inserts.

Preferably, by virtue of the inserts the elastic modulus and tenacity increase by a value between about 5% and 30% more than the corresponding values of the fabric without these inserts. Because of these characteristics of those parts of the pants presenting the inserts and

because of their shape and positioning, it has been found experimentally that the pants provide a retentive and shaping effect on the hips and a retentive and upward thrust effect on the lower portion of the buttocks.

The two parts 109A, 109B of the second element 109 are sewn together
5 along their preferably rectilinear edge 109F (Figure 11B), adapted to be positioned in the intergluteal cleft S4 and to overlie a central line of symmetry D1 of the rear part of the pants (this line D1 is represented only with reference to the embodiment shown in Figure 1). Said rectilinear edge 109F having preferably the shape of a single rectilinear line.

10 According to one aspect of the invention, the two parts 109A, 109B must adhere to the buttocks as much as possible and their seam 116 (Figure 10C) must enter the intergluteal cleft S4, so as to highlight and upgrade the appearance of the buttocks. To facilitate this insertion of the seam 116 of the two parts 109A and B of the element 109 into the intergluteal cleft,
15 and hence enable the two parts to better bind the buttocks, the edges 109F of the two parts to be sewn together have the already described rectilinear shape. It should be noted that in known pants, the sewing edges provided at the rear central line of symmetry of the pants always have a curved shape (when the parts of the pants are seen in plan and have not yet been sewn together), i.e. a shape which aids buttock
20 roundness in the finished pants; in contrast, according to the invention, this sewing line has a rectilinear shape, such that when the pants are worn, as there is a "lack of fabric" at the intergluteal cleft compared with the roundness of the buttocks, the fabric is pulled into the intergluteal cleft.
25 Advantageously those parts of the pants above and below the two parts 109A and B also have the same rectilinear edge shape. Hence the part 107B presents a rectilinear edge 107I and the part 110 also presents a rectilinear edge 110D, such that when these two parts and the parts 109A and B are sewn together they form two overlying rectilinear edges closed
30 by the seam 116.

To improve insertion of the seam 116 into the intergluteal cleft, advantageously a conventional elongated elastic element 117 is also sewn

to said seam, sewn preferably to the interior of the pants, and in a state of pretension, such that when the pants are worn, this elongated elastic element pulls the seam and thrusts it into the intergluteal cleft. The same effect can also be obtained with a cord 18 (represented only with reference to the pants embodiment shown in Figure 8), provided inside the pants and presenting a section sewn to the fork C of the pants, and for the rest slidable within a slot 19 (Figure 8) provided in the seam 16 and with the free ends 18A emerging slightly below the waist 4 of the pants. By pulling the cord 18 and knotting its ends 18A the seam 16 can be pretensioned such that when the pants are worn, it enters the intergluteal cleft. It should be noted that the different solutions described to this point to facilitate insertion of the rear central pants seam 116 into the intergluteal cleft, or rather the rectilinear edge at the central rear seam 116, and/or insertion of a pretensioned elastic element 117 into the seam, and/or insertion of a cord 18 into the seam, are all solutions which can be used even in pants of conventional type to the expert of the art. These technical solutions are therefore not to be considered as limited to the pants according to the invention and could therefore form the subject of an independent patent. The upper element 110 is adapted to cover an upper terminal band S5 of the buttocks and an upper front portion of the hips, to form the inner part of the front pockets 111. Advantageously, the major edge 110A is rounded to better adapt to the anatomy of the buttocks and to give the central part 109 of the pants a heart shape. It should be noted that a section of the lower major edge 110A is adapted to be secured to the arched upper edge 109E of each of the two parts of the element 109, and that between said two edges a fabric-free region of approximately triangular shape is present, by virtue of which an arched seam or dart 121 can be formed. It should be noted that the upper major edge 110B, which is substantially rectilinear and inclined, is adapted to be joined to the arched lower edge 123A of the waist element 123. The waist part 104 is produced as a single element 123 (Figure 11A). The waist part 104 and the elements 10 must not move when the pants are worn and must

cooperate with the upward traction action of the two parts 109A, 109B of the element 109 and finally with the lifting of the central part of the buttocks. To improve positioning of the waist part and further prevent its downward slippage, the inner face of the waist part 104 comprises an elastic tape 124 sewn thereto which remains in view (Figure 10A), for example of silicone or with an outer silicone-coated surface, able to increase the adherence of the waist part 104 to the skin. Preferably according to the invention the height J2 (Figure 10A) of the maximum point M8 of the rear portion of the waist 104 from the front fork C is significantly greater than the corresponding height J1 of the maximum point M9 of the front portion of the waist 104. Preferably the greater height J2 is greater than the lesser height J1 by a distance between 30% and 70% of J1, more preferably this distance being equal to about 50% of J1 (i.e. $J2 = J1 + 50\%J1$). For example, in a garment of size S, $J1 = 18$ cm and $J2 = 27$ cm.

Preferably, to better adapt to the more projecting and rounded central parts S3 of the buttocks, each of the two parts 109A and 109B can have a shape which can be two-dimensional for little pronounced buttocks, or a three-dimensional cup shape for more pronounced buttocks (see Figure 7A in which the parts 109A and 109B are indicated by the number 9), i.e. a hollow convex shape with a perimetral edge of irregular shape. Consequently, according to the invention, pants having a determined size, for example size 40, are produced in a plurality, for example three, of different forms each having a particular buttock "size", i.e. with three different types of elements 109, preferably all the elements 109 having a substantially equal perimetral shape (the perimetral dimensions could possibly be different) and different convexities. Hence, for example, (with reference to Figure 7A), the elements 9 (109) have a maximum point M5 at a first height H1, second elements 9 (109) have the maximum point at a second height H2 greater than the first, and third elements 9 (109) have the maximum point at a third height H3 greater than the second, for example between 2 and 3 cm.

Preferably the three-dimensional form of the two parts 109A, 109B is obtained by a conventional fabric preforming technique, of type similar to that used for some time in the brassiere cup production sector. This preforming technique enables cups to be obtained without internal seams
5 (the cups comprise seams only along their perimeter) and can hence adhere better to the buttocks. As this production technique is conventional for the expert of the art, it will not be further described.

The front part 101 of the pants comprises, for each leg, an elongate element 105 which advantageously comprises the edge 105A (Figure
10 11A) to be sewn to the corresponding element of the pants rear part 102, which in its upper part, above the knee, comprises a portion 105B which is curved such that at their top, at the hips and abdomen, the front part 101 of the pants has a width 100L1 (Figure 10A) which is less than the overall width 100L of the pants when viewed frontally (Figure 10A). Consequently
15 when viewed frontally, the pants comprise, laterally at the hips, at least one portion 100A formed by at least one prolongation 100P1, 100P2 of the rear part 102 of the pants, and portions 103A of the lateral seams 103 which extend from the sides of the pants and above the knee, in the front part of the pants, with curved parts 103A. By virtue of this particular
20 curvature of the elements 105 which form the pants front part 101, because of the curved front portions 103A of the seams 103, and by virtue of the prolongations 100P1-P2 of the rear part 102, when the garment is worn a visual slimming effect of the hips is achieved. Preferably the pants present two rear false pockets 130 (Figure 11B) dimensioned and shaped
25 such as to be sewn preferably along their entire perimeter, and each only onto one of the two parts 109A, 109B of the second element 109, to cover at least a central portion S3 of the buttocks. Advantageously, to favour the posture of the buttock, the pocket is dimensioned such as not to lie "flat" against the two parts 109A, 109B of the element 109 but such as to be
30 secured with an excess of fabric. In other words, the false pockets are dimensioned and sewn such that they spread out and adhere to the underlying part of the pants only when the pants are worn. Figure 10D

shows the pants without the element 109 and without its two parts 109A and 109B.

Figures 12A, 12B, 12C show a second embodiment of pants according to the invention, representing a variant of the first embodiment of Figures 10-11. Those parts of the pants in common with the previously described pants will not be further described in detail and will be indicated by the same number used with reference to Figures 10-11 plus 100.

The substantial differences compared with the previously illustrated pants are related to the fact that:

- 10 - the element 209 which covers the central part S3 has an even more accentuated form,
- the front seam 203A of the pants presents a first portion 203A' which extends from the sides of the pants into the front part of the pants, and a second portion 203A" which returns towards the sides of the pants and connects to the seam 221 of the rear elements 209, 210, 207B.

This second embodiment also presents inserts 250A and 250B (represented by a grey coloration in Figures 12, even though in reality they are not visible when the pants are worn, being provided in the interior of the pants) in the first element 207B, adapted to cover at least a lower terminal portion S1 and a lateral portion S2 of the buttocks, to make two bands of said element 207B less elastic and more tenacious, and hence more retentive, these covering a hip portion, a lateral portion S2 and a lateral band S7 of the lower terminal portion S1 of the buttocks, preferably provided at the horizontal cleft S5 of the buttocks without however reaching the intergluteal cleft S4.

Preferably the pants produced in conformity with the previously described first embodiment (Figure 10) are more suitable for small or medium buttocks, whereas those according to the second embodiment (Figure 12) are more suitable for large or medium-large buttocks.

30 With reference to Figures 1-5, these show pants according to a third embodiment of the invention.

Compared with the embodiments shown in Figures 12 and 13, this third embodiment is more complex. Those parts of the pants in common with those previously described with reference to Figures 12 and 13 will not be further described in detail and will be indicated by the same number used with reference to Figures 12 and 12 less 100. The substantial differences between the pants of the first embodiment (Figure 12) and third embodiment (Figure 1) are related to the fact that to produce the different parts of the pants of the first embodiment a single knitted fabric is used, whereas in the third embodiment knitted fabrics are used having different characteristics, to perform a technical function substantially identical to that of the parts presenting the inserts 150A, 150B and of the parts without these inserts in the first embodiment. In the pants of the third embodiment, shown in Figures 1-4, at least the first 7B, the second 9 and the third element 4, 10 all comprise a knitted fabric but preferably presenting different modules of elasticity. Preferably, the fabric of the second element 9 presents an elastic modulus less (for example a modulus less by a percentage between 5% and 15%) than that of the first element 7B, and the fabric at least of the third element 10 presents an elastic modulus greater (for example a modulus greater by a percentage between 5% and 15%) than that of the first element 7B. the fabric of the second element 9 presents a weight less than those of the first element 7b and the third element 10, 4. The front part 1 of the pants also comprises elements of conventional type which will not be described in detail, these comprising (Figure 3A) elements 6A, 6B for forming the front pockets, elements 6C for the zip, and usual elements 6D, 6E, 6F, 6G for forming the list, the zip cover and the loops.

Again in this embodiment the upper portion 7B of the elongate element 7, provided at the buttocks, presents the two previously described regions Z1 and Z2 (and indicated by 100Z1 and 100Z2). The region Z2 (Figure 5) of the element 7 laterally comprises two prolongations P3 and P2 extending into the front part of the pants as previously described. Advantageously, the two prolongations P3 and P2 are separated from each other and

comprise between one and the other a fabric-less region 15 by which a first seam or dart 13 can be formed, inclined (in lateral view Figure 3) to a vertical axis by an angle Y1 between 110° and 165°, and preferably about 135°. As also explained hereinafter, by virtue of this dart 13 and of its
5 accentuated inclination, an upward slandering effect is achieved for the figure, and furthermore at the rear that part of the element 7 below the dart 13 is pulled upwards, cooperating in this manner to create an upward thrust effect on the buttocks. The elongate element 7 and the upper element 10 are sewn together such as to also form a second seam or dart 14 inclined (in lateral view Figure 3) to a vertical axis by an angle Y2 between 110° and 165°, and preferably about 150°, to ensure the same advantages as described with reference to the first dart 13. The elongate elements 7 are advantageously made of a knitted fabric having a greater weight (for example a weight greater by 15-30%) and a higher elastic modulus (for example 5-15% higher) than those of the knitted fabric with
15 which the two parts 9A, 9B of the element 9 for the central part of the buttocks are made. Preferably the elements 7 are made of a weft knitted fabric, and more preferably of a double jersey weft knitted fabric (alternatively the weft knitted fabric could also be of jersey, or ribbed knitting, or 1:1 ribbed, or interlock or plush). The fabric preferably has a weight between 200 and 300 g/m² and more preferably between 230 and 270 g/m².

Preferably the yarn of the knitted fabric of the elements 7 comprises a natural fibre, for example cotton, and an elastomer, for example Lycra, the
25 elastomer percentage in the yarn being between 20% and 30% and is preferably about 25%, such that the fabric of the elements 7 is elastic but also highly retentive. The rear part 2 of the pants comprises two parts 9A, 9B of the element 9, presenting substantially the same characteristics as the corresponding previously described parts 109A and 109B, and will
30 therefore not be repeated. Preferably the two parts 9A, 9B of the elements 9 are made of a weft knitted fabric, and more preferably of a single jersey weft knitted fabric (alternatively the weft knitted fabric could

also be of jersey, or ribbed knitting, or 1:1 ribbed, or interlock or plush). The elements 9 are preferably made of a fabric having a weight between 150 and 250 g/m² and more preferably between 180 and 200 g/m².

5 Preferably the yarn of the knitted fabric of the two parts 9A, 9B of the element 9 comprises a natural fibre, for example cotton, and an elastomer, for example Lycra, the elastomer percentage in the yarn being between 15% and 25% and is preferably about 20%, such that the fabric of the elements 9 is not too retentive but neither too "limp" or too little retentive. The element 10 is made of a weft knitted fabric, and more preferably of a
10 double jersey weft knitted fabric, (alternatively the weft knitted fabric could also be of jersey, or ribbed knitting, or 1:1 ribbed, or interlock or plush). Preferably the fabric of the element 10 is the same as that used for the element 7. Advantageously however, to increase the rigidity of this element 10, in the fabric a more rigid fabric is inserted, i.e. of high
15 tenacity, for example a light shuttle woven fabric or a mesh made of a non-deformable substantially anelastic material (i.e. of high elastic modulus). The element 10 or even just a part thereof is preferably made by superposing three fabric layers: an inner layer of knitted fabric, an inner layer of a non-deformable anelastic fabric, and an outer layer of knitted
20 fabric. By virtue of this insertion of a fabric of greater tenacity, the element 10 and also, as explained hereinafter, the waist part 4, form elements of the pants which when worn are able to remain in a fixed position such as not to undergo significant modification, consequently the element 9 made of a light elastic fabric and connected to the element 10 via the dart 21
25 creates a sort of "pretensioning" region such that when the pants are worn, they are subjected to an upward traction force W (Figure 3) which results in an effect of at least partial lifting of the buttock part covered and retained by the element 9, while at the same time thrusting the seam 16 into the intergluteal cleft.

30 A similar upward traction effect, even though less accentuated, is also induced on the upper portion 7B of the element 7, secured to the element 10 by the dart 14 (Figure 1).

The waist part 4 is formed by sewing together front waist elements 22 (Figure 4A) and rear waist elements 23 (Figure 4B) made of a fabric having the same characteristics as that with which the elements 10 are made. These waist elements must also not shift while the pants are worn and must cooperate with the upward traction action of the two parts 9A, 9B of the element 9 and finally with the lifting of the central part of the buttocks.

To improve the positioning of the waist part and further prevent its downward slippage, the inner face of the waist elements 22, 23 comprise an elastic tape 24 sewn thereto which remains in view (Figure 9), for example of silicone or with an outer silicone-coated surface, able to increase the adherence of the waist part 4 to the skin.

In the three embodiments of the pants the fact that they present a very high waist, and a low front waist, as already described, on the one hand accentuates the slendering effect of the hips, and on the other hand enables the waist part 4, 104, 204 to position itself in a position substantially above or approximately at the upper edge of the buttocks, or rather approximately at the hip joint when the pants are worn. From this position, by virtue of the particular shape of the previously described components of the rear part of the pants, the waste part 4, 104, 204 and the insert 10, 110, 210 are able to exert an upward traction force on the underlying pants components (the two parts 9A, 9B, 109A, 109B, 209A, 209B of the element 9, 109, 209 and the upper part 7B, 107B, 207B of the legs 7, 107, 207) which results:

- in an upward at least partial thrust at least on the central parts of the buttocks,
- in the thrusting of the central rear seam 16, 116, 216 of the pants into the intergluteal cleft,
- in a significant adherence of the rear fabric of the pants to the buttocks.

This combination of effects results overall in a reshaping of the forms of the buttocks of the wearer of the pants.

Finally it should be noted that the aforescribed embodiments have been provided by way of example and that numerous variants are possible, all falling within the same inventive concept, and that, in particular, the shape and/or dimensions, and/or the materials of the different parts of pants according to one of the embodiments could also be used in another of the 5 embodiments. Thus for example in the pants of the first or second embodiment, instead of the plastic inserts the inserts could be made of the three different types of fabric described with reference to the third embodiment, or vice versa the pants of the third embodiment could 10 comprise inserts similar to those of the first or second embodiment and be made of a single fabric with inserts. The same also applies with reference to the shape and dimensions, in particular of the parts 9A, 9B, and 109A, 109B, and 209A, 209B, of the seams 3A, 103A, 203A, of the waist parts 10, 110, 210, of the part 7B, 107B, 207B, which could be transferred to 15 first, second or third pants and vice versa.

It should be noted that the invention also relates to a set of pants, for example pants all having the same size in which all pants of said set comprise: a first rear part 2, 102, 202 adapted to at least partially cover the buttocks, a second front part 1, 101, 201 adapted to at least partially cover 20 the abdomen, and in which in all the pants of said set, said first and said second part have substantially the same shapes and dimensions with the exception of a central portion 9, 109, 209 of said first part 2, 102, 202 adapted to cover at least a central portion S3 of the buttocks, and presenting a shape and/or dimensions which are different for all pants of 25 said set, to hence produce pants which all have the same size but are able to adapt to different dimensions of the central portions S3 of the buttocks of the pants wearer. According to the invention, pants can therefore be produced all having the same size but with rear central portions provided at the central portions S3 of the two buttocks which are of different form 30 such as to be able to adapt to the different buttock shapes of the pants wearer. According to the invention, pants can for example be produced which at the two central portions S3 of the buttocks present flat or

substantially flat portions (for slightly projecting and slightly rounded buttocks) or cup-shaped portions with cups having different depths (for example cups for very projecting and rounded buttocks and cups for medium projecting and rounded buttocks).

- 5 It should also be noted that advantageously the pants of the invention comprise an extremely limited number of components in that their rear part adapted to cover the buttocks is essentially formed by sewing together only a limited number of parts. The pants can therefore be produced easily and quickly using techniques and machines of usual type.

CLAIMS

1. Pants for shaping the female buttocks and hips, of the type comprising:
- 5 - a first rear part adapted to at least partially cover the buttocks,
- a second front part adapted to at least partially cover the abdomen,
- said first part comprising
- 10 - at least one first element adapted to cover at least a lower terminal portion and lateral portion of the buttocks,
- at least one second element adapted to cover at least a central portion of the buttocks,
- and at least one third element adapted to cover at least an upper terminal portion of the buttocks,
- 15 characterised in that
- said first, second and third element comprise a knitted fabric,
- said first and third element define a central aperture, outer edges of said second element being secured to edges defining said aperture of said first and third element so as to close said aperture,
- 20 - and that said second element comprises two parts, each adapted to cover only one of the two central parts of the buttocks, said two parts being secured together along respective lateral edges provided at the intergluteal cleft of the buttocks by a central seam adapted to be positioned at said intergluteal cleft.
- 25 2. Pants as claimed in claim 1, wherein at least the joined-together edges of the two parts which form the second element have, before being sewn together, a rectilinear shape in plan view, to facilitate insertion of the seam of said edges into the intergluteal cleft of the buttocks and the adherence of said two parts to the buttocks
- 30 when the pants are worn.
3. Pants as claimed in claim 1, wherein the modulus of elasticity and/or the tenacity of at least two portions of the first

element is greater than the modulus of elasticity and/or the tenacity of the second element adapted to cover at least the central portion of the buttocks, by a value between 5% and 30% of the corresponding value of the modulus of elasticity and/or the tenacity of said second element, wherein each of said at least two portions of the first element are each adapted to cover at least the lower terminal portion and/or a lateral portion of the buttocks, and/or a portion of the hips.

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4. Pants as claimed in claim 1, wherein the first rear part is provided with the central seam adapted to be positioned to correspond with the intergluteal cleft, said central seam presenting members to facilitate the insertion of said seam into said cleft, said member comprising an elongated elastic element sewn to the interior of the pants onto said seam in a state of pretension, such that when the pants are worn, said elongated elastic element pulls said seam and urges it into the intergluteal cleft.

20

25

5. Pants as claimed in claim 1, wherein the first rear part is provided with the central seam adapted to be positioned to correspond with the intergluteal cleft, said central seam presenting members to facilitate the insertion of said seam into said cleft, said member comprising a cord provided inside the pants and presenting a sewn section and a fork and for the rest slidable within a slot provided at said seam and with free ends which emerge from said slot at a waist part such that on pulling said cord and knotting its ends, the seam can be pretensioned such as to facilitate insertion into said cleft.

30

6. Pants as claimed in claim 1, wherein the first element presents at least two inserts rigidly secured to an inner face of said first element at two different portions of said first element, each of said inserts being provided at that part of the pants adapted to cover at least a portion of the hips, a lateral portion of the buttocks, and a lower lateral portion of the buttocks.

7. Pants as claimed in claim 6, wherein the inserts are made of a plastic material, said inserts being made to adhere to and being secured to the inner face of the first element.

5 8. Pants as claimed in claim 7, wherein the plastic material comprises polyurethane.

9. Pants as claimed in claim 6, wherein the inserts are made of a material presenting a thickness between 0.02 and 0.5 mm, and at least one of the following further characteristics: weight between 30 and 130 g/m², and surface continuous or presenting a plurality of
10 holes to facilitate breathability.

10. Pants as claimed in claim 1, wherein at least the first rear part adapted to at least partially cover the buttocks, and the second front part adapted to at least partially cover the abdomen, and the first element adapted to cover at least the lower terminal portion and
15 lateral portion of the buttocks, and the second element adapted to at least partially cover the central portion of the buttocks, are all made of the same knitted fabric having identical technical characteristics for all said parts and elements.

11. Pants as claimed in claim 1, wherein each of the two parts of
20 the second element presents a cup shape.

12. Pants as claimed in claim 1, wherein a first distance measured between a highest point of a waist part of the first rear part and a fork of the pants is greater than a second distance measured between a highest point of said waist part of the second front part and said fork, the difference between said first distance and the
25 second distance being at least equal to 30% of the second distance.

13. Pants as claimed in claim 1, wherein the portions of the first element and of the third element extend to lateral parts of the buttocks and are prolonged from the first rear part of the pants into
30 the second front part, and/or that said first rear part and second front part are joined together by lateral seams which extend into said

second front part at least to positions corresponding with that part of the pants adapted to cover the abdomen.

5 14. Pants as claimed in claim 1, wherein each of the two parts of the second element presents an upper edge to be connected to a corresponding lower edge of a portion of the third element, said upper edge presenting an arched shape facing a fork of the pants, and said lower edge presenting a rectilinear or arched shape different from that of said upper edge, such that when said two elements are brought together before being connected together, they
10 determine a fabric-less region to be closed by a seam which joins said edges together.

15 15. Pants as claimed in claim 1, wherein the third element adapted to cover at least the upper terminal portion of the buttocks, comprises a lower edge said lower edge being rounded to better adapt to the anatomy of the buttocks and to give the central part of the pants a heart shape, said lower edge being adapted to be sewn to a corresponding arched edge of the second element adapted to cover at least the central portion of the buttock.

20 16. Pants as claimed in claim 1, wherein the third element comprise an upper element adapted to cover an upper terminal band of the buttocks and joined to a waist element.

25 17. Pants as claimed in claim 1, wherein the first element adapted to cover at least the lower terminal portion and lateral portion of the buttocks, comprise an inner arched edge, adapted to be sewn to a corresponding arched edge of the second element adapted to cover at least the central portion of the buttocks.

1/15

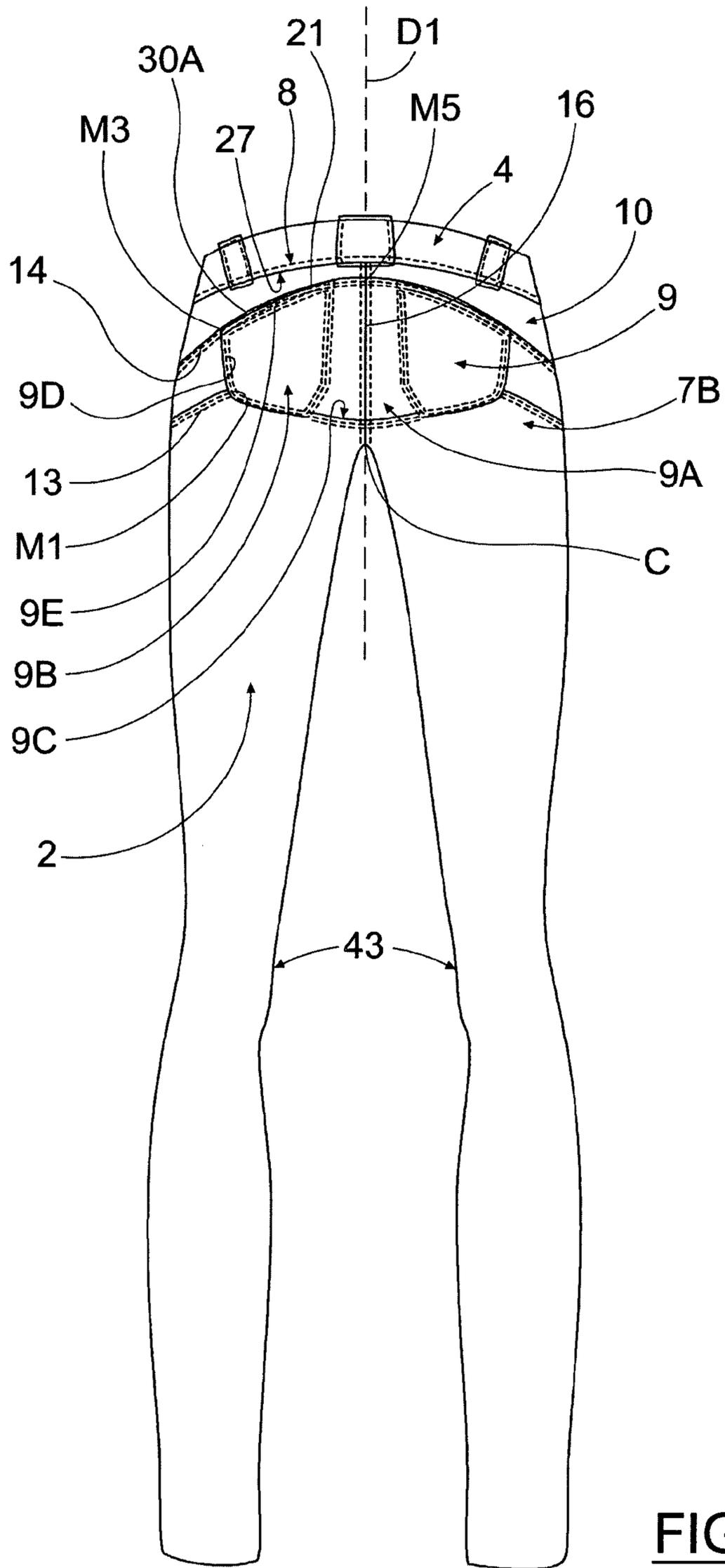


FIG.1

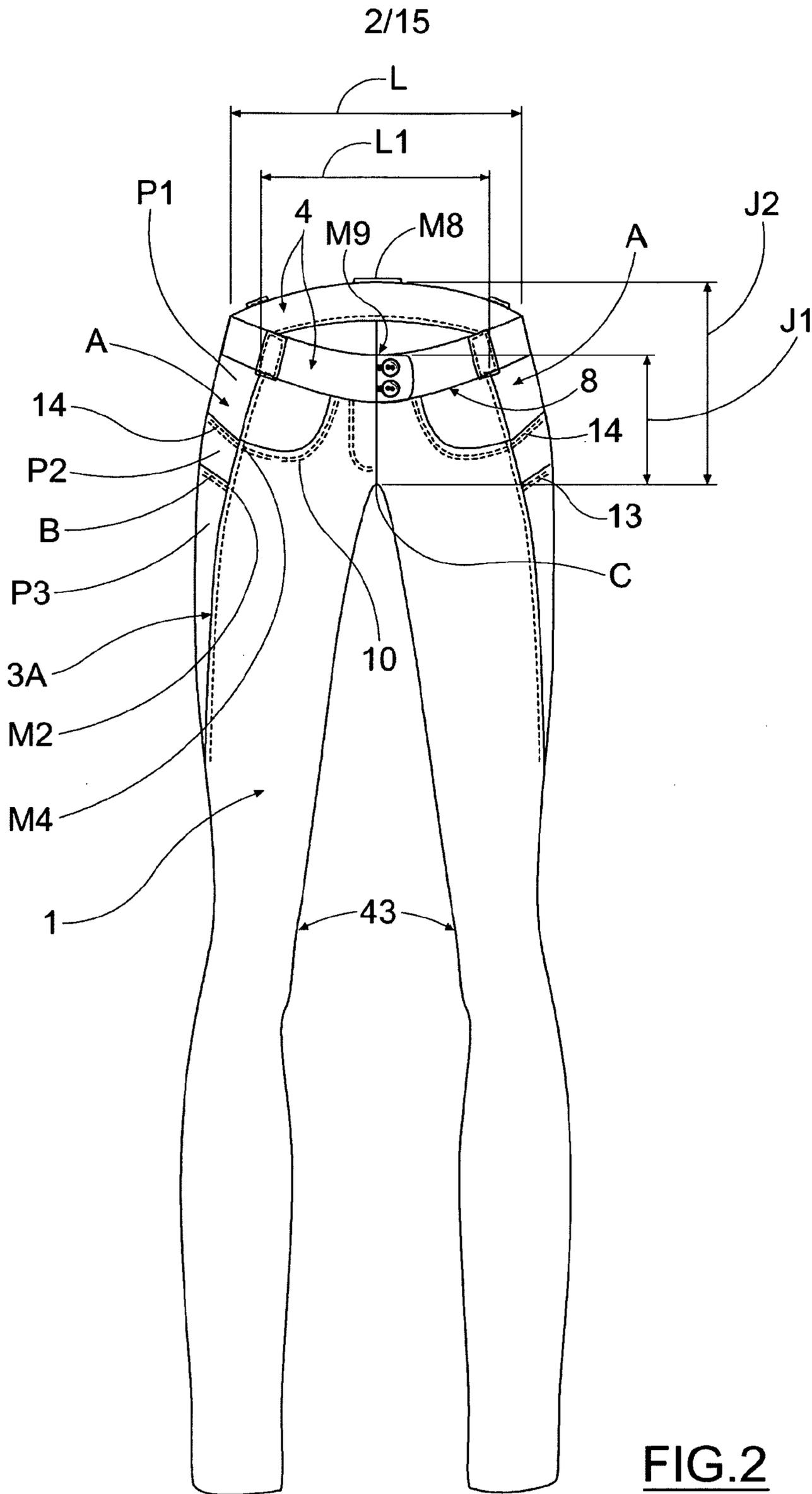


FIG.2

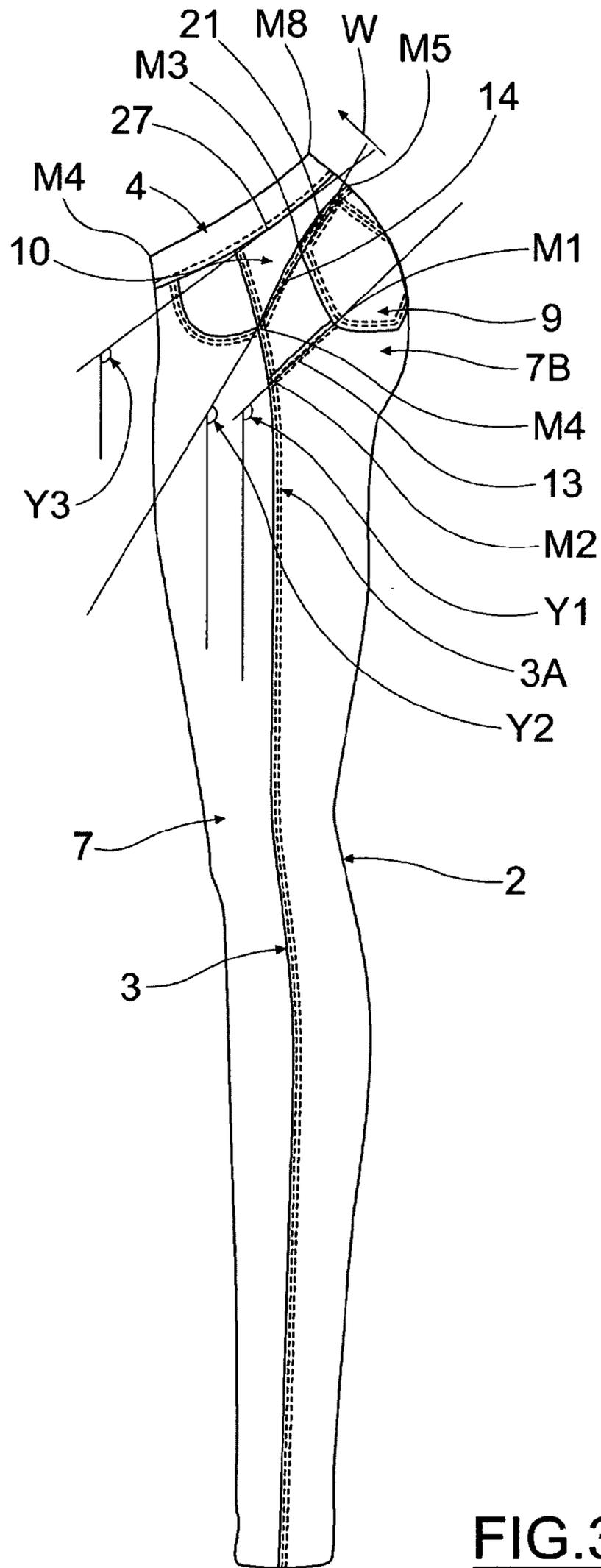


FIG.3

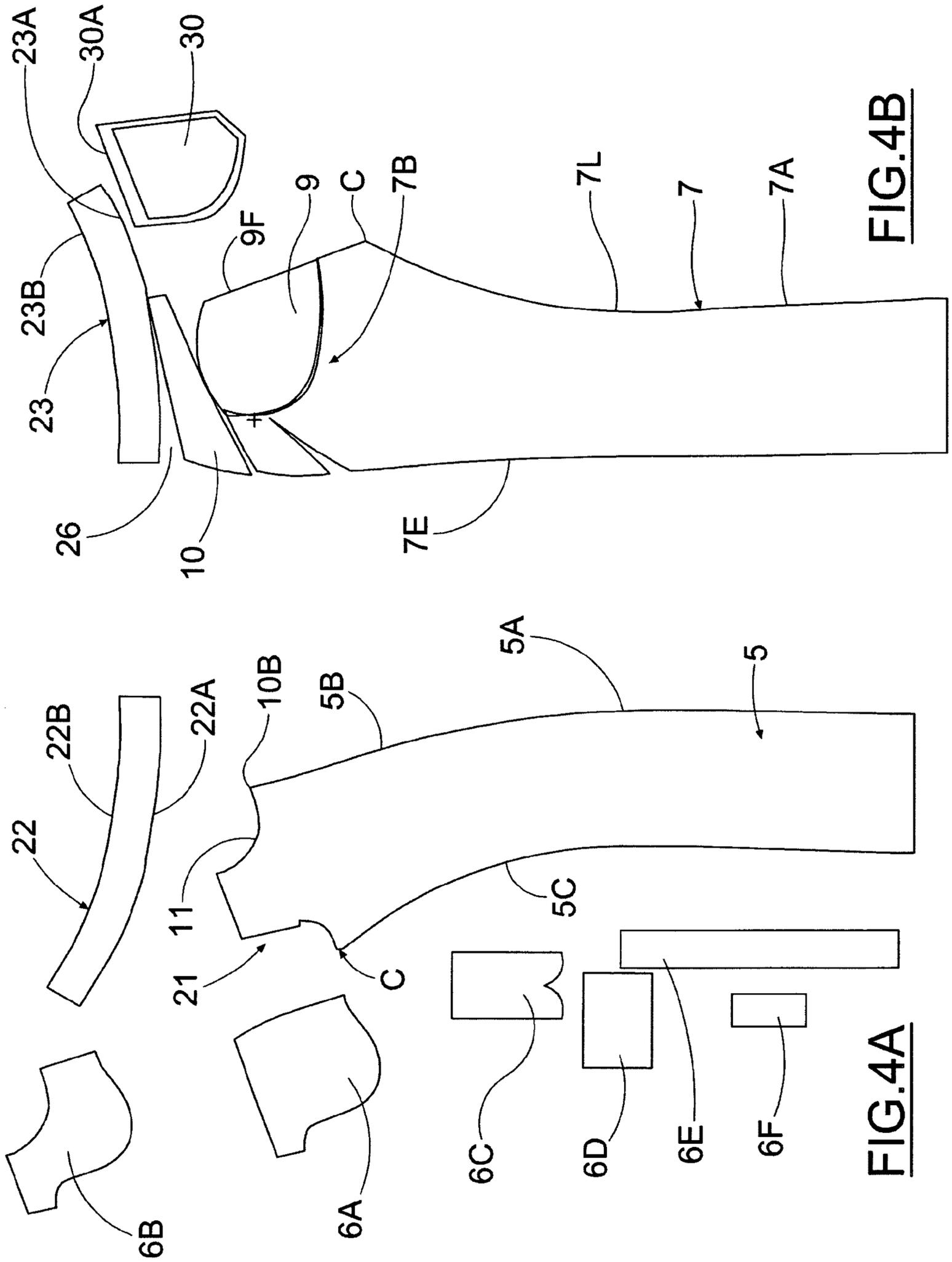


FIG. 4B

FIG. 4A

5/15

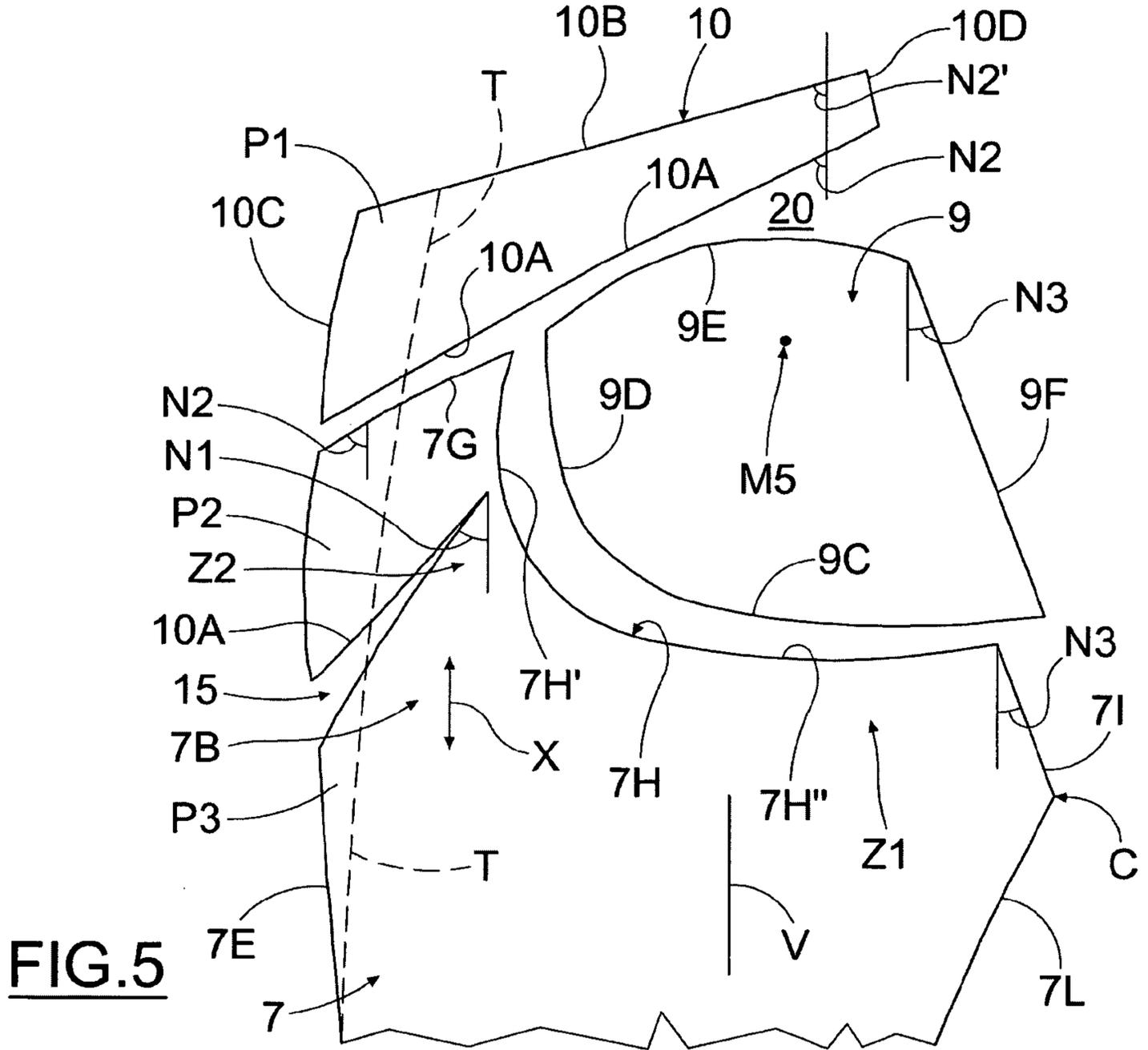


FIG. 5

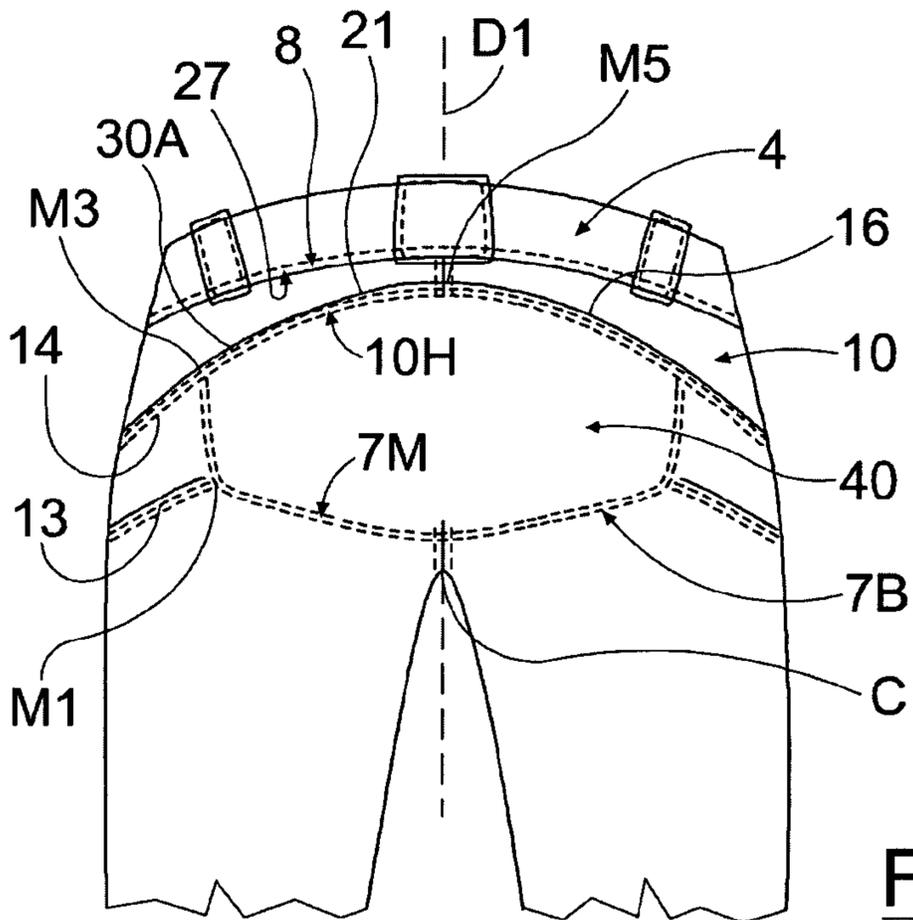


FIG. 1BIS

6/15

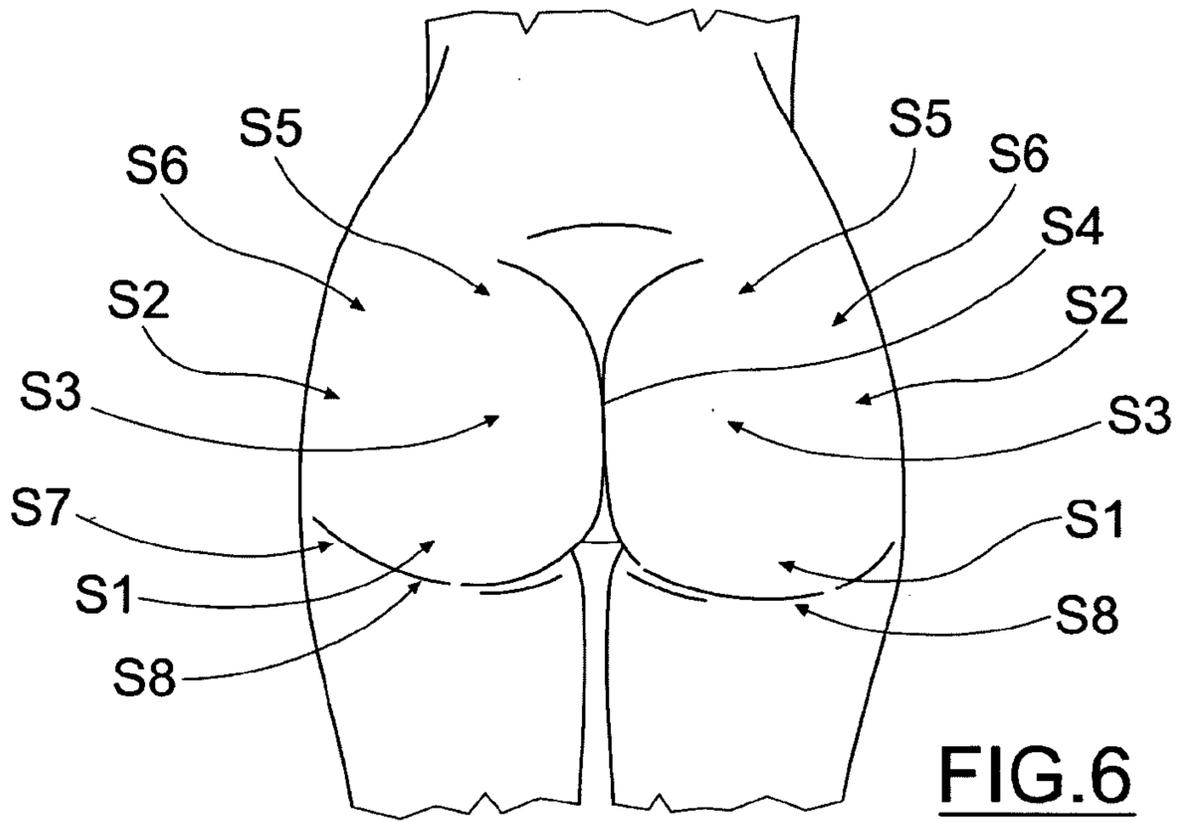


FIG. 6

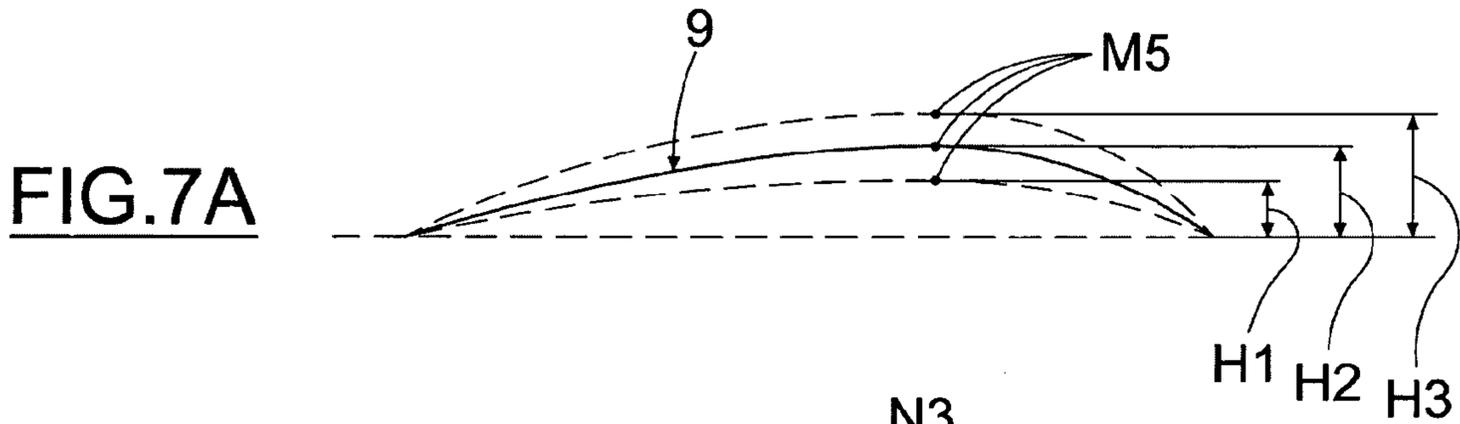


FIG. 7A

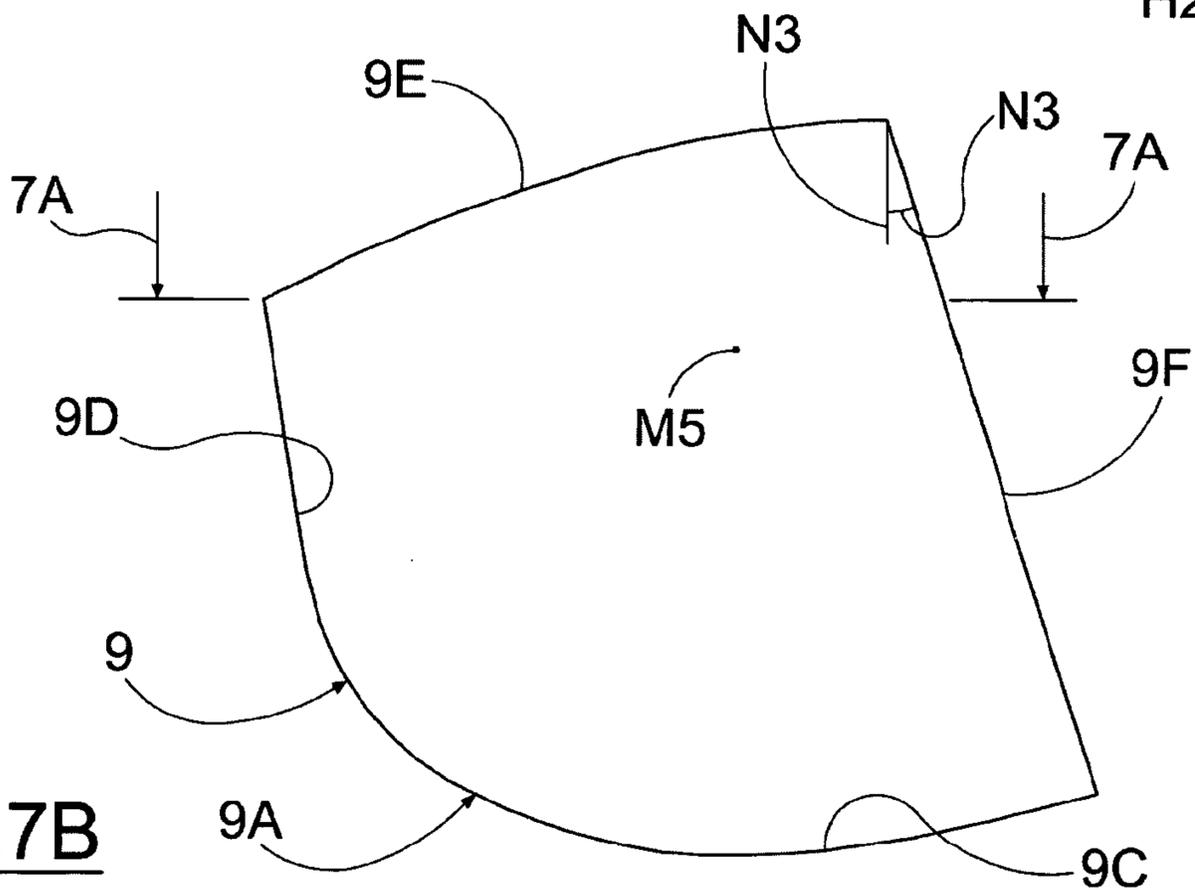


FIG. 7B

7/15

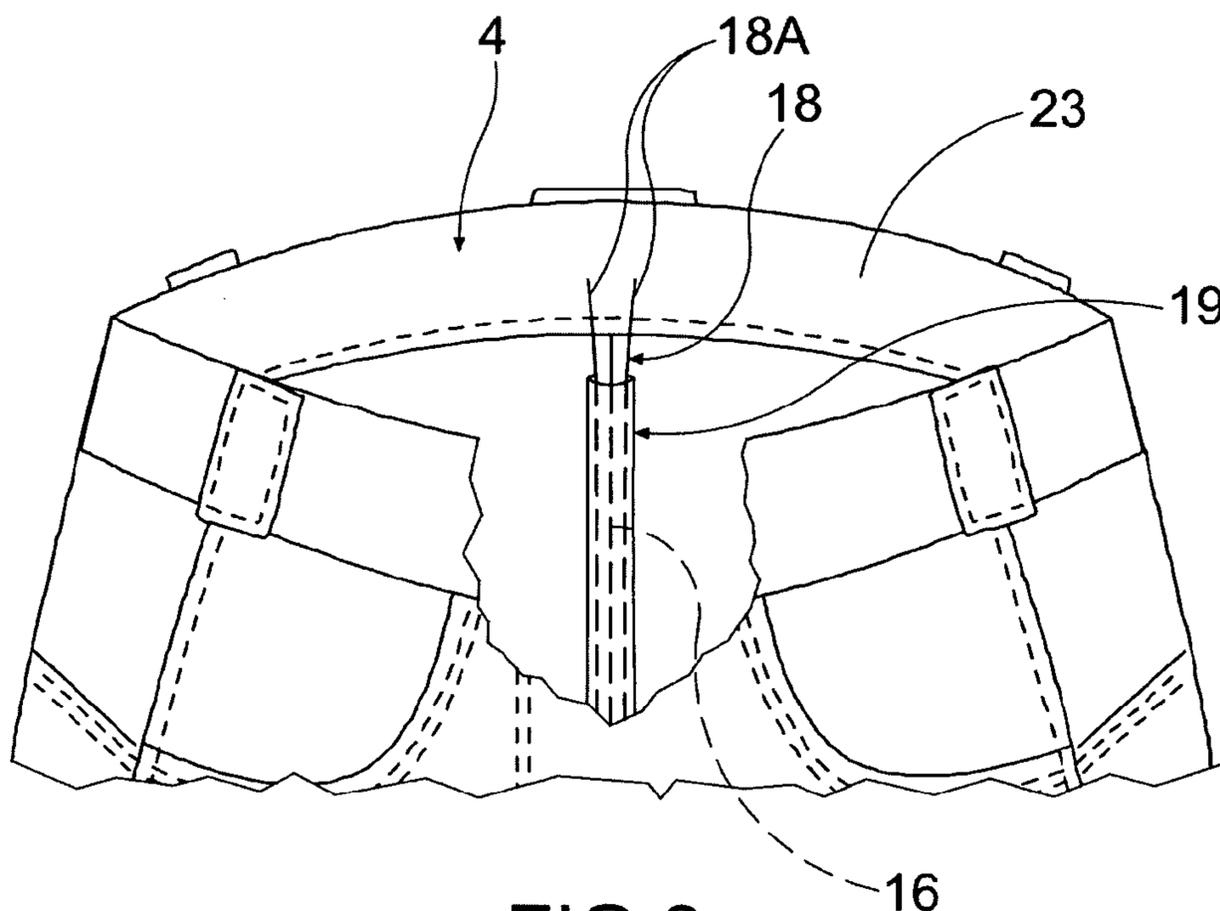


FIG. 8

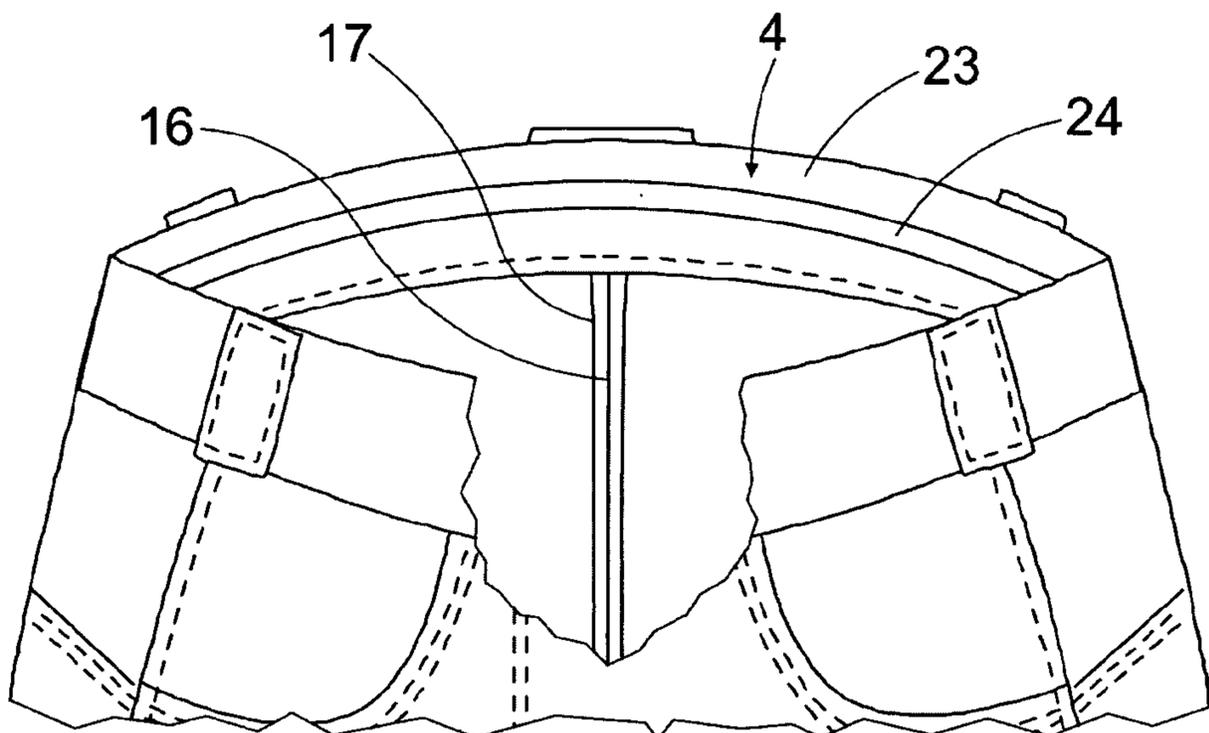


FIG. 9

8/15

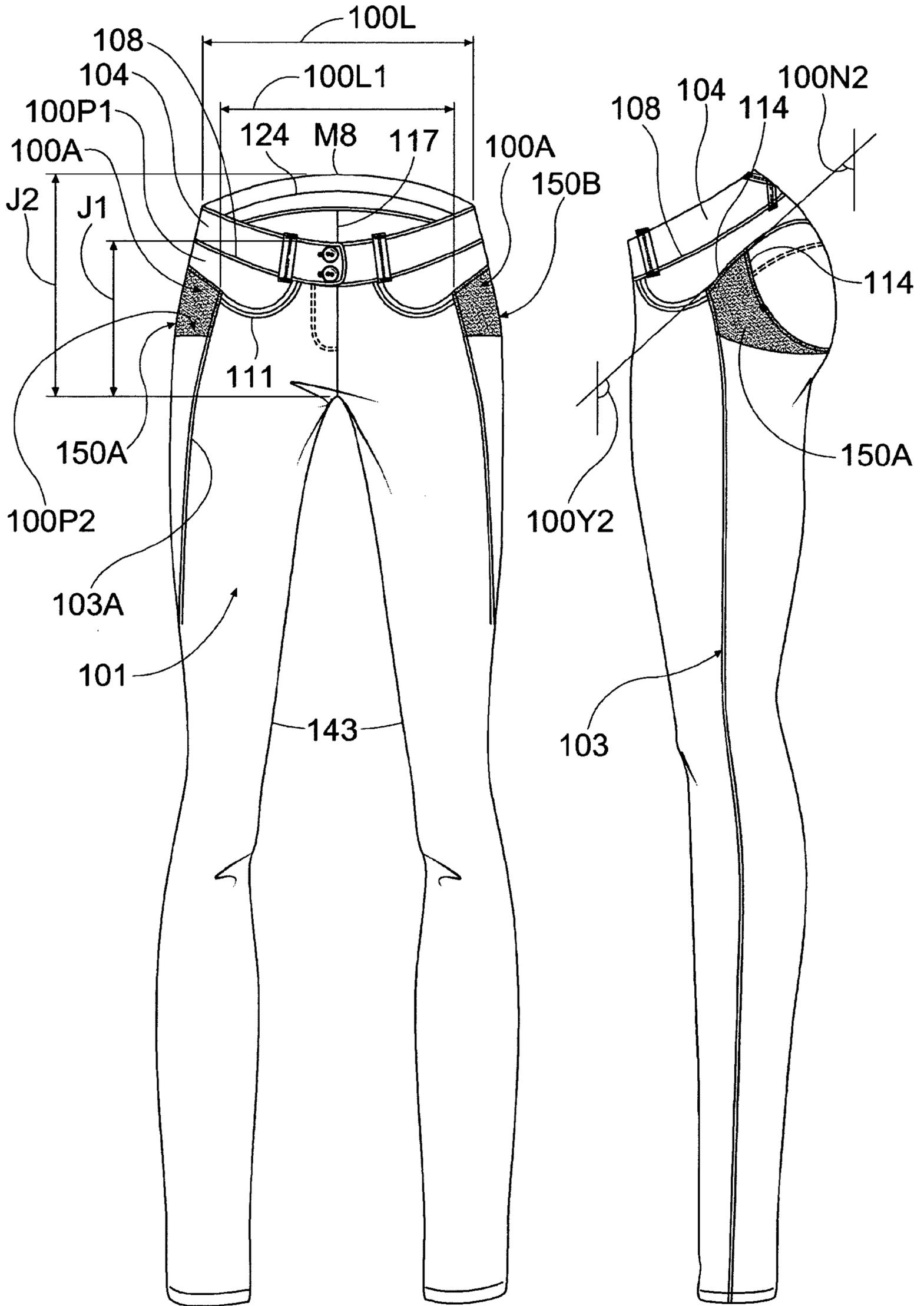


FIG. 10A

FIG. 10B

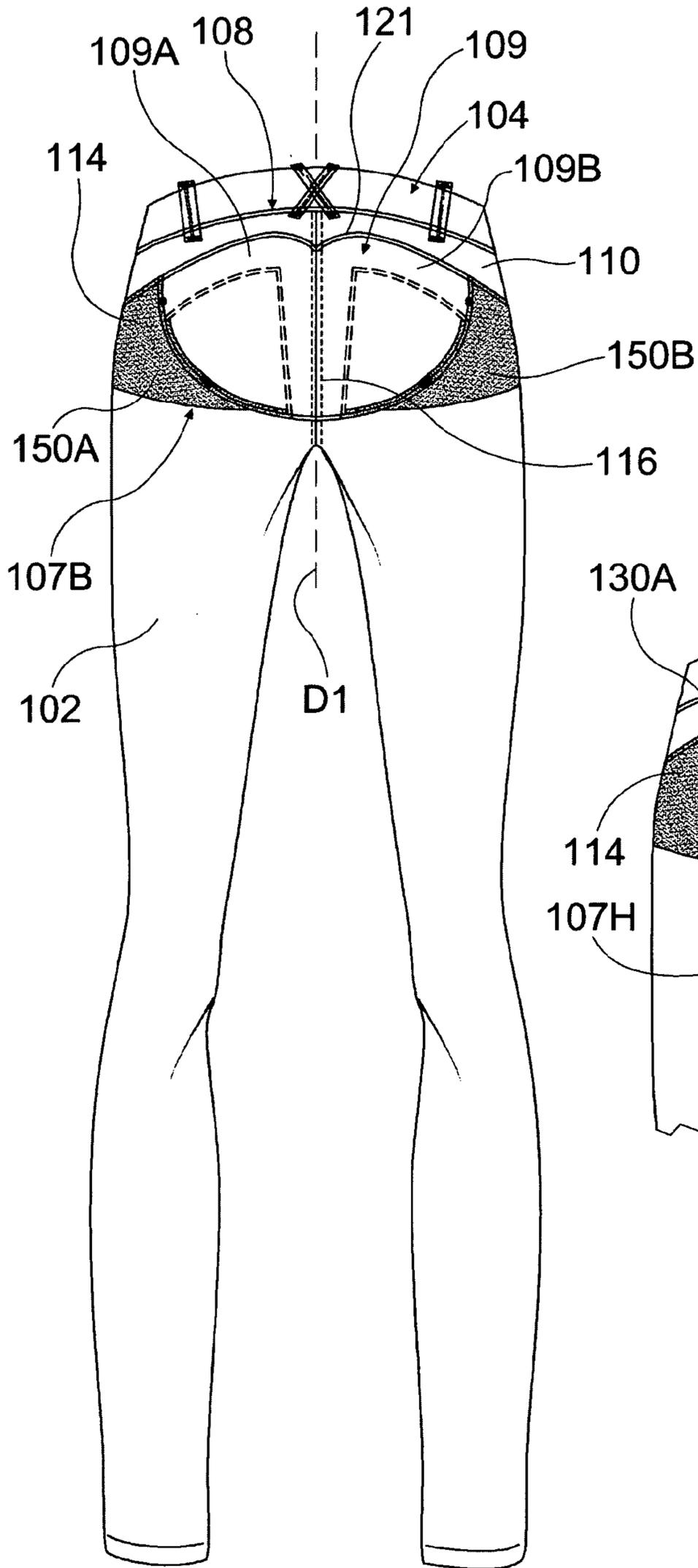


FIG. 10C

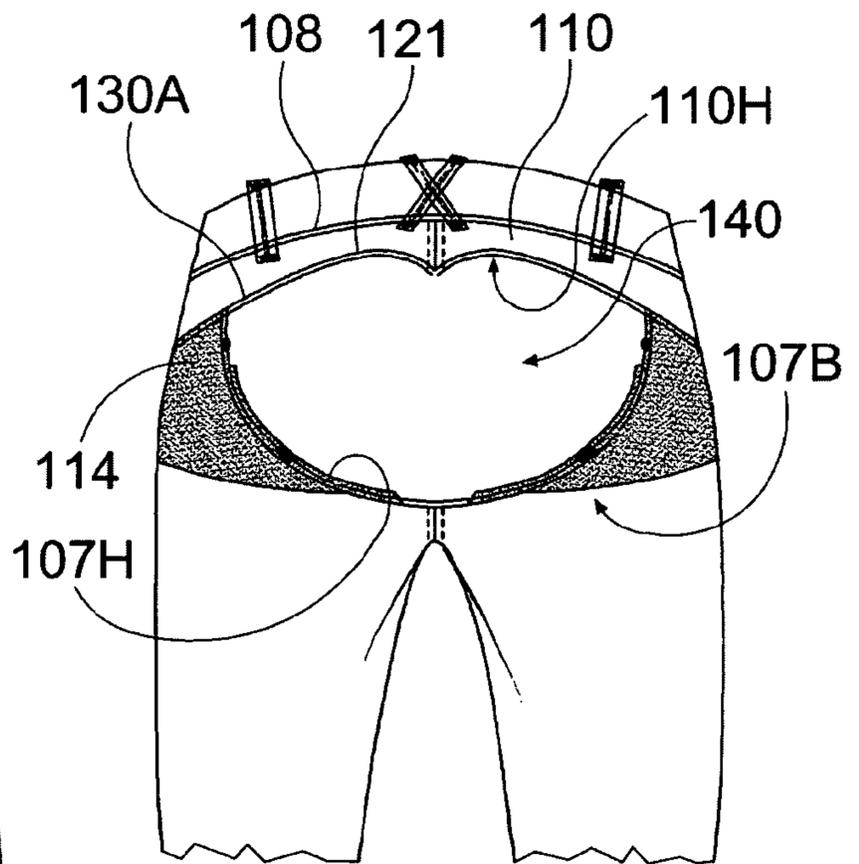


FIG. 10D

10/15

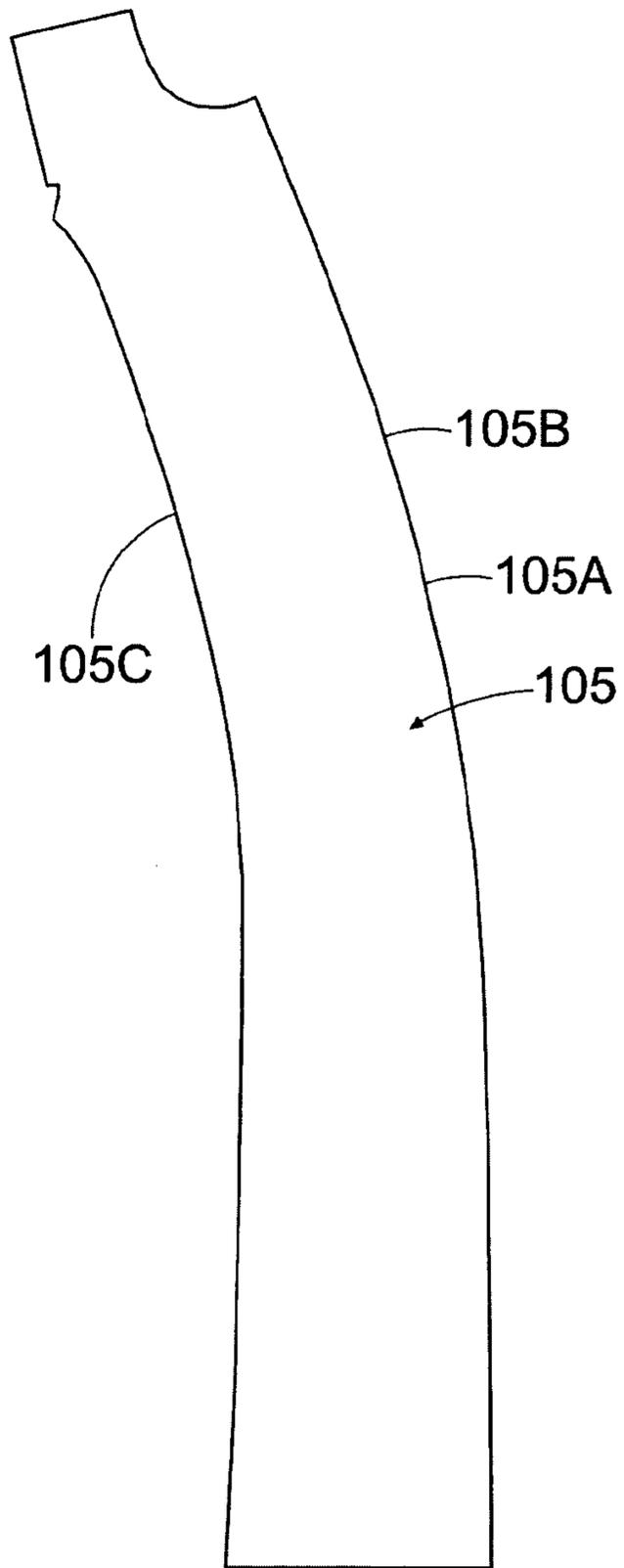


FIG.11A

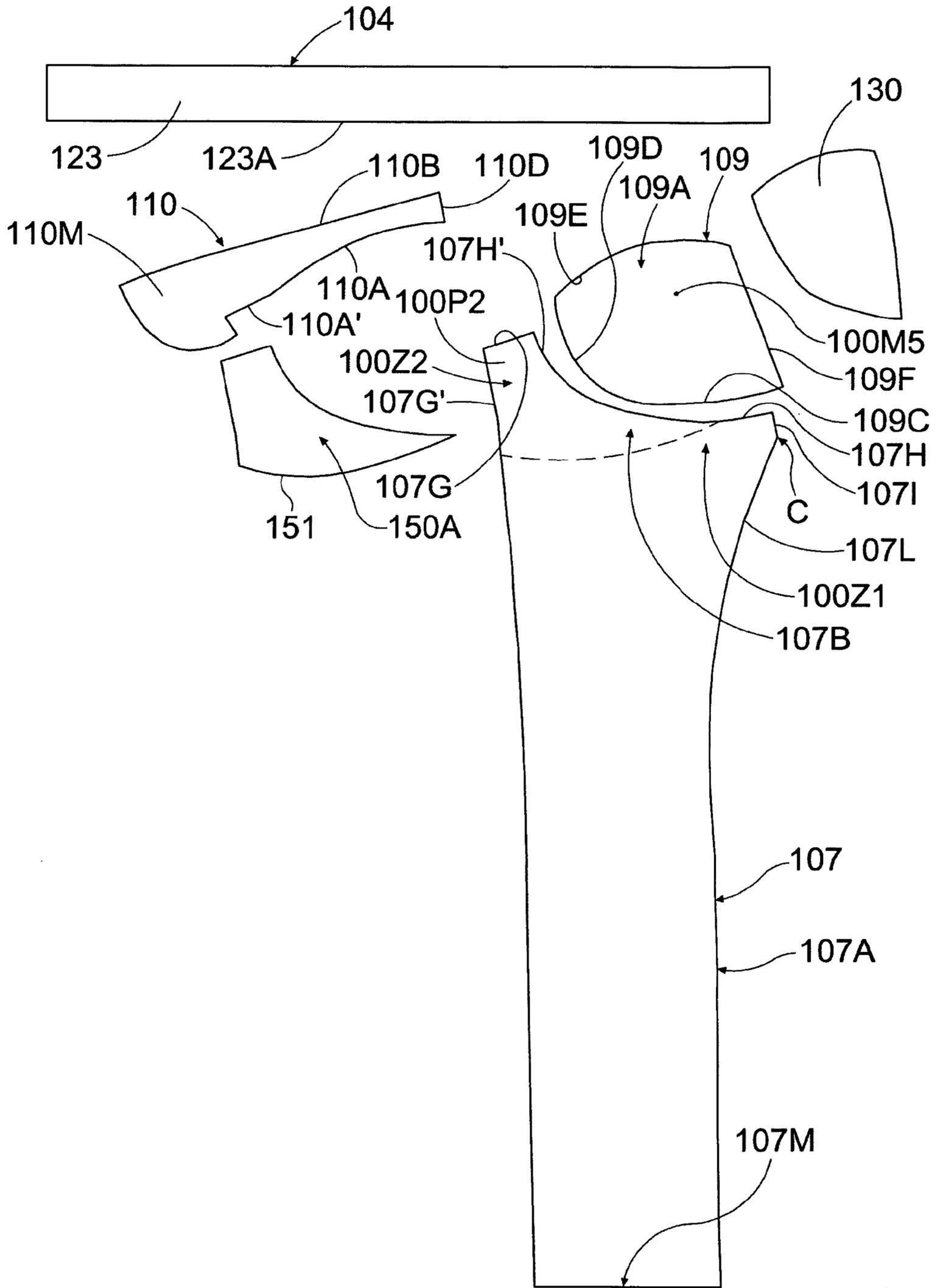


FIG.11B

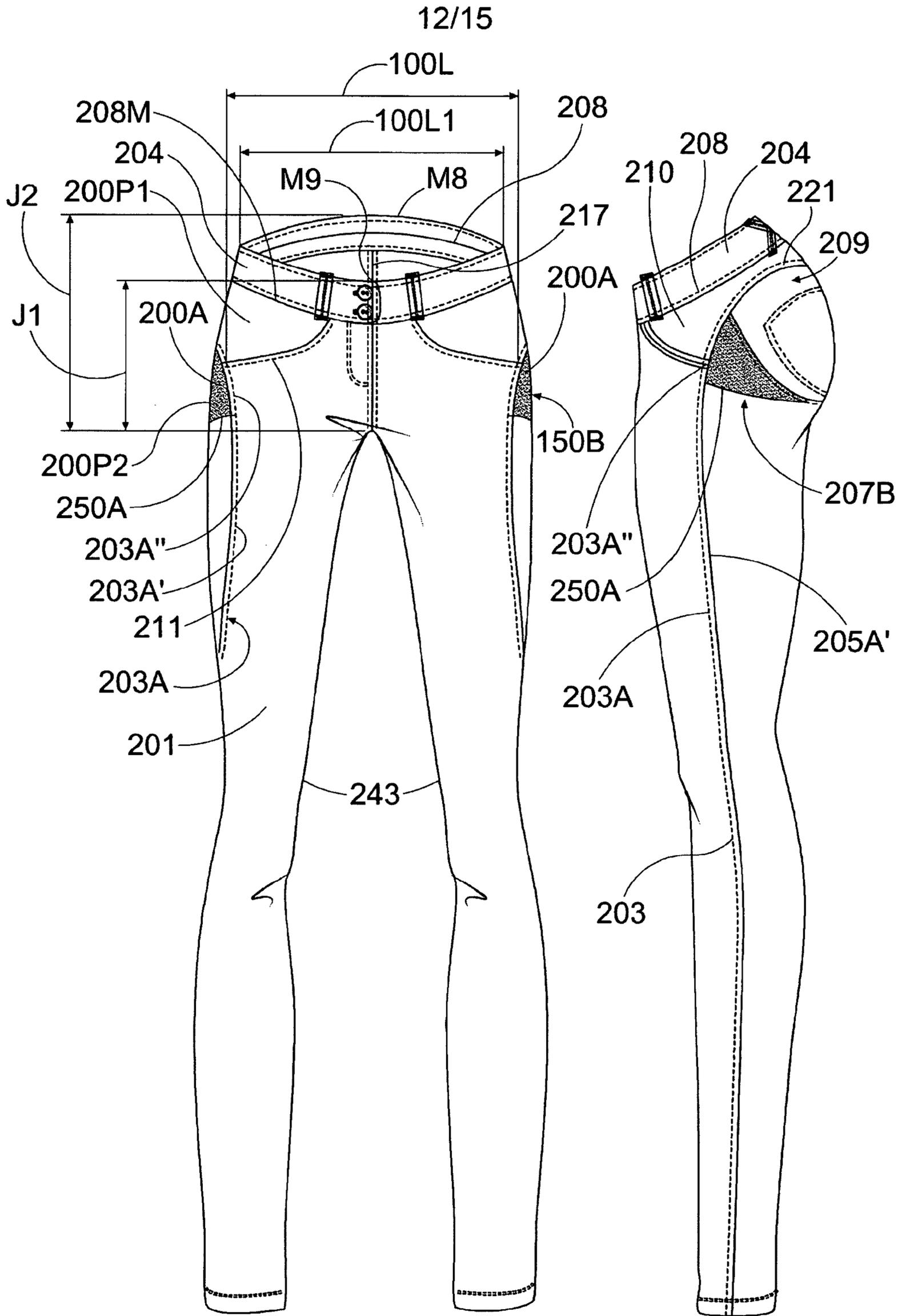


FIG.12A

FIG.12B

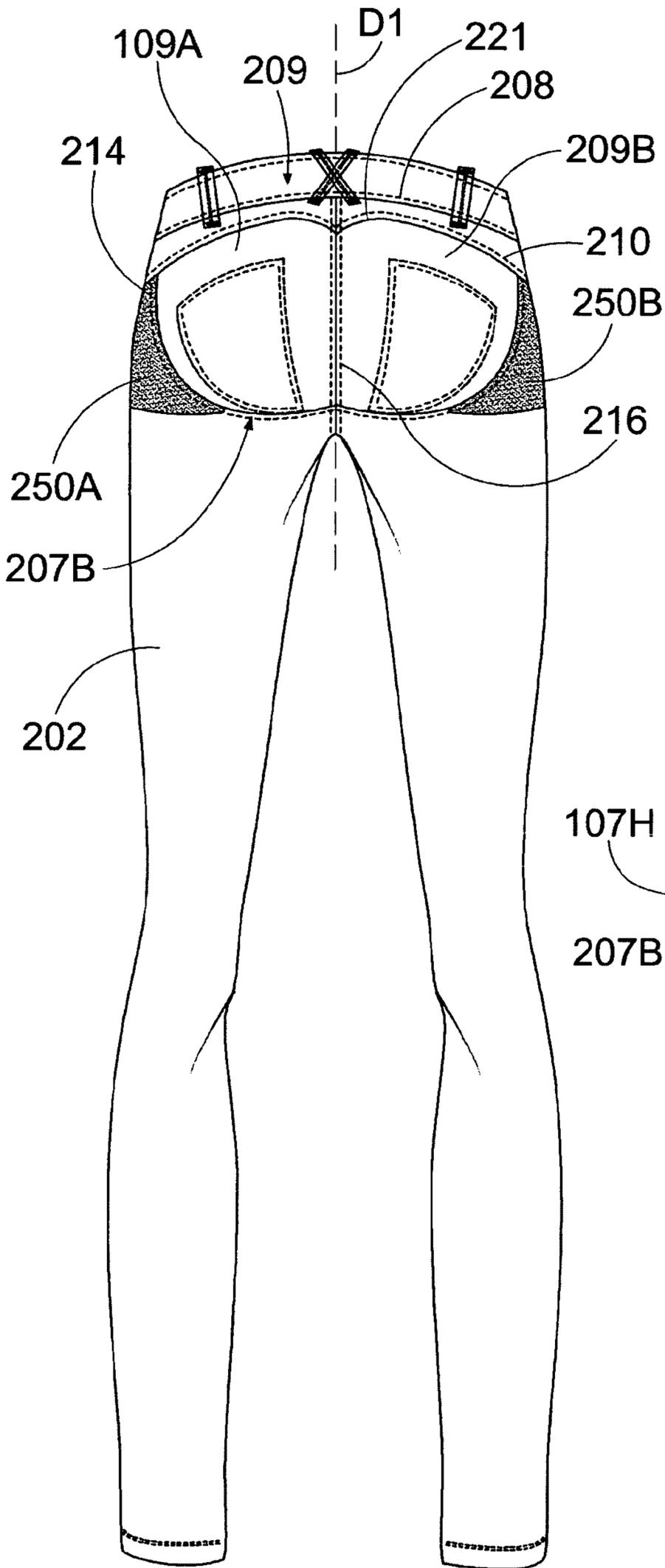


FIG. 12C

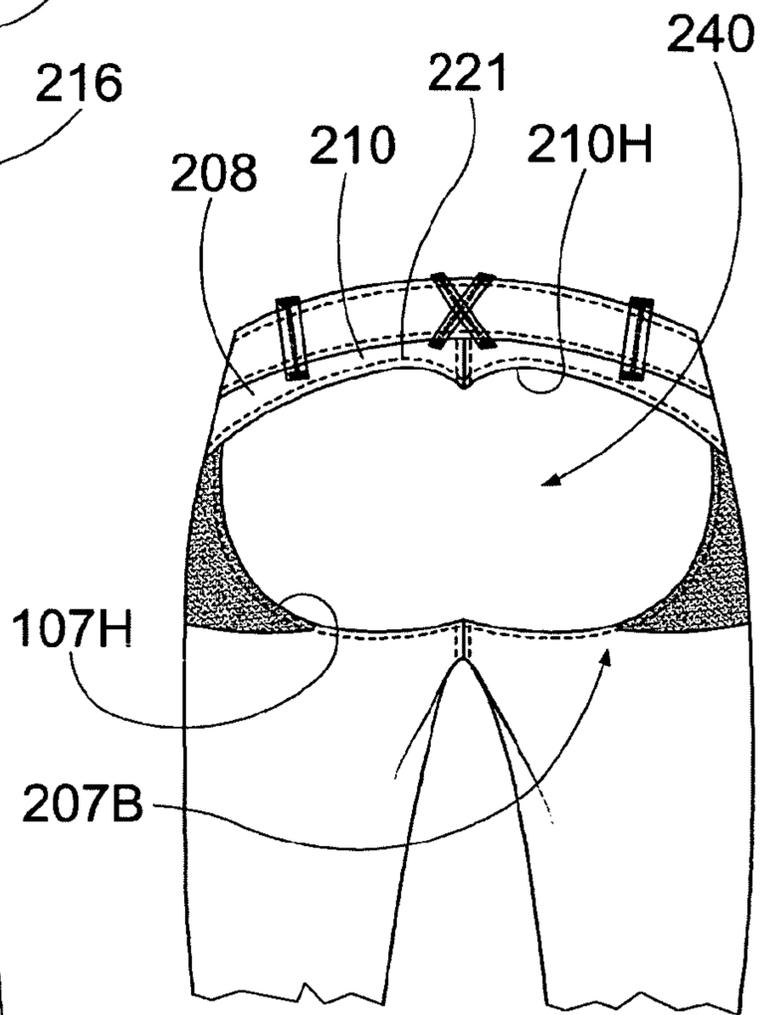


FIG. 12D

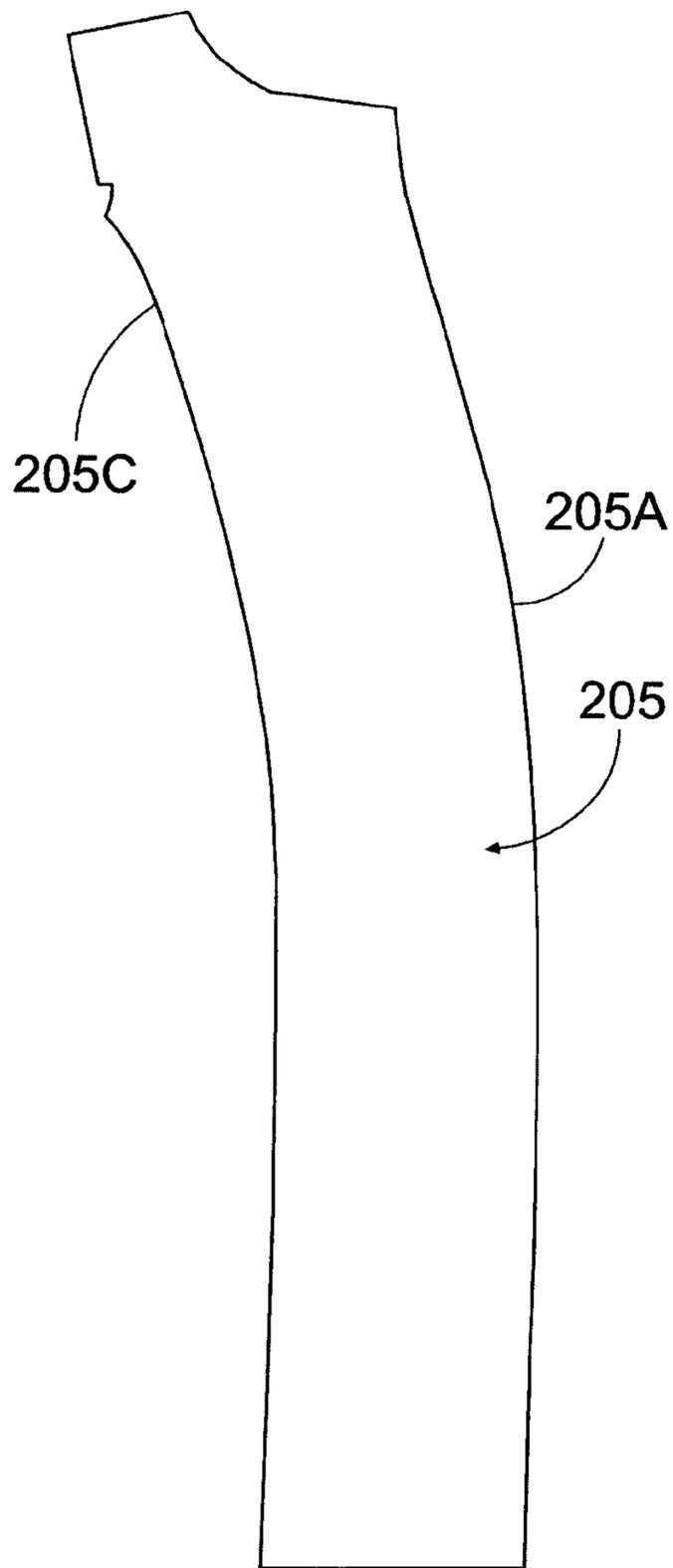


FIG. 13A

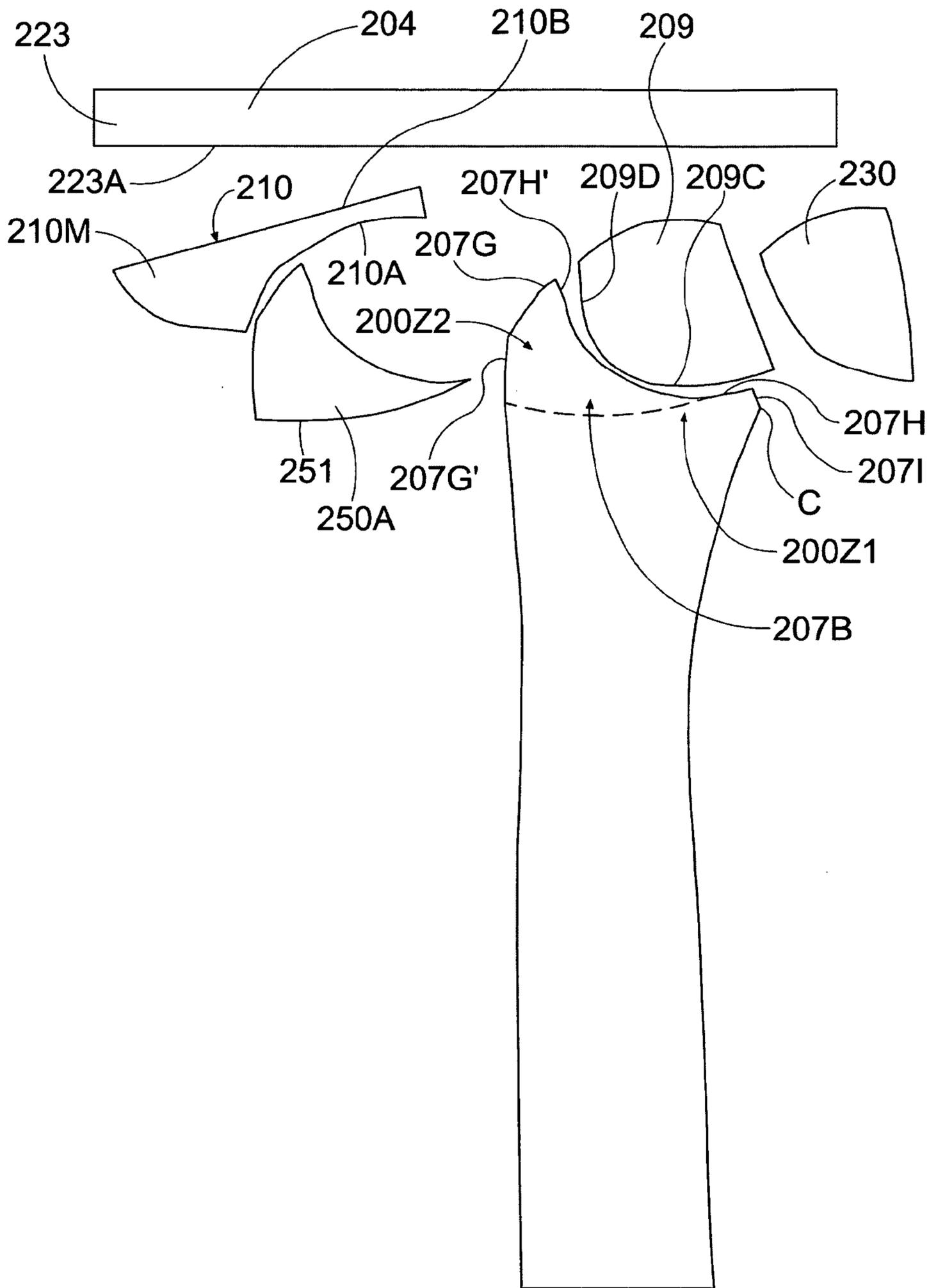


FIG.13B

