(54) **METHOD FOR MAKING A SEWING PATTERN**

(57)   A method for making a sewing pattern (100) on the basis of measurements of parts of the body of a person, the sewing pattern being divided into a first sector (1), named "chest sector", a second sector (2), named "armhole sector", and a third sector (3), named "back sector", wherein a "V"-shaped zone (10) is provided in the first sector (1), wherein an "L"-square (4) is provided, with a first (5) and a second arm (6) forming the "L", wherein at least the first arm is graduated, wherein the geometric shape of the "V"-shaped zone (10) depends on a measurement performed with the square (4).
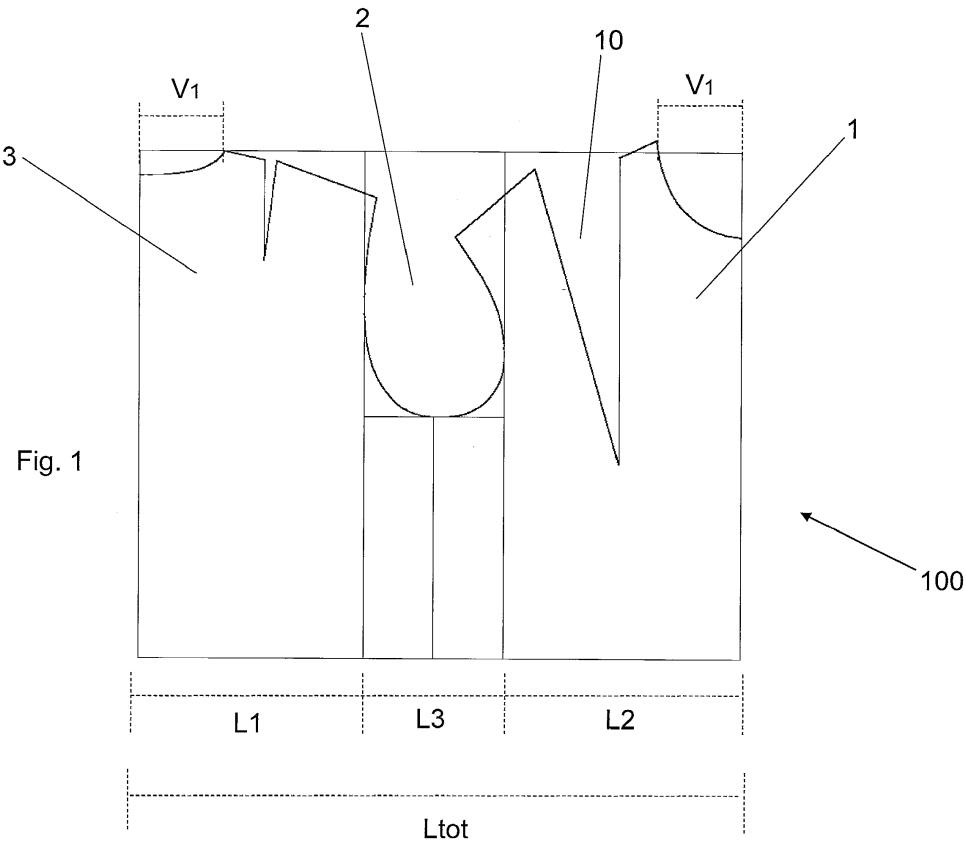
Fig. 1

EP 3 078 286 A1

Description

Field of the invention

[0001] The present invention relates to a method for making a sewing pattern, in particular a sewing pattern for women's outerwear.

Background art

[0002] Market needs have led to making garments with standardized sizes. Since there can only be a limited number of standard sizes and since the physical features vary from person to person, it is apparent that standard sizes cannot fit everyone as they should. For this reason, many people resort to specialized tailors to obtain garments made to measure which can better adapt to their physical features. Sewing patterns, usually made of tissue paper, which are firstly drawn and then cut out, are produced to make garments, e.g. outerwear, to measure. The sewing pattern is drawn on the basis of a given number of measurements of parts of the person's body. In general, the drawing of the sewing pattern for women's garments includes at least one triangular shaped zone which, once cut, defines a dart in order to provide three-dimensionality and thus volume for the breasts.

[0003] Disadvantageously, the conventional sewing patterns, and thus the outerwear which result therefrom, are made on the basis of some standard measurements or are taken on a woman, typically a size 40, who is employed as a model. Sizes are then developed on a computer or by drawing by hand to make the subsequent size, i.e. sizes 42, 44, 46, 48, 50, etc. Therefore, the outerwear cannot always adequately fit a woman. Furthermore, the conventional methods for making a sewing pattern are burdensome and laborious; indeed, such methods imply many correction steps, for example aimed at correcting posture or plumb line faults which are performed on the woman employed as a model, which imply a lot of work when the outerwear has already been made. A known method for making a sewing pattern is described in US 4 899 448 A.

[0004] The need is thus felt to provide a method for making a sewing pattern which allows to overcome the aforesaid drawbacks.

Summary of the invention

[0005] It is an object of the present invention to provide a method for making a sewing pattern which is more accurate than the conventional methods.

[0006] It is a further object of the present invention to provide a method for making a sewing pattern, the drawing of which is based on greater details concerning the conformation of the person.

[0007] It is a further object of the present invention to provide a method for making a sewing pattern which allows the minimization, with respect to the prior art, of the possible correction steps, in particular on the finished outerwear, e.g. aimed at correcting posture and plumb line defects.

[0008] The present invention thus achieves at least one of these objects by providing a method, according to claim 1, for making a sewing pattern on the basis of measurements of parts of the body of a person, the sewing pattern being divided into a first sector, named "chest sector", a second sector, named "armhole sector" and a third sector, named "back sector", wherein a "V"-shaped zone is provided in the first sector,
wherein an "L"-square is provided, with a first and a second arm forming the "L", wherein at least the first arm is graduated on a scale in centimeters or millimeters, wherein the following steps are included:

- measuring:

    the rear width of the shoulders M_{13}, the length of the breast M_7, the inclination angle α of a shoulder with respect to the horizontal, the circumference of the chest above the breasts M_1, the distance between the breasts M_{12};
    resting the "L"-square on the person so that the first arm touches an upper part of a shoulder and the second arm, arranged vertically, touches the most protruding part of the breast corresponding to the shoulder to measure a reference length M_{20},
    defined by the distance between the vertical straight line passing through the most protruding point of the breast and the resting point of said first arm on the upper part of the shoulder,

- calculating the following values:
- a first value V_1, obtained by means of the formula: $V_1 = M_1/12$;
- a second value V_2, obtained by means of the formula: $V_2 = (M_{13}/2) - V_1 + T_1 - 0.5$ cm

    where T_1 is a first tolerance value;

- a third value V_3 expressed in degrees, obtained by means of the formula $V_3 = \alpha + 8°$
- a fourth value V_4, obtained by means of the formula $V_4 = (M_{12}/2) + 1$ cm;
- and a reference value $V_{ref} = M_{20}/2$, named "breast dart width",
- operating the following geometric construction:

    - tracing a first segment AB, comprising a first end point A and a second end point B, of length equal to measurement M_7;
    - tracing a second segment AC perpendicular to the first segment AB, of length equal to the first value V_1;
    - tracing a third segment CD inclined with respect to the second segment AC by a first acute angle

equal to the third value V_3 and of length equal to the second value V_2, the third segment CD comprising a third end point D;
-    tracing a first straight line r1 parallel to the first segment AB, distant from the latter by a length equal to said fourth value V_4, and comprising a first point E and a second point F, wherein the second point F is the intersection point between a second straight line r2 passing through the second end point B and perpendicular to the first segment AB, and wherein the first point E is the intersection point between the straight line r1 and the third segment CD, defining a fourth segment EF, a fifth segment ED and a second acute angle DEF;
-    tracing a third straight line r3, parallel to the first straight line r1 and at a distance from the latter equal to said reference value V_{ref},
-    determining a third point L given by the intersection between a circumference centered in the second point F and passing through the first point E, and the third straight line r3, defining a sixth segment LF of length equal to the fourth segment EF;

so that the first point E, the second point F and the third point L define said "V"-shaped zone.

[0009] The method is particularly adapted to make a sewing pattern for outerwear, from which a bodice, a shirt, a jacket or a coat can be made, for example. Advantageously, the method of the invention may include one or more steps in which the fit is checked so that possible corrections to the finished outerwear are minimized.

[0010] Advantageously, the method according to the invention includes making the width of the breast dart on the basis of a measurement taken with an "L"-shaped square, so as to provide outerwear which better fits the physical features of a woman, in particular her breast size.

[0011] In the present content, all the segments, such as for example AB, AC and the like, should be understood as two points of a line, e.g. between points A and B, A and C etc.

[0012] Preferably, all the measurements or lengths indicated by letter M and respective subscript are measured according to the decimal metric system, preferably in cm or in mm. It is worth noting that using a measurement system for the described values different from the decimal metric system is not beyond the scope of the present invention.

[0013] The dependent claims describe preferred embodiments of the invention.

Brief description of the drawings

[0014] Further features and advantages of the present invention will become more apparent in the light of the detailed description of a preferred, but not exclusive em-

bodiment of a method for making a sewing pattern illustrated by the way of non-limitative example, with reference to the accompanying drawings, in which:

Fig. 1 shows a sewing pattern of the invention;
Fig. 2 shows a geometric construction according to the present invention;
Fig. 3 shows a diagrammatic front view of a person and of the measurements according to the method of the invention;
Fig. 4 shows a diagrammatic front view of a person and other measurements according to the method of the invention;
Fig. 5 shows a diagrammatic rear view of a person and other measurements for the method of the invention;
Fig. 6 shows a diagrammatic side view of a person and other measurements according to the method of the invention;
Fig. 7 diagrammatically shows the side profile of a person and the positioning of a square for a measurement according to the invention.

[0015] Some points of the sewing pattern are highlighted by full squares for clarity.
[0016] The same reference numbers in the figures identify the same elements or components.

Detailed description of a preferred embodiment of the invention

[0017] An embodiment of a method for making a sewing pattern 100 is shown with reference to the figures. According to the invention, the sewing pattern is divided into three sectors, in particular a first sector 1, named "chest sector", a second sector 2, named "armhole sector" and a third sector 3, named "back sector". The second sector 2 is arranged between the first sector 1 and the third sector 3. The first sector 1 comprises a "V"-shaped zone, indicated by reference numeral 10, defined by two consecutive segments, and in particular by a segment LF and another segment FE. After having made the sewing pattern, the sewing pattern may be cut along such segments LE and FE to make a dart for accommodating the size of the breasts. The method includes measuring the parts of a body of a person, in particular a woman, in order to make a sewing pattern for a woman.

[0018] In order to make the first sector 1, the rear width of the shoulders M_{13}, the length of the breast M_7, the circumference of the chest above the breasts M_1 and the distance between the breasts M_{12} is measured. Such measurements and the method for taking them are well known in the industry. Preferably, the length of the breast M_7 is measured from the upper part of the shoulder down to the breast level, in particular to the nipple. The length the breast may be measured with a tailor's measuring tape by resting one end of the measuring tape on the upper part of the shoulder and extending it to the nipple

with an inclination with respect to the vertical which will depend on the breast size. Preferably, the end of the measuring tape is arranged on the upper part of the shoulder at a distance from the neck equal to $M_1/12$, i.e. V_1. Advantageously, the method also includes the inclination α of a shoulder with respect to the horizontal, and such a measurement is preferably measured in degrees.

[0019] Advantageously, unlike the prior art, the method also includes measuring a length M_{20}, or reference length, by means of an "L"-square 4. The "L"-square 4 has a first arm 5 and a second arm 6 forming the "L", and at least the first arm 5 is graduated by means of a plurality of graduation notches which have increasing values, according to a scale in centimeters or millimeters, starting from the cross point between the first arm 5 and the second arm 6.

[0020] Alternatively, the graduation starts from a predetermined distance, for example 10 cm. Preferably, in this case, the first graduation notch is thus labeled with number 5, and the graduation pitch is 1 cm between the labeled notches with 0.5 increments. This graduation avoids needing to divide the length M_{20} by two in the step of the method which will be described below.

[0021] The length M_{20} is measured by resting the square 4 on the person, so that the first arm 5 touches an upper part of the shoulder and that the second arm 6 touches the breast corresponding to the shoulder, e.g. for example a left shoulder with the left breast. In particular, to measure the length M_{20} the second arm 6, is arranged vertically, touches the most protruding point of the breast with respect to the chest, and is arranged perpendicularly to the ground (not inclined ground). In particular, the length M_{20} is defined by the distance between the vertical straight line passing through the most protruding point of the breast and the resting point of the first arm 5 on the upper part of the shoulder. Preferably, the square 4 is provided with a spirit level 7 to check the correct positioning of the square 4 itself during the measurement.

[0022] The resting point of the first arm 5 on the upper part of the shoulder is at the joint point between shoulder and neck. Said joint zone, also named neck zone, is generally arranged at a distance $V_9 = M_1/12$ from the mean point of the shoulder blade.

[0023] Such measurements are used to calculate some values which are used to draw the sewing pattern. In particular, the method includes calculating:

- a first value V_1, obtained by means of the formula: $V_1 = M_1/12$, also named "front neckline width" or "rear neckline width".
- a second value V_2, obtained by means of the formula: $V_2 = (M_{13}/2) - V_1 + T_1 - 0.5$ cm

where T_1 is a first tolerance value;

- a third value V_3 expressed in degrees, obtained with the formula $V_3 = \alpha + 8°$, also named front shoulder inclination;
- a fourth value V_4, obtained by means of the formula $V_4 = (M_{12}/2) + 1$ cm;
- a reference value $V_{ref} = M_{20}/2$, also named "breast dart width",

[0024] Once such measurements and such values are known, the method includes making the following geometric construction:

- tracing a first segment AB, comprising a first end point A and a second end point B, of length equal to measurement M_7;
- tracing a second segment AC perpendicular to the first segment AB, of length equal to the first value V_1;
- tracing a third segment CD, inclined with respect to the second segment AC by a first acute angle equal to the third value V_3 and of length equal to the second value V_2; the third segment CD comprising a third end point D;
- tracing a first straight line r1 parallel to the first segment AB, distant from the latter by a length equal to said fourth value V_4, and comprising a first point E and a second point F, wherein the second point F is the intersection point between a second straight line r2 passing through the second end point B and perpendicular to the first segment AB, and wherein the first point E is the intersection point between the straight line r1 and the third segment CD, defining a fourth segment EF, a fifth segment ED and a second acute angle DEF;
- tracing a third straight line r3, parallel to the first straight line r1 and at a distance from the latter equal to said reference value V_{ref},
- determining a third point L given by the intersection between a circumference centered in the second point F and passing through the first point E, and the third straight line r3, defining a sixth segment LF of length equal to the fourth segment EF.

[0025] From this geometric construction, it results that the first point E, the second point F and the third point L define the "V"-shaped zone of the first sector. Advantageously, the geometric shape of such a "V"-shaped sector is defined on the basis of M_{20}, which was previously measured with the "L"-square.

[0026] Preferably, the method also includes measuring the rear armhole level M_{11} and calculating a fifth value V_5, obtained with the formula $V_5 = M_{11} + T_2 + V_{ref} - 6$ cm, where T_2 is the second tolerance value; the following steps are included:

- tracing a seventh segment LM inclined with respect to the sixth segment LF by an acute angle MLF equal to the second acute angle DEF and of length equal to the fifth segment ED;
- determining a fifth point N which lays on the first segment AB at a distance from the first end point A equal

to V_5;

- tracing a fourth straight line r4 perpendicular to the first segment AB and passing through the fifth point N;
- tracing a fifth straight line r5, parallel to the first segment AB, passing through the fourth point M, which intersects the fourth straight line r4 in the sixth point P, so that the fourth point M and the sixth point P define an eighth segment MP;
- determining the mid-point Q of the eighth segment MP and tracing a sixth line r6 perpendicular to the first segment AB and passing through point Q, so that the sixth straight line r6 intersects the sixth segment LF and the fourth segment EF at points R and S, respectively,
- measuring the length M_{21} of the distance from point R to point S, which is named "chest dart width".

[0027] The rear armhole level M_{11} can be measured, for example, as the distance between the upper part of the shoulder and the corresponding armpit.

[0028] Advantageously, the method allows determining the breast dart width, which is an important parameter for making the outerwear. Furthermore, the method advantageously includes using the chest dart width to make the sewing pattern, as will be described below.

[0029] Preferably, the method also includes calculating a sixth value V6, obtained by means of the formula $V6 = (M_{13}/2) + T_1 + 0.5$ cm $- T_3$, where T_3 is a third tolerance value from 0 to 2 cm, preferably equal to 1.2 cm.

[0030] The width L_1 of the third sector 3, or back sector, along a direction perpendicular to the first segment AB is equal to $L_1 = V_6$.

[0031] Preferably, the method also includes calculating a further value $V_{10} = V_6 - T_4 + T_8$ is provided, where T_4 is a fourth tolerance value from 1 to 3 cm, preferably equal to 2.3 cm and T_8 is a further tolerance value, and measuring the circumference of the chest at the breasts M_2 and calculating a seventh value V_7, obtained with the formula $V_7 = (M_2/2) - (M_1/2)$. If the condition $V_7 > 2$ cm occurs, which indicates that the person has large breasts, the step of calculating an eighth value V_8 is included, obtained with the formula $V_8 = (V_7 - 2$ cm$)/2$, and the fourth tolerance value T_8 is equal to V_8, otherwise $T_8 = 0$. Such a checking operation is advantageous because it is performed already during the creation of the sewing pattern, and thus allows to minimize any changes to the finished outerwear.

[0032] The invention further provides an optimal measurement of the width of the first sector 1. In particular, the width L_2 of the first sector 1 along a direction perpendicular to the first segment AB is expected to be equal to $L_2 = V_{10} + M_{21} - 0.5$ cm.

[0033] The invention further provides an optimal measurement for the width of the second sector 2. In particular, the circumference of the arm M_6 is measured in order to determine such a width, from which the width L_3 of the

second sector 2 can be calculated along a direction perpendicular to the first segment AB; the width of the second sector is obtained with the formula according to which $L_3 = (M_6 + T_5)/2 - 5$ cm. The circumference of the arm M_6 is taken in a position between the elbow and the corresponding shoulder, preferably the most protruding part (or maximum circumference) in such a zone.

[0034] The invention also provides an optimal measurement of the width of the sewing pattern. Following the steps of the method, the total width L_{tot} of the sewing pattern along a direction perpendicular to the first segment AB, is equal to $L_{tot} = L_1 + L_2 + L_3 + T_6$, where T_6 is a variable value typically from 0 to 6 cm.

[0035] Preferably, a step of checking the total length Ltot of the sewing pattern is included. In particular, if condition $L_{tot} \neq M_2/2 + T_7$ occurs, i.e. Ltot is different from $(M_2/2 + T_7)$, the value T_6 is adjusted by means of the formula $T_6 = Ltot - M_2/2 + T_7$, where T_7 is a tolerance value.

[0036] In this case, the value of T_6, which may be positive or negative, is equally divided between L_1, L_2 and L_3.

[0037] Preferably, the back sector also has a "V"-shaped zone.

[0038] The tolerance values T_1, T_2, T_5 and T_7 refer to the fit of the half of the rear shoulder width, of the armhole level, of the arm circumference and of the half-circumference of the height of the breasts, respectively. Such tolerance values may preferably vary as follows:

the first tolerance value T_1 is from 0 to 2 cm, preferably from 0.5 to 1.5 cm, the second tolerance value T_2 is from 0 to 4 cm, preferably from 0 to 3 cm, the fifth T_5 tolerance value is from 4 to 8 cm, and the tolerance value T_7 is from 0 to 5 cm.

Preferably, the sewing pattern is made for half the outerwear, another sewing pattern being able to be used, which is identical to the previous one, for making a complete garment.

[0039] According to a variant, the value V_1 is determined by measuring the circumference of the neck M_{30}. In particular, $V1 = M_{30}/5 + 1$ cm. In this case, all the steps of the method are the same as those described above. Furthermore, according to this variant, for the measurement M_7, an end of the measuring tape is preferably arranged at a distance from the neck equal to $(M_{30}/5) + 1$ cm, i.e. V_1.

Claims

1. A method for making a sewing pattern (100) on the basis of measurements of parts of the body of a woman, the sewing pattern being divided into a first sector (1), named "chest sector", a second sector (2), named "armhole sector" and a third sector (3), named "back sector", wherein a "V"-shaped zone (10) is provided in the first sector (1),

wherein an "L"-square (4) is provided, with a first (5) and a second arm (6) forming the "L", wherein at least the first arm (5) is graduated on a scale in centimeters or millimeters,
wherein the following steps are provided:

- measuring:

the rear width of the shoulders M_{13},
the length of the breast M_7, measured from the upper part of the shoulder down to the level of the breast,
the inclination angle α of a shoulder with respect to the horizontal,
the circumference of the chest above the breasts M_1,
the distance between the breasts M_{12};

- resting the "L"-square (4) on the person so that the first arm (5) touches an upper part of a shoulder and the second arm (6), arranged vertically, touches the most protruding point of the breast corresponding to the shoulder to measure a reference length M_{20}, defined by the distance between the vertical straight line passing through the most protruding point of the breast and the resting point of said first arm (5) on the upper part of the shoulder,
- calculating the following values:

- a first value V_1, obtained by means of the formula: $V_1 = M_1/12$ or $V_1 = (M_{30}/5) + 1$ cm, where M_{30} is the length of the circumference of the neck;
- a second value V_2, obtained by means of the formula: $V_2 = (M_{13}/2) - V_1 + T_1 - 0.5$ cm

where T_1 is a first tolerance value from 0.5 to 1.5 cm;

- a third value V_3 expressed in degrees, obtained by means of the formula $V_3 = \alpha + 8°$
- a fourth value V_4, obtained by means of the formula $V_4 = (M_{12}/2) + 1$ cm;
- and a reference value $V_{ref} = M_{20}/2$, named "breast dart width",
- operating the following geometric construction:

- tracing a first segment AB, comprising a first end point A and a second end point B, of length equal to measurement M_7;
- tracing a second segment AC perpendicular to the first segment AB, of length equal to the first value V_1;
- tracing a third segment CD inclined with respect to the second segment AC by a first acute angle equal to the third value V_3 and of length equal to the second value V_2, the third segment CD comprising a third end point D;
- tracing a first line r1 parallel to the first seg-

ment AB, distant from the latter by a length equal to said fourth value V_4, and comprising a first point E and a second point F, wherein the second point F is the intersection point between a second line r2 passing through the second end point B and perpendicular to the first segment AB, and wherein the first point E is the intersection point between the line r1 and the third segment CD, defining a fourth segment EF, a fifth segment ED and a second acute angle DEF;
- tracing a third line r3, parallel to the first line r1 and at a distance from the latter equal to said reference value V_{ref},
- determining a third point L given by the intersection between a circumference centered in the second point F and passing through the first point E, and the third line r3, defining a sixth segment LF of length equal to the fourth segment EF;

so that the first point E, the second point F and the third point L define said "V"-shaped zone (10).

2. A method according to claim 1, wherein the following steps are provided:

- measuring the rear armhole level M_{11}, as the distance between the upper part of the shoulder and the armpit,
- calculating a fifth value V_5, obtained by means of the formula $V_5 = M_{11} + T_2 + V_{ref}$
- 6 cm, where T_2 is a second tolerance value from 0 to 4 cm,
- tracing a seventh segment LM inclined with respect to the sixth segment LF by an acute angle MLF equal to the second acute angle DEF and of length equal to the fifth segment ED;
- determining a fifth point N which lays on the first segment AB at a distance from the first end point A equal to V_5;

- tracing a fourth line r4 perpendicular to the first segment AB and passing through the fifth point N;
- tracing a fifth line r5, parallel to the first segment AB, passing through the fourth point M, which intersects the fourth line r4 in the sixth point P, so that the fourth point M and the sixth point P define an eighth segment MP;
- determining the mid-point Q of the eighth segment MP and tracing a sixth line r6 perpendicular to the first segment AB and passing through point Q, so that the sixth line r6 intersects the sixth segment LF and the fourth segment EF at points R and S, respectively,

- measuring the length M_{21} of the distance from point R to point S, which is named "chest dart width".

3. A method according to claim 2, wherein there is provided a step of:

   - calculating a sixth value V_6, obtained by means of the formula $V_6 = (M_{13}/2) + T_1 + 0.5$ cm $-T_3$, where T_3 is a third tolerance value comprised between 0 and 2 cm, preferably equal to 1.2 cm;

   and wherein the width L_1 of said third sector (3) along a direction perpendicular to the first segment AB is equal to $L_1 = V_6$.

4. A method according to claim 3, wherein a further value $V_{10} = V_6 - T_4 + T_8$ is provided, where T_4 is a fourth tolerance value comprised between 1 and 3 cm, preferably equal to 2.3 cm and T_8 is a further tolerance value,
   and wherein there is provided a step of:

   - measuring the circumference of the chest at the breasts M_2,
   - calculating a seventh value V_7, obtained by means of the formula $V_7 = (M_2/2)-(M_1/2)$,

   wherein if the $V_7 > 2$ cm condition is true there is provided the step of:

   - calculating an eighth value V_8, obtained by means of the formula $V_8 = (V_7 - 2$ cm$)/2$, and $T_8 = V_8$,

   otherwise $T_8 = 0$.

5. A method according to claim 4, wherein the width L_2 of said first sector (1) along a direction perpendicular to the first segment AB is equal to $L_2 = V_{10} + M_{21} - 0.5$ cm.

6. A method according to any one of the preceding claims, wherein there is provided a step of:

   - measuring the circumference of the arm M_6 in a position between the elbow and the shoulder,

   calculating the width L_3 of said second sector (2) along a direction perpendicular to the first segment AB by means of the formula $L_3 = (M_6 + T_5)/2 - 5$ cm, where T_5 is a fifth tolerance value from 4 to 8 cm.

7. A method according to any one of the preceding claims, wherein said resting point of the first arm (5) of the "L"-square on the upper part of the shoulder is at the joint zone between shoulder and neck.
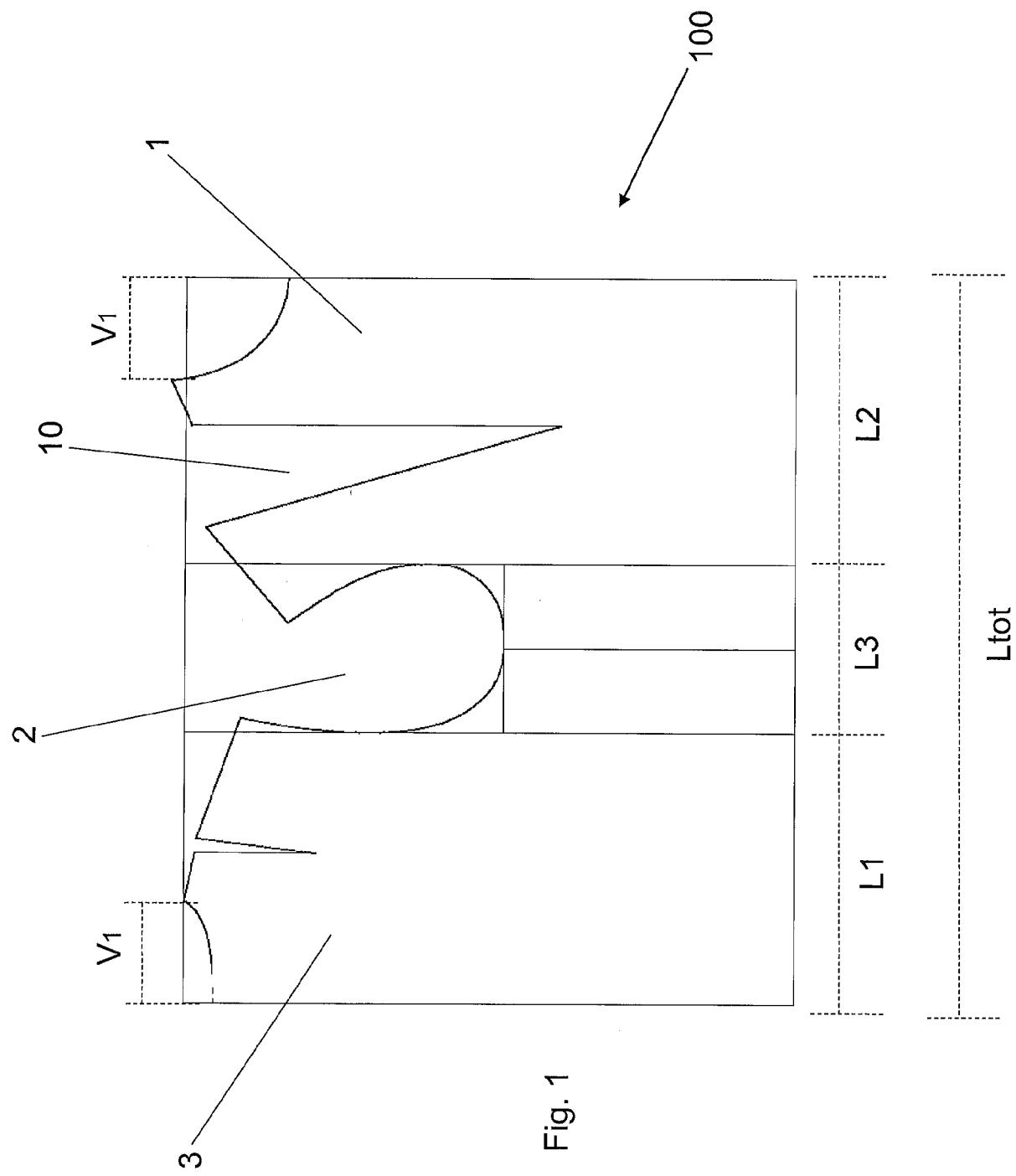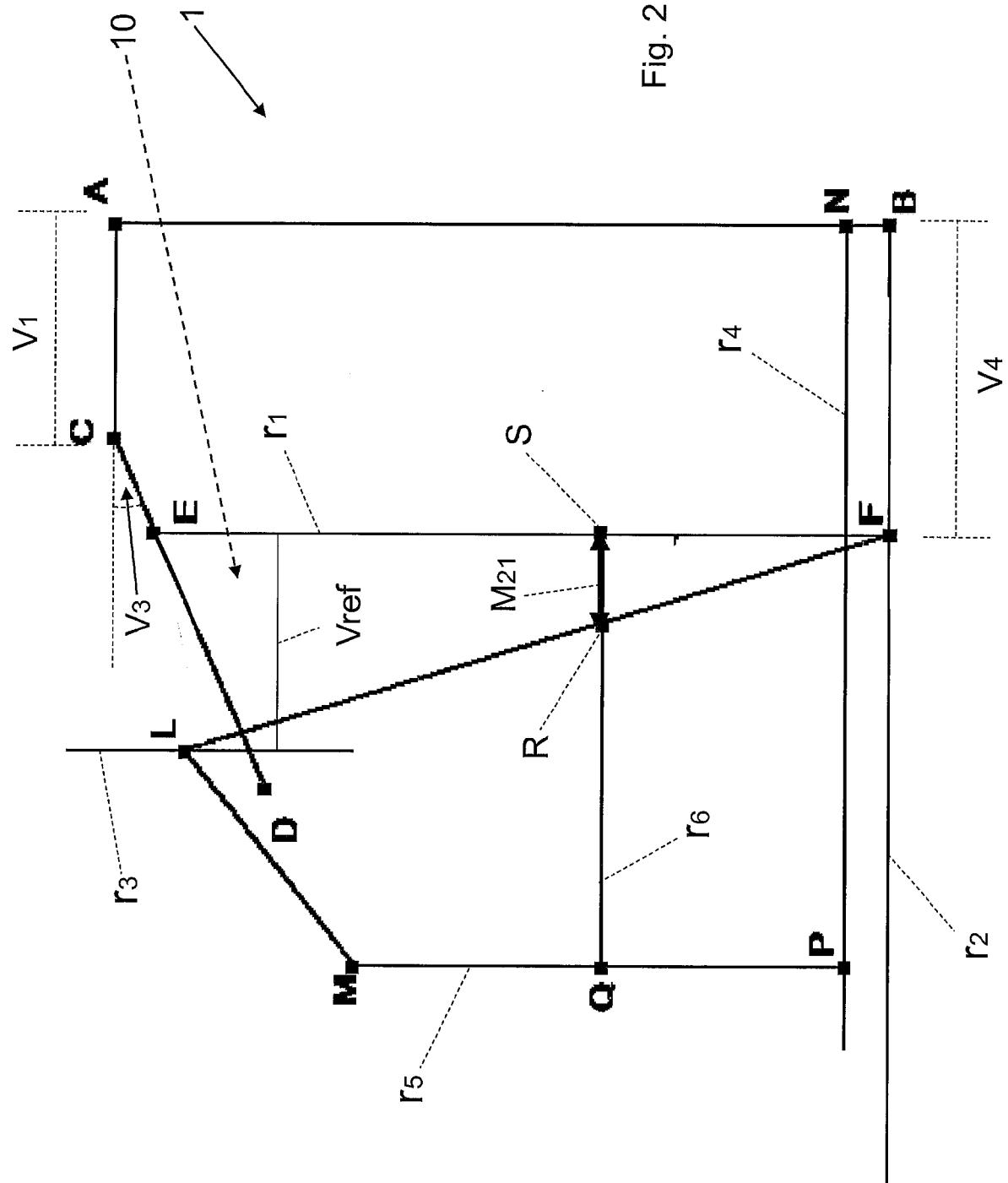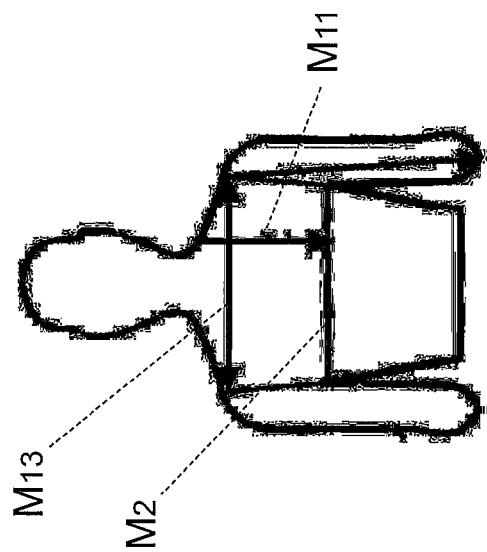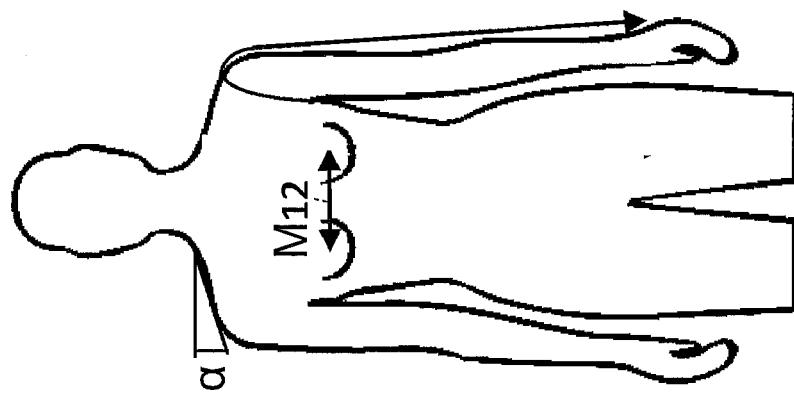
Fig. 1

Fig. 2

M11

M13

M2

Fig. 5

M12

α

Fig. 4

M7

M6

M2

Fig. 3

Fig. 7

Fig. 6

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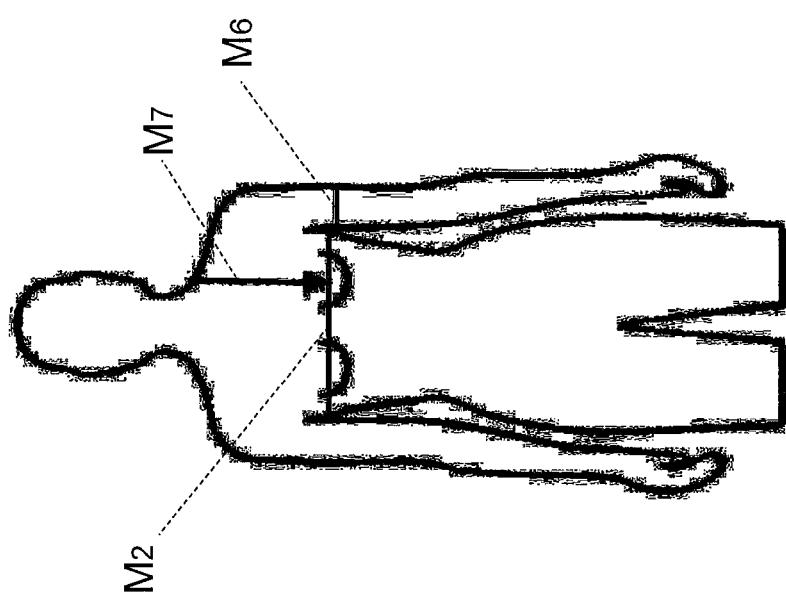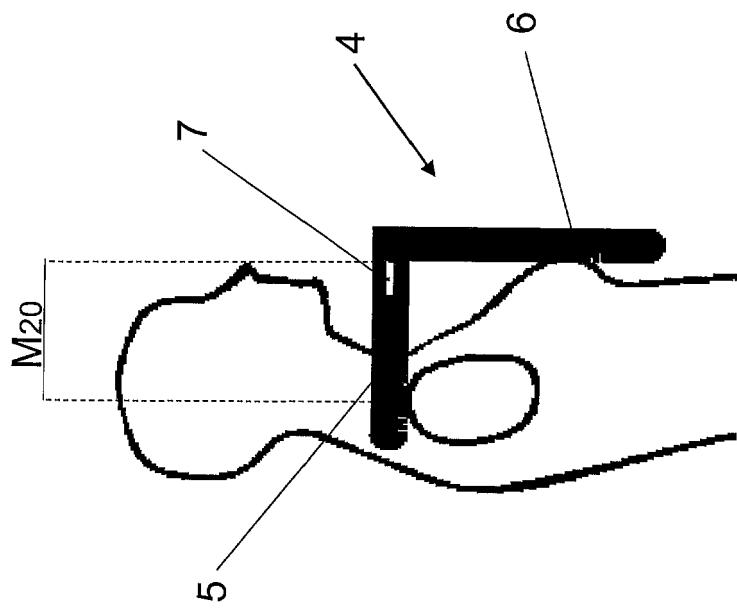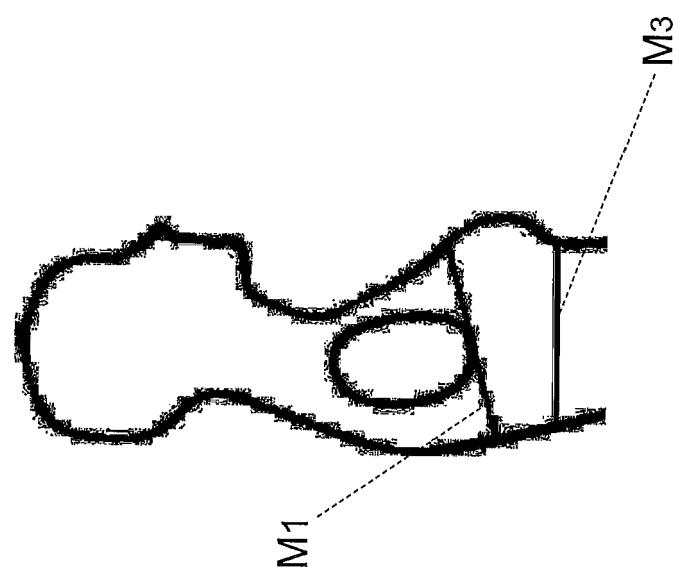
EUROPEAN SEARCH REPORT

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A,D	US 4 899 448 A (HUANG DING S [TW]) 13 February 1990 (1990-02-13) * column 2, line 13 - column 6, line 54; claim 1; figures 1-20 *	1-7	INV. A41H3/04 A41D1/22
A	GB 320 080 A (ALFRED JACOB) 30 September 1929 (1929-09-30) * page 1, line 9 - page 2, line 27; figure 1 *	1-7	
A	DE 101 36 074 A1 (BRINKMANN-STIELER ANNEGRET [DE]) 20 February 2003 (2003-02-20) * paragraph [0001] - paragraph [0012]; claim 1; figure 1 *	1-7	
A	CN 103 284 373 A (UNIV NINGBO) 11 September 2013 (2013-09-11) * the whole document *	1-7	

	TECHNICAL FIELDS SEARCHED (IPC)
	A41H A41D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	27 July 2016	Simpson, Estelle

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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L : document cited for other reasons

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ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 16 16 4442

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