(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 3 072 408 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
28.09.2016 Bulletin 2016/39

(51) Int Cl.:
A41F 9/00 *(2006.01)* ***A41H 43/00*** *(2006.01)*

(21) Application number: **15425026.0**

(22) Date of filing: **27.03.2015**

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
MA

(71) Applicant: **Emmedue S.r.l.**
37036 San Martino Buon Albergo (IT)

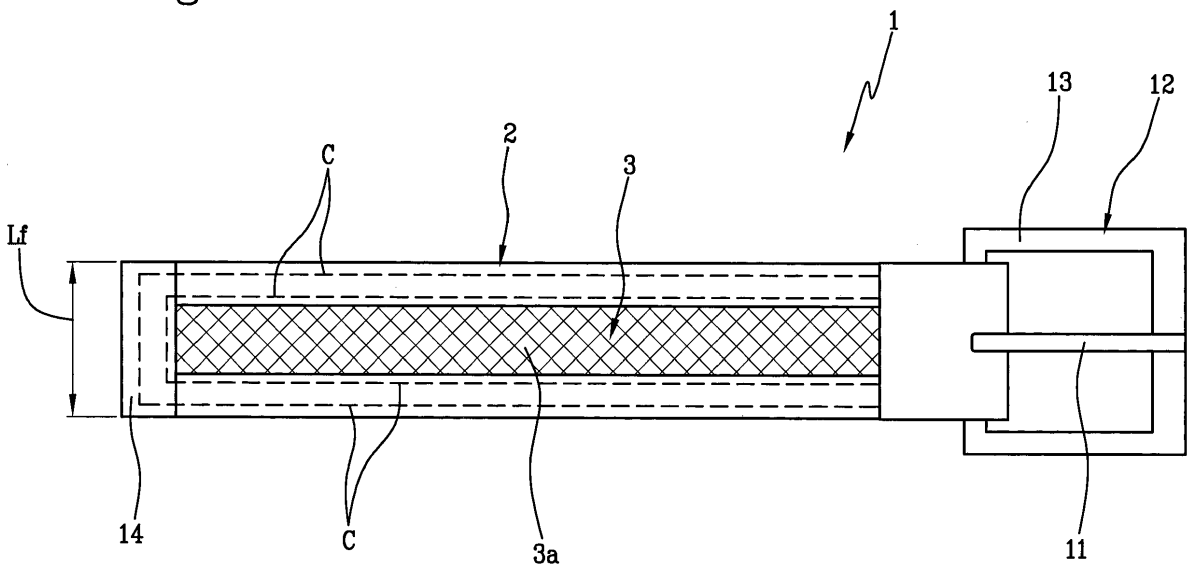
(72) Inventor: **Cescati, Eugenio**
37036 San Martino Buon Albergo (Verona) (IT)

(74) Representative: **Lissandrini, Marco**
Bugnion S.p.A.
Via Pancaldo 68
37138 Verona (IT)

(54) **Method for making a belt and belt**

(57) A belt (1) is made starting from a first layer (2) having a width (L) which is greater than the final width (Lf) of the belt (1) and by a second layer (3) having a width (L1) which is smaller than the final width (Lf) of the belt (1) and of the width (L) of the first layer (2). The second layer (3) superposes the first layer (2), in the middle relative to its width, thus leaving free two outer longitudinal strips (4) of the first layer (2). Each outer longitudinal strip (4) is folded over the second layer (3) along a respective longitudinal fold line (5) and is fixed in position for example by seams.

Fig.3



EP 3 072 408 A1

Description

[0001] This invention relates to a method for making a belt and a belt.

[0002] It is known to make belts in several materials, for example by superposing layers over each other made of different materials.

[0003] A first method for making belts in several materials comprises superposing and gluing the layers to each other. The belts made with this method may be subject to detachments of the various layers due to wear or aging of the adhesive. Moreover, no finishing process is comprised of the edges at which both edges of the layers and the adhesive used, remain visible.

[0004] A second method for making belts comprises gluing and/or stitching the layers to each other by applying, on the edges, a covering edge to complete the belt and hide the adhesive. The covering edge is easily subject to wear and, due to the pigments used, may soil the garments to which the belt is applied.

[0005] In this context, the technical purpose which forms the basis of this invention is to propose a method for making a belt and a belt which overcome the above mentioned drawbacks of the prior art.

[0006] More specifically, the aim of this invention is to provide a method for making a belt and a belt capable of resisting wear.

[0007] A further aim of this invention is to propose a method for making a belt that is easy to apply and adapt to automated production systems.

[0008] Yet another aim of this invention is to allow the use of any type of material, more specifically metallic materials or materials provided with metallic decorations.

[0009] The technical purpose indicated and the aims specified are substantially achieved by a method for making a belt and a belt, respectively comprising the technical features described in one or more of the appended claims. The dependent claims, also in combinations not expressly provided, correspond to different embodiments of the invention.

[0010] Further features and advantages of the invention are more apparent in the non-limiting description which follows of a preferred non-exclusive embodiment of a belt, together with the method for making it.

[0011] The description is set out below with reference to the accompanying drawings which are provided solely for purposes of illustration without restricting the scope of the invention and in which:

- Figure 1 is a schematic top view of some components designed to make a belt according to this invention;
- Figure 2 is a schematic top view of the components of Figure 1, superposed;
- Figure 3 is a schematic top view of a belt according to this invention;
- Figure 4 is a schematic perspective view of a portion of belt being made. With reference to the accompanying drawings, and in particular to Figure 3, the numeral 1 denotes a belt in its entirety.

[0012] The belt 1 comprises a first layer 2 preferably made of leather. The first layer 2 extends along a longitudinal direction X-X corresponding to a final length of the belt. The term "extends" means that the first layer has, along the longitudinal direction X-X, a dimension, hereinafter called length, which is greater than that of the others.

[0013] Moreover, the first layer 2 has, transversely to the longitudinal direction X-X, a width L which is greater than the final width Lf of the belt 1.

[0014] The belt 1 also comprises a second layer 3 extending along a longitudinal direction X-X corresponding to the length of the belt 1. In this case too, the term "extending" means that the second layer has, along the longitudinal direction X-X, a dimension, hereinafter called length, which is greater than that of the others.

[0015] Moreover, the second layer 3 has, transversely to the longitudinal direction X-X, a width L1 which is smaller than the final width Lf of the belt 1 and is smaller than the width L of the first layer 2.

[0016] The second layer 3 is selected from among one or more of the following materials: leather, short-haired fur or pony hair, metallic materials or materials with metallic decorations, PVC, PU, artificial leather, denim, canvas, various weaves and small components.

[0017] In the step of making the belt, after having prepared the first layer 2 and the second layer 3, the second layer 3 is superposed on the first layer 2, in the middle relative to the width L of the first layer 2, thus leaving free two outer longitudinal strips 4 of the first layer 2.

[0018] Then, each of the outer longitudinal strips 4 is folded over the second layer 3 along a respective longitudinal fold line 5 which is parallel to the longitudinal direction X-X and therefore to the length of the belt. In other words, the first layer 2 is folded longitudinally over both the longitudinal outer edges 6 of the second layer 3, thus leaving free and visible a central portion 3a of the second layer 3.

[0019] More specifically, when superposing the second layer 3 on the first layer 2, each longitudinal outer edge 3b of the second layer 3 is positioned inside a respective longitudinal fold line 5, with reference to a longitudinal centre line of the belt 1.

[0020] Lastly, each of the outer longitudinal strips 4 is fixed, and more specifically stitched through the second layer 3 and the first layer 2. Figure 3 illustrates, for example, two seams C for each outer longitudinal strip 4, which are positioned parallel to the length of the belt 1.

[0021] In one possible embodiment, during the step of making the belt 1, a reinforcing layer 7 is also prepared, extending along a longitudinal direction X-X corresponding to the length of the belt 1. In this case too, the term "extending" means that the reinforcing layer 7 has, along the longitudinal direction X-X, a dimension, hereinafter called length, which is greater than that of the others.

[0022] The reinforcing layer 7 is superposed on the

first layer 2, in the middle relative to the width L of the first layer, before the second layer 3 is superposed. In other words, the reinforcing layer 7 is interposed between the first layer 2 and the second layer 3.

[0023] Preferably, the reinforcing layer 7 has, transversely to the longitudinal direction, a width L2 which is smaller than the width L of the first layer 2 and is greater than the width L1 of the second layer 3. More specifically, the width L2 of the reinforcing layer 7 is substantially equal to the final width Lf of the belt 1.

[0024] Preferably, each longitudinal outer edge 8 of the reinforcing layer 7 substantially superposes a respective longitudinal fold line 5. In other words, the first layer 2 is folded at each outer longitudinal edge 8 of the reinforcing layer 7. Moreover, each longitudinal outer edge 3b of the second layer 3 is positioned inside a respective longitudinal outer edge 8 of the reinforcing layer 7, with reference to a longitudinal centre line of the belt 1.

[0025] In one possible embodiment, the first layer 2 may have, along the longitudinal direction X-X, a length which is greater than the length of the second layer 3 and, if necessary, than the reinforcing layer 7, if present. In this case, superposing the layers is performed in a such a way that at least one head portion 9 of the first layer 2 protrudes. More specifically, the head portion 9 may have a smaller width than the total width L of the first layer and substantially equal to the final width Lf of the belt 1.

[0026] The head portion 9 has at least one opening 10 designed to receive a movable sidepiece or tongue 11 of a buckle 12 of the belt 1.

[0027] Making the belt 1 therefore comprises folding the head portion 9 relative to a transversal fold line 13 to define a slot for fixing the buckle 12, more specifically, a frame 13 for the buckle 12. The head portion 9 may be folded toward the second layer 3, as illustrated in Figure 3, which constitutes the front of the belt 1, or toward the back of the belt 1, that is to say, toward the exposed part of the first layer 2.

[0028] Fixing the head portion of 9 may be stable or removable, for example by inserting screws (not illustrated) through the layers of the belt.

[0029] In one possible embodiment, the first layer 2 may have, along the longitudinal direction X-X, a length which is greater than the length of the second layer 3 and, if necessary, than the reinforcing layer 7, if present. In this case, superposing the layers is performed in a such a way that at least one tail portion 14 of the first layer 2 protrudes. More specifically, the tail portion 14 may have a smaller width than the total width L of the first layer and substantially equal to the final width Lf of the belt 1.

[0030] Making the belt 1 therefore comprises folding the tail portion 14 relative to a tail transversal fold line 15 toward the second layer 3, as illustrated in Figure 3. Fixing the tail portion 14 may be achieved by seams C.

[0031] When the embodiment is complete, the belt 1 is defined on the back by the first layer 2 which continuously folds over the front part of the belt at outer longitudinal strips 4, thus leaving visible the central portion 3a of the second layer 3.

[0032] In this way, the belt 1 is more resistant to wear, more specifically at the edges made directly by means of the first layer 2. The coupling between the first and the second layer allows a fast and automatable embodiment and the possibility of introducing the reinforcing layer by selecting from among different thicknesses and materials as a function of the type of belt. The presence of the folded outer longitudinal strips 4 completely covers each longitudinal outer edge 3b of the second layer 3, therefore the second layer may be made in any material also with jagged, sharp or irregular edges.

[0033] Comprising different widths of the reinforcing layer and of the second layer generates a slight step at each longitudinal outer edge 3b of the second layer 3 which facilitates fixing the outer longitudinal strips 4, preferably with two seams, one at only the reinforcing layer (outer seam) and one at both the reinforcing layer and at the second layer (inner seam).

Claims

1. A method for making a belt (1) comprising the following steps:

   preparing a first layer (2) extending along a longitudinal direction (X-X) corresponding to a length of the belt (1), wherein the first layer (2) has,
   transversely to the longitudinal direction (X-X), a width (L) which is greater than the final width (Lf) of the belt (1);
   preparing a second layer (3) extending along a longitudinal direction (X-X) corresponding to the length of the belt, wherein the second layer (3) has,
   transversely to the longitudinal direction, a width (L1) which is smaller than the final width (Lf) of the belt (1) and is smaller than the width (L) of the first layer (2);
   superposing the second layer (3) on the first layer (2), in the middle relative to the width of the first layer (2), thus leaving free two outer longitudinal strips (4) of the first layer (2);
   folding each of the outer longitudinal strips (4) over the second layer (3) along a respective longitudinal fold line (5) which is parallel to the longitudinal direction (X-X) and to the length of the belt (1);
   fixing in position each of the outer longitudinal strips (4).

2. The method for making a belt according to claim 1, wherein fixing in position each of the outer longitudinal strips (4) comprises stitching each of the outer

longitudinal strips (4) through the second layer (3) and the first layer (2).

3. The method for making a belt according to claim 1 or 2, comprising preparing a reinforcing layer (7) extending along a longitudinal direction (X-X) corresponding to the length of the belt (1), and superposing the reinforcing layer (7) on the first layer (2), in the middle relative to the width of the first layer (2), before superposing the second layer (3), whereby the reinforcing layer (7) is interposed between the first layer (2) and the second layer (3).

4. The method for making a belt according to claim 3, wherein the reinforcing layer 7 has, transversely to the longitudinal direction (X-X), a width (L2) which is smaller than the width (L) of the first layer (2) and is greater than the width (L1) of the second layer (3).

5. The method for making a belt according to claim 4, wherein each longitudinal outer edge (8) of the reinforcing layer (7) substantially superposes a respective longitudinal fold line (5).

6. The method for making a belt according to any one of the preceding claims, wherein each longitudinal outer edge (3b) of the second layer (3) is positioned inside a respective longitudinal fold line (5), with reference to a longitudinal centre line of the belt (1).

7. The method for making a belt according to any one of the preceding claims, wherein each of the two outer longitudinal strips (4) of the first layer (2) has, transversely to the longitudinal direction (X-X), a width such as to cover, once folded over the second layer (3), only a part of the second layer (3), thus leaving free a central portion (3a).

8. The method for making a belt according to any one of the preceding claims, wherein the first layer (2) is made of leather.

9. The method for making a belt according to any one of the preceding claims, comprising preparing the first layer (2) having, along the longitudinal direction (X-X), a length which is greater than the length of the second layer (3) and superposing the first layer (2) and second layer (3) in such a way that a head portion of (9) of the first layer (2) protrudes, folding the head portion (9) relative to a transversal fold line (13) to form a slot for fixing a buckle (12) of the belt (1).

10. The method for making a belt according to claim 9, wherein the head portion (9) is folded toward the second layer (3).

11. The method for making a belt according to any one of the preceding claims, comprising preparing the first layer (2) having, along the longitudinal direction (X-X), a length which is greater than the length of the second layer (3) and superposing the first layer (2) and second layer (3) in such a way that a tail portion of (14) of the first layer (2) protrudes, folding, toward the second layer (3), the tail portion (14), relative to a tail transversal fold line (15).

12. The method for making a belt according to any one of the preceding claims, wherein the second layer (3) is selected from among one or more of the following materials: leather, short-haired fur or pony hair, metallic materials or materials with metallic decorations, PVC, PU, artificial leather, denim, canvas, various weaves and small components.

13. A belt (1) that can be made by means of a method according to any one of the preceding claims, comprising a first layer (2) folded longitudinally over both longitudinal outer edges (3b) of a second layer (3).

14. The belt (1) according to claim 13, comprising a reinforcing layer (7) interposed between the first layer (2) and the second layer (3).

15. The belt (1) according to claim 13 or 14, comprising a head portion of (9) that is folded relative to a transversal fold line (13) to form a slot for fixing a buckle (12) of the belt (1).

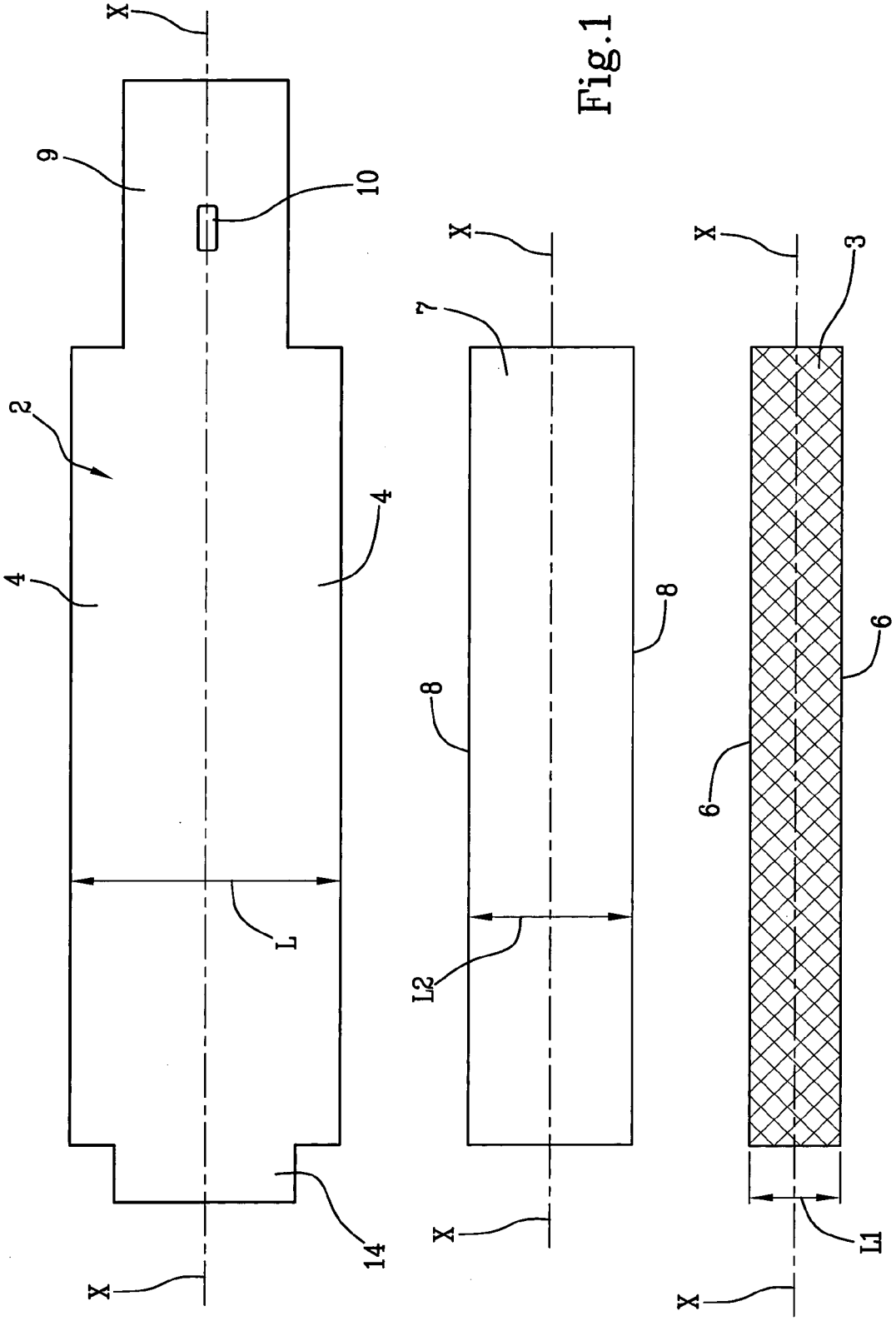
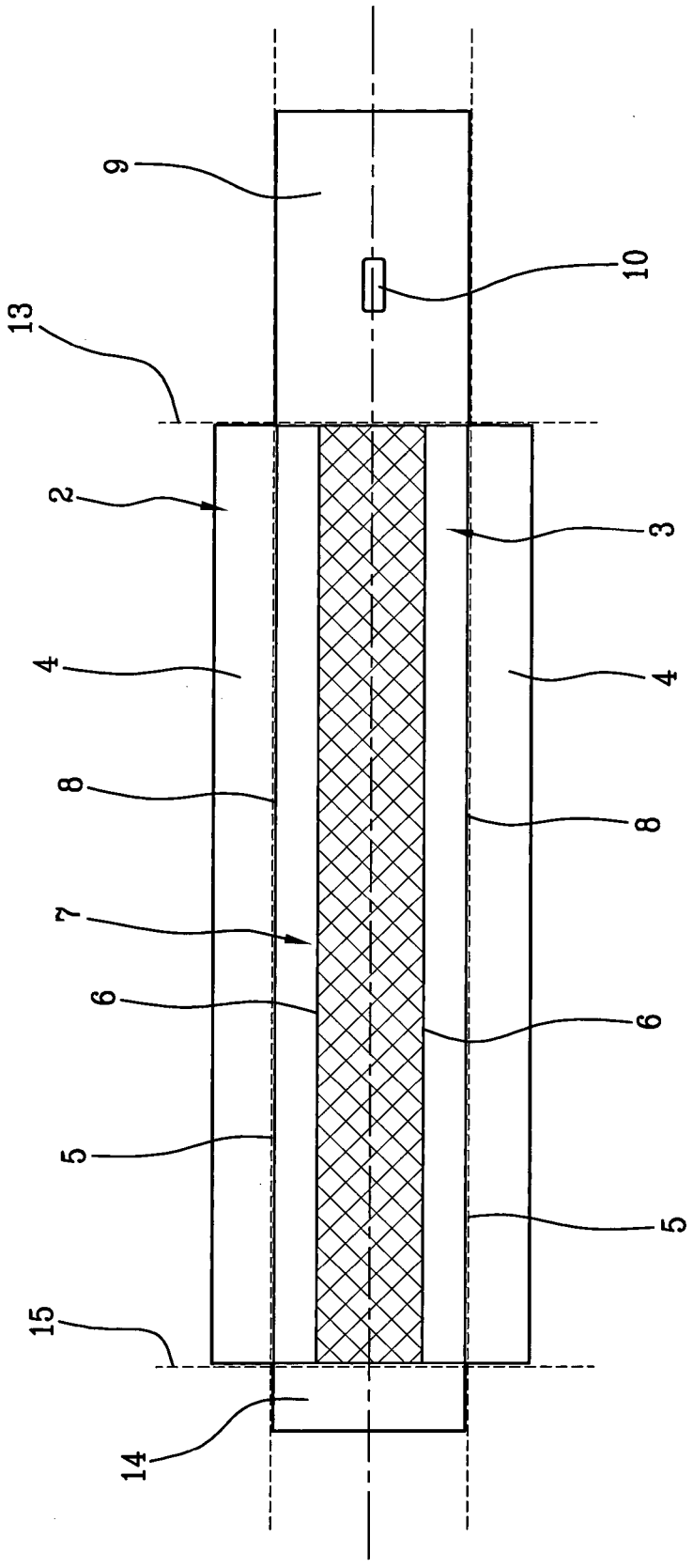


Fig.1

Fig.2



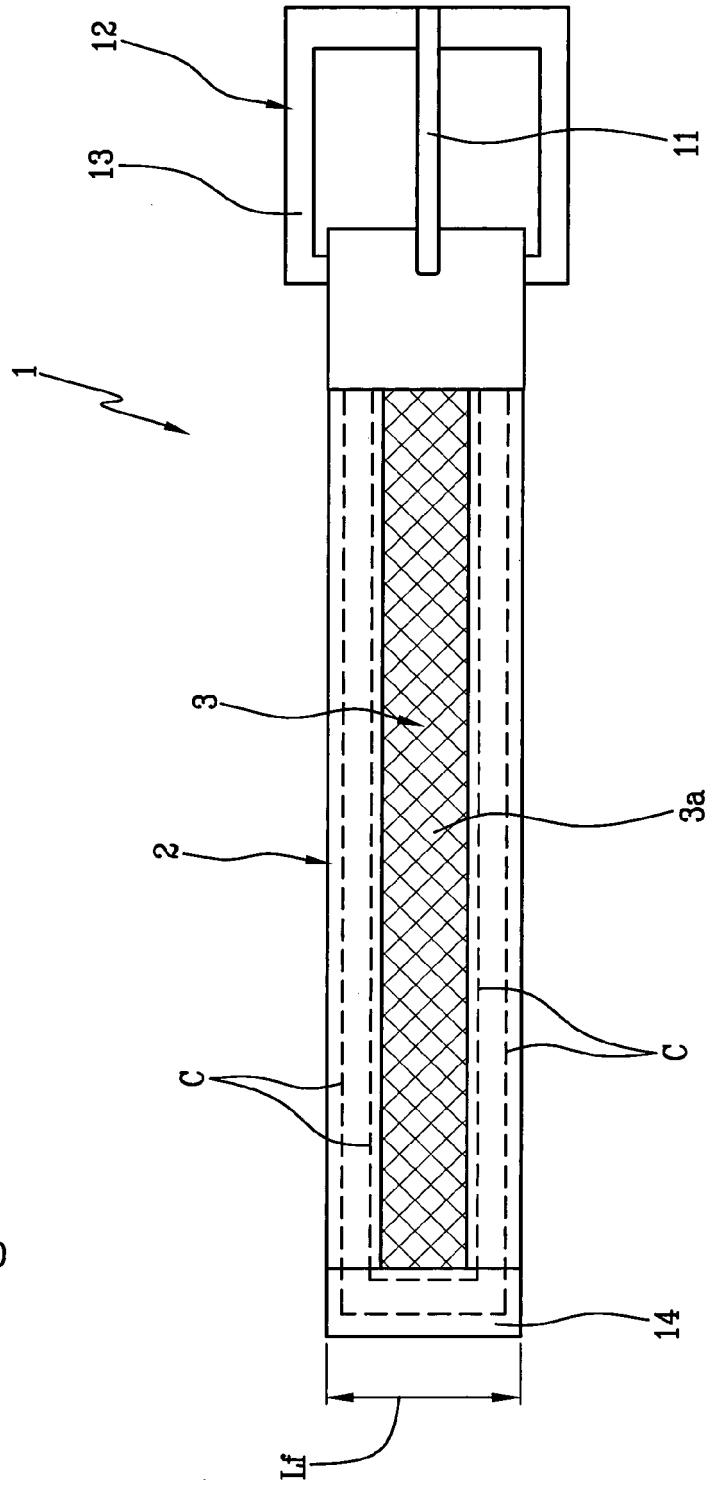
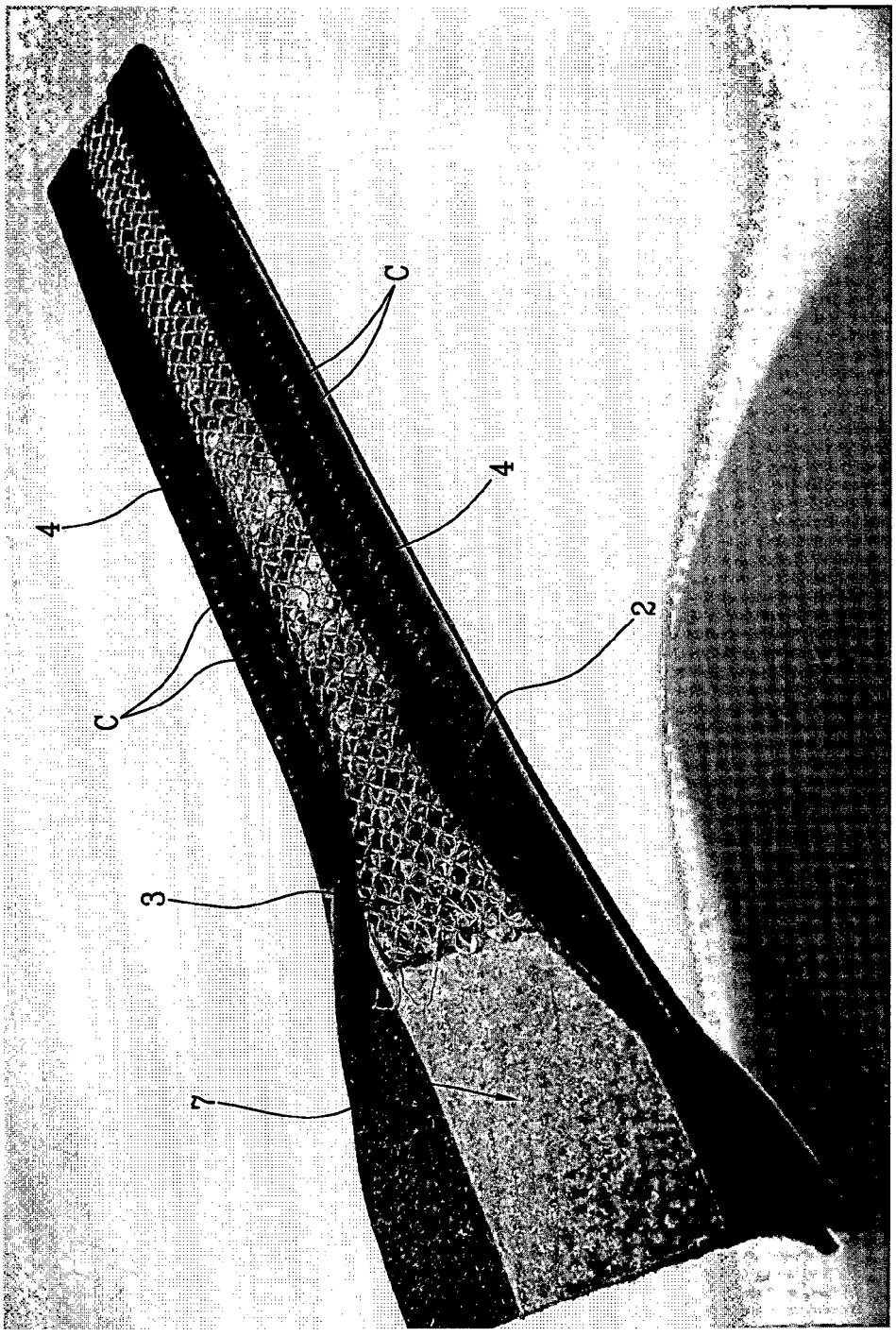


Fig.3

Fig.4



Europäisches Patentamt
European Patent Office
Office européen des brevets

EUROPEAN SEARCH REPORT

Application Number
EP 15 42 5026

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	US 2 898 603 A (MAX EPSTEIN) 11 August 1959 (1959-08-11) * column 2, line 45 - column 3, line 45; figure 4 *	1-8, 12-14 9-11,15	INV. A41F9/00 A41H43/00
X	JP 2005 213660 A (TAKAYAMA KOJI) 11 August 2005 (2005-08-11) * figures 1,3 *	1-8, 12-14	
X	CH 655 220 A (UNKNOWN) 15 April 1986 (1986-04-15) * abstract; figure 1 * * page 3, column 2, line 35 - line 51; claims 1,8 *	1-8,12	
Y	JP S57 48231 U (UNKNOWN) 18 March 1982 (1982-03-18) * figures 4A,4D *	9-11,15	

TECHNICAL FIELDS SEARCHED (IPC)
A41F A41D A41H A44C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	31 August 2015	da Silva, José

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 15 42 5026

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

31-08-2015

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2898603 A	11-08-1959	NONE	
JP 2005213660 A	11-08-2005	JP 4562121 B2	13-10-2010
		JP 2005213660 A	11-08-2005
CH 655220 A	15-04-1986	NONE	
JP S5748231 U	18-03-1982	JP S604407 Y2	07-02-1985
		JP S5748231 U	18-03-1982

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82