

(19)



(11)

EP 3 501 314 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
26.06.2019 Bulletin 2019/26

(51) Int Cl.:
A41D 17/00 (2006.01)

(21) Application number: **18425102.3**

(22) Date of filing: **20.12.2018**

(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:
KH MA MD TN

(71) Applicant: **Blinkhand di Nadia Di Carlo**
00012 Rome (IT)

(72) Inventor: **Blinkhand di Nadia Di Carlo**
00012 Rome (IT)

(30) Priority: **21.12.2017 IT 201700148175**

(54) **GREAVE**

(57) 1. A greave (1) apt to cover a portion of a user's leg between the ankle and the knee, comprising:
- a main body (10) shaped like a sheet;
- first closing means (6) of said main body (10), arranged in correspondence of at least one of two opposite perimetral edges (a, b) of said main body (10) and shaped so as to provide a coupling between said opposite perimetral edges (a, b),

wherein when such coupling is realized, said main body (10) assumes a substantially tubular shape, preferably a cylindrical shape, in order to realize a closing configuration;
- retention means (7) of said main body (10) on the user's leg, adjustable according to the anatomy of the user's leg portion.

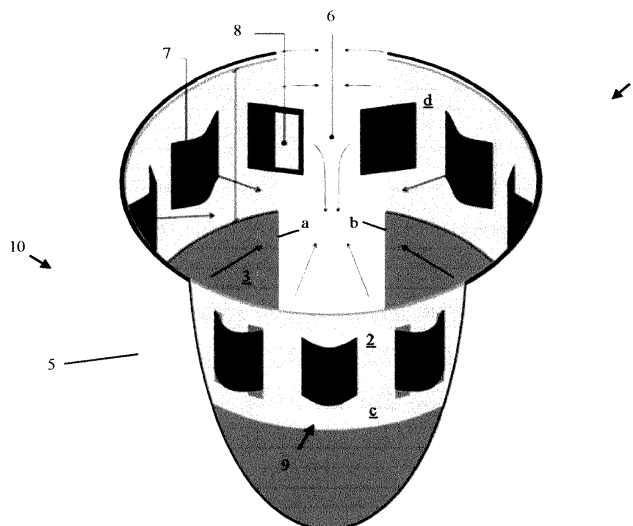


FIG. 2

EP 3 501 314 A1

Description

Technical area of the invention

[0001] The present invention is relative to an element of clothing accessory, in particular to greave. The accessory element supplies an improved connection to the user's leg.

[0002] The greave proposed achieves a plurality of functions, including a decorative function, i.e. confers a pleasant aesthetic appearance to the user's leg, as well as a protective function for the user's leg.

Background

[0003] At the state of the art, there are several types of clothing accessory elements used to wrap or cover the user's leg.

[0004] An example of such accessories, in use for many years, are gaiters. Gaiters were originally conceived with a protective function, but in some historic periods they also took on an aesthetic valence.

[0005] Gaiters are created to be attached to shoes and remain tightly connected to them, consequently they cannot be considered an autonomous accessory element, where by autonomous we mean an element that presents a defined form independent of further clothing elements or areas of the body to which it is connected, though maintaining a formal independence.

[0006] The close contact of gaiters to shoes imposes, also, a notable limit in possible combinations of materials, colours and geometric decoration with the other parts of one's clothing.

[0007] Further, gaiters have two attachment points necessary to support them, allowing them to retain their correct morphological aspect. Usually, these two points are placed respectively above and below each shoe.

[0008] Another example of clothing accessory for legs are riding greaves. These latter have the same limits of gaiters, as, when in use, they are attached to shoes.

[0009] Thus, also riding greaves cannot be considered an autonomous accessory element, i.e. of an autonomously defined form. Moreover, being adherent to the shoe itself, a riding greave must necessarily be of a size relative to the differing dimensions of the individuals who wear them and of the leg on which they are worn.

Summary of the invention

[0010] The technical problem posed and resolved by the present invention is that of supplying a clothing accessory that allows one to avoid the inconveniences mentioned above referring to noted technical solutions.

[0011] The above mentioned problem is resolved by a greave 1 which as claimed is independent.

[0012] The preferred characteristics of the present invention are the object of the dependent claims.

[0013] The greave, to which this invention refers in-

cludes adjustable support means, suited to adapting the greave to the anatomy of the user. These means of support adjustable to the user's leg are when in use preferably placed in correspondence with the upper part of the greave. In this way the greave in use appears as if suspended, i.e. not connected to the shoe or to any other element of clothing.

[0014] At the same time, the greave is an answer to predetermined characteristics of practicality, comfort and aesthetics.

[0015] In accordance with the preferred form of the invention, the greave allows one to fulfill a plurality of functions. For example, the greave can have a decorative function, i.e. confer a pleasing aesthetic aspect to the leg of the user, as well as a protecting function to the user's leg.

[0016] The decorative function is carried out mainly through the tubular cylindrical form of the greave. So the greave becomes a refined complementary accessory to one's outfit, which at one and the same time valorises the leg's appearance, minimising any relative imperfections (perhaps used to hide a protheses). Precisely the simple form of the cylinder, that surrounds and enwraps the leg, produced in a variety of precious materials, by designers and in colours intelligently matched, would exalt its appearance.

[0017] The greave in accordance with the present invention can also be a useful instrument to protect the user's leg from the cold, as it can be worn together with a skirt suit, also with shoes that are décolleté, and be removed when necessary, for example on those occasions when a specific dress-code is requested. Its use is also effective also over trousers, for example for those who travel by motorcycle or scooter in the winter.

[0018] In particular the decorative function is carried out by the exterior of the greave that has decorative designs, colours and a variety of materials.

[0019] The greave can also be usefully worn over a boot or other type of foot ware, giving a further touch of elegance to one's overall outfit.

[0020] Other advantages, characteristics and modalities of use of the present invention will become evident from the following detailed description of some forms in which it can be produced, presented purely as examples and in no way limiting.

Brief description of the figures

[0021] In the descriptive section that follows reference will be made to the attached figures, in which:

- Figure 1 shows an overall view of a first form of preferred production of a greave in accordance with the present invention;
- Figure 2 gives a perspective view, partially in section, of a portion of the extremity of a form of preferred production of the greave in accordance with the

present invention;

- Figures 3-5 show a view in transversal section of a portion of the extremity of a preferred form of production of Figure 2, respectively in an open, closing and closed configurations of the main body, when the greave is being worn:
- Figure 6 shows a lateral view of the preferred form of Figure 2, in an open configuration.

[0022] The above mentioned Figures are to be understood exclusively as examples and not limiting, and may present magnified thicknesses and proportions to facilitate the understanding of the invention.

Detailed description of the preferred production form

[0023] The present invention refers to a clothing accessory, in particular to a greave, i.e. to a garment suited to dressing or enwrapping the user's leg.

[0024] The greave is particularly suited to covering a portion of the user's leg between the ankle and the knee, but it could be adapted to other portions of the leg.

[0025] The preferred form of production of the greave in accordance with the present invention is indicated with a 1 in Figures 1 and 2.

[0026] The greave 1 includes a main body 10 essentially in the form of a sheet, i.e. it is essentially of two main dimensions (height and width) of development respect to the third, which would be thickness.

[0027] The main body 10 is preferably in a quadrangular shape, square or rectangular, when it is in an open or unfolded configuration, while it has a tubular shape, in particular cylindrical, in a closed configuration.

[0028] In reference to Figures 2-6, the main body 10 includes first of all a supporting layer 2, which will be described much more fully below.

[0029] The main body 10 preferably also includes other layers, which are placed one on the other, among these is an outer facing layer 5 visible in use, presenting for example decorative elements, and an internal lining layer 3, not visible in use. The support layer 2 is preferably placed between the external facing layer 5 and the internal lining layer 3. The main body 10 can be produced in textile, preferably the internal layer 3 is produced in material that allows the skin below to breath.

[0030] The support layer 2 constitutes the structural support of the main body 10, and with this objective is realised in flexible material, such that it can be bent to realise a tubular shape, in particular cylindrical, but that presents sufficient rigidity to maintain this tubular shape in the closed configuration.

[0031] The greave 1 also includes the first means of closure 6 of the main body 10, placed in correspondence of at least one of the two opposite outer edges a, b of the main body 10. The means of closure 6 are placed in such a way that those of one edge a will correspond to those

on the opposite outer edge b so that once in the closed configuration the main body 10 will assume an essentially tubular shape, in particular cylindrical.

[0032] In the shape of realisation shown in the Figures, the means of closure 6 include a zipper, preferably removable as respect the main body 10 and applied in such a way as not to be visible on the exterior when the greave is in use, i.e. being worn.

[0033] Further the greave 1 includes adjustable means of attachment 7 to attach of the main body 10 to the leg of the user, these means of attachment 7 are adjustable in function of the anatomy of the portion of the leg of the user. The adjustable means of attachment 7 are placed in correspondence of a portion of the terminal extremity of the principle body 10, that is preferably an upper portion when the main body 10 is in the closed configuration and is being worn by a user, i.e. when the greave is in use.

[0034] The adjustable means of attachment 7 are placed in such a way that they will surround the user's leg when they are in use, in particular in the proximity of the knee. Preferably, the support layer 2 will have a placement system 9 for the adjustable means of attachment 7.

[0035] The adjustable means of attachment 7 will include a second closure means 8, preferably placed in correspondence with their ends. Preferably the second means of closure 8 are placed in correspondence with the opposite external edges a, b of the main body 10.

[0036] The second means of closure 8, in the same way as the first means of closure 6, can include a mechanical closure system, e.g. a textile closure system such as hook and reinforced hole (e.g. Velcro®), zipper, buckles, laces, clips, buttons, or in alternative a combination of one or more of the mentioned systems.

[0037] The preferred type of production for the greave 1 shown in Figures 2-6 foresees adjustable attachment means 7 that include an elastic strip, preferably this strip should have a width of 3 centimeters.

[0038] Preferably, it is possible to foresee a further layer of the main body 10, or final counter-lining, whose function is to conceal the closing means 6 and the adjustable means of attachment 7.

[0039] As mentioned, the external layer 5 constitutes the visible part of the greave 1, and is generally made of one or more materials of the highest quality, such as various coloured leathers, that can be produced with the most varied finishing details.

[0040] These materials can be assembled together with "invisible" seams, so that they will create decorative geometric patterns that would make the accessory unique, as visible in Figure 1. In accordance with the preferred realisation of the invention, the external finishing layer 5 is exchangeable.

[0041] In particular the internal lining 3 is in direct contact with the leg when in use. This lining layer can contain the closure means 6.

[0042] The support layer 2 can instead include the adjustable means of attachment 7, in particular, as mentioned, the support layer 2 can include a base 9 for such

adjustable means of attachment 7.

[0043] Preferably, the base 9 creates a sliding guide for the adjustable means of attachment 7. The base 9 preferably includes a number of holes 15 in the support layer 2, preferably equidistant and creating an annular system when the main body 10 is in the closed configuration.

[0044] The adjustable means of attachment 7 are threaded through these numerous holes 15, in such a way that they cause an overlap of an external strip *c* or an internal strip *d* of the support layer 2 between each pair of adjacent holes of the numerous holes 15.

[0045] In accordance with the preferred form of realisation of the invention, the base 9 of the adjustable means of attachment 7 is located preferably 3-4 centimeters from the top (when in use) edge of the greave 1. Preferably, the support layer 2 includes a reinforced annular system in correspondence with the upper edge, this includes a strip of material that is more resistant than that of the rest of the main body 10, preferably 8 centimeters in height, which develops longitudinally along the top edge to the main body 10 when this latter is in its closed tubular configuration. In particular, the perimeter of the reinforced annular system 2 is tightly glued and/or sewn to the external finishing 5 of the greave 1.

[0046] In the form of realisation shown in the attached Figures, the adjustable means of attachment 7 includes an elastic strip, which in the flowing description will be referred to more simply as an elastic. In the reinforced annular system 2 where and through which the, preferably equidistant, holes 15 are realised at regular intervals of about e.g. 2 centimeters one from the other, which assumes an annular placement when the main body 10 is in the closed configuration. The elastic can slide freely through the holes 15 to allow the greave 1, once around the leg, to develop a uniform and homogenous pressure around the entire circumference of the accessory's contact with the leg of the person wearing the said accessory.

[0047] In accordance with a preferred variant of the invention, the elastic slides freely through the series of holes 15 created at regular intervals in the reinforced strip 2 sewn to the internal facing of the greave, in particular sewn to the internal layer 3. To this end this internal layer 3 can include a lining, to which is sewn the reinforced annular system 2.

[0048] The elastic, that can pass through the holes 15 sliding freely, guarantees that the greave 1 adheres perfectly to the leg, avoiding possible unsightly gatherings and/or deformations but also at the same time making it appear suspended at an equal distance around the entire perimeter of contact of the user's leg.

[0049] When the greave 1 is worn and the adjustable means of attachment 7 are closed, in correspondence with the holes 15 there will be a continual series of points of contact with equal tractive force toward the interior of the circumference, consequently allowing a homogenous adhesion on the perimeter around which it has contact with the leg, but without altering the greave's geo-

metric structure.

[0050] Intermittent movement of the adjustable means of attachment 7 constitutes the means by which the tractive force is distributed equally, which is necessary to avoid unsightly gatherings and/or deformations of the cylindrical outline of the main body 10 when the greave is in use.

[0051] Thanks to the presence of the adjustable means of attachment 7, the greave 1 will remain unaltered in its tubular, or better cylindrical, shape and firmly adherent to the leg, allowing natural movement without any problems.

[0052] The material and the accessories of which the greave 1 is made up according to the present invention can be: leather made from sheepskin, goatskin, horse skin, suede, textile, pvc, with decoration in metals such as: aluminum, silver or gold or gemstones or pearls.

[0053] Furthermore, they can have decorations carried out with woody or floral materials, meaning with the term "floral materials" materials coming directly from real flowers.

[0054] The present invention which is described in the foregoing text has been with references to preferred forms of realisation. It is to be understood that there can exist other forms of realisation that belong to the same inventive nucleus, as defined in the setting of the protection of the rights here below listed.

Claims

1. A greave (1) apt to cover a portion of a user's leg between the ankle and the knee, comprising:
 - a main body (10) shaped like a sheet;
 - first closing means (6) of said main body (10), arranged in correspondence of at least one of two opposite perimetral edges (a, b) of said main body (10) and shaped so as to provide a coupling between said opposite perimetral edges (a, b), wherein when such coupling is realized, said main body (10) assumes a substantially tubular shape, preferably a cylindrical shape, in order to realize a closing configuration;
 - retention means (7) of said main body (10) on the user's leg, adjustable according to the anatomy of the user's leg portion.
2. The greave (1) according to claim 1, wherein said adjustable retention means (7) is arranged at a terminal ending portion of said main body (10).
3. The greave (1) according to claim 1 or 2, wherein said adjustable retention means (7) is arranged so as it surrounds the user's leg portion in proximity of the knee when said greave (1) is worn.
4. The greave (1) according to any of the preceding

claims, wherein said adjustable retention means (7) comprises second closing means (8), preferably at its own terminal ends.

5. The greave (1) according to the preceding claim, wherein said second closing means (8) is arranged at said opposite perimetral edges (a, b) of said main body (10). 5
6. The greave (1) according to claim 4 or 5, wherein said first and/or second closing means (6, 8) comprises a mechanical closing system. 10
7. The greave (1) according to the preceding claim, wherein said mechanical closing system comprises one or more of the following: zipper, textile closure system of the type with hook and loop, buckles, laces, clips, buttons. 15
8. The greave (1) according to any of the preceding claims, wherein said adjustable retention means (7) comprises an elastic band. 20
9. The greave (1) according to any of the preceding claims, wherein said main body (10) comprises a supporting layer (2) bearing a seat (9) for housing said adjustable retention means (7). 25
10. The greave (1) according to the preceding claim, wherein said seat (9) realizes a guide for the sliding of said adjustable retention means (7). 30
11. The greave (1) according to the preceding claim, wherein said seat (9) comprises a plurality of openings (15) passing through said supporting layer (2) and having an annular arrangement when said main body (10) is in said closing configuration, said adjustable retention means (7) being inserted within said plurality of openings (15) so as to overlap an external face (c) or an internal face (d) of said supporting layer (2) between each couple of adjacent openings of said plurality of openings (15). 35 40
12. The greave (1) according to any of the preceding claims, wherein said main body (10) comprises an external coating layer (5) having decorative elements and an internal coating layer (3), said supporting layer (2) being interposed between said external coating layer (5) and internal coating layer (3). 45 50
13. The greave (1) according to the preceding claim, wherein said external coating layer (5) is interchangeable. 55



FIG. 1

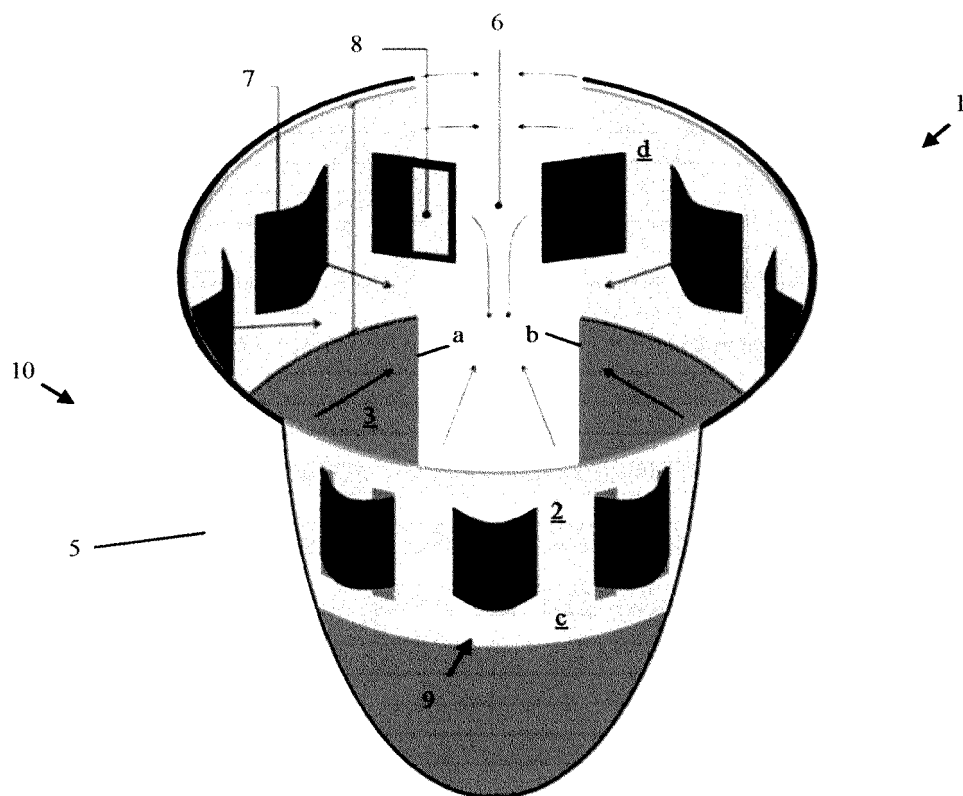


FIG. 2

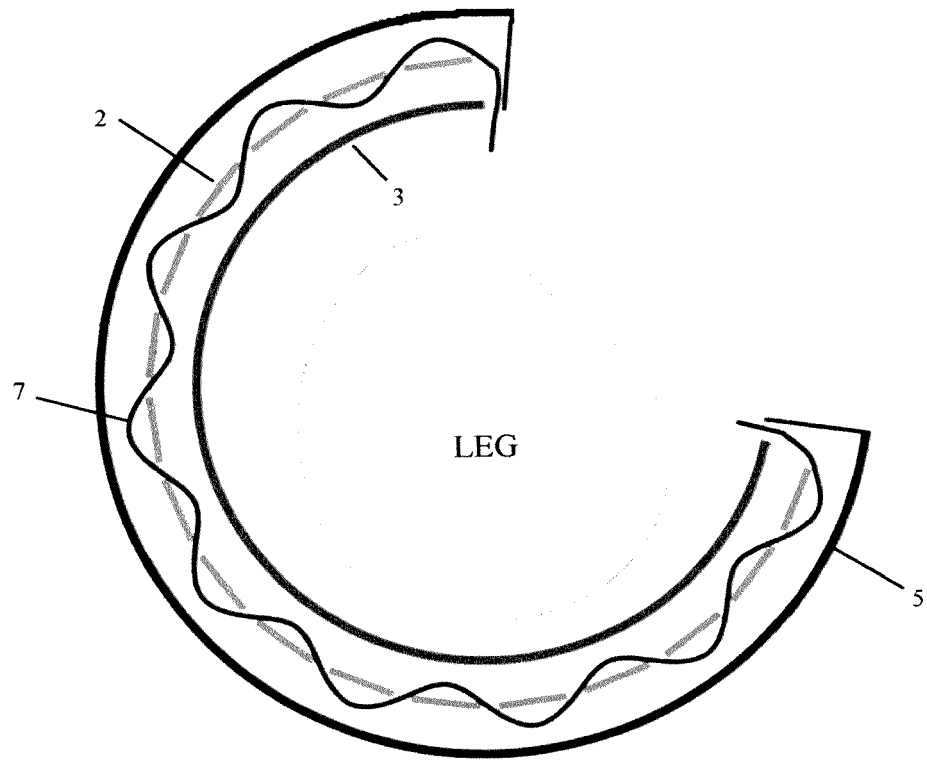


FIG. 3

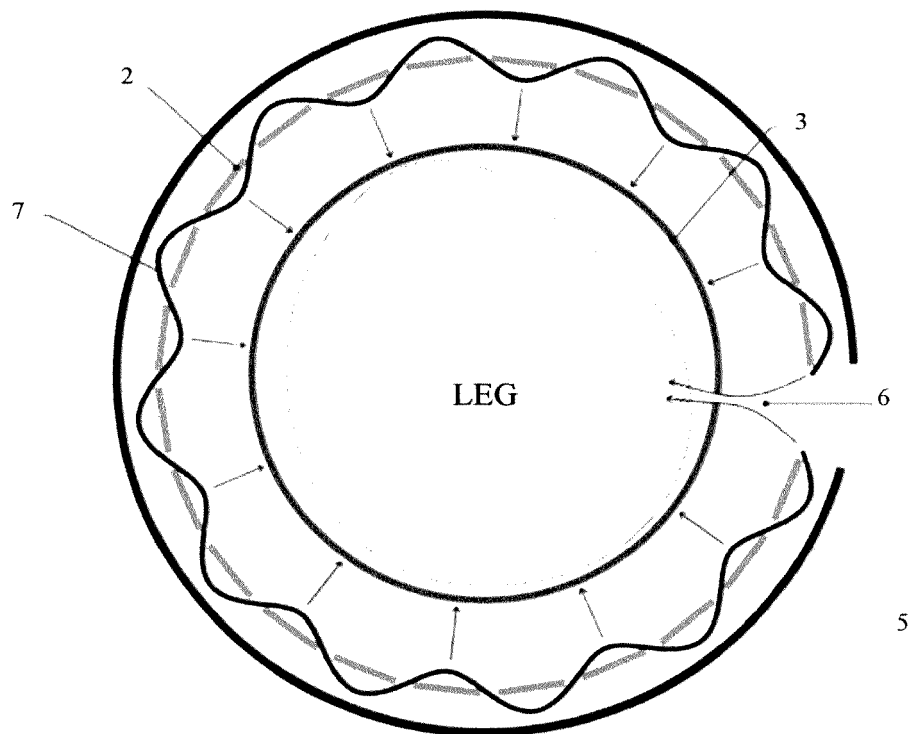


FIG. 4

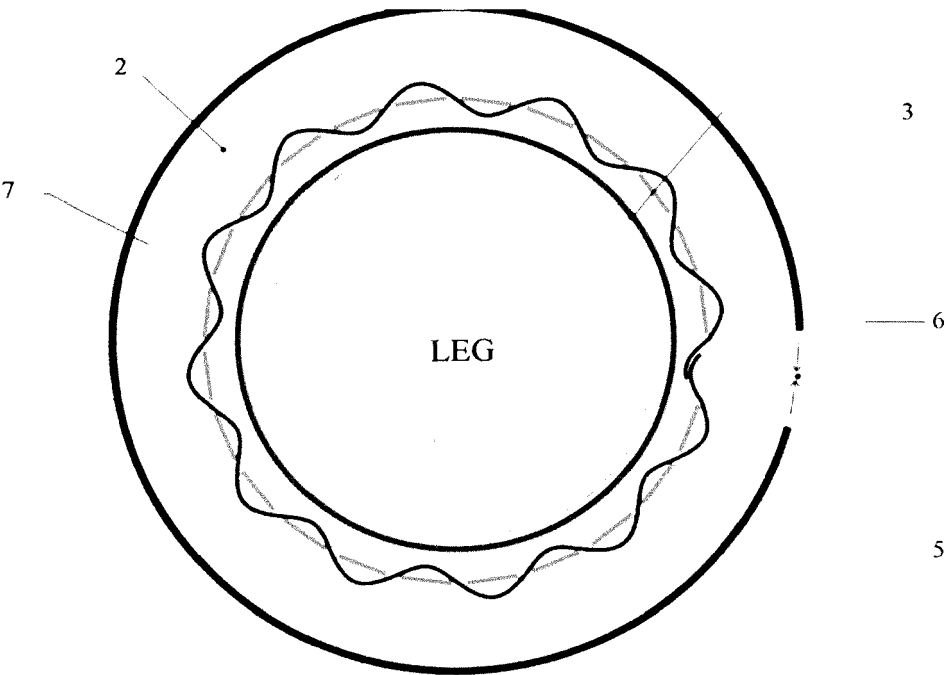


FIG. 5

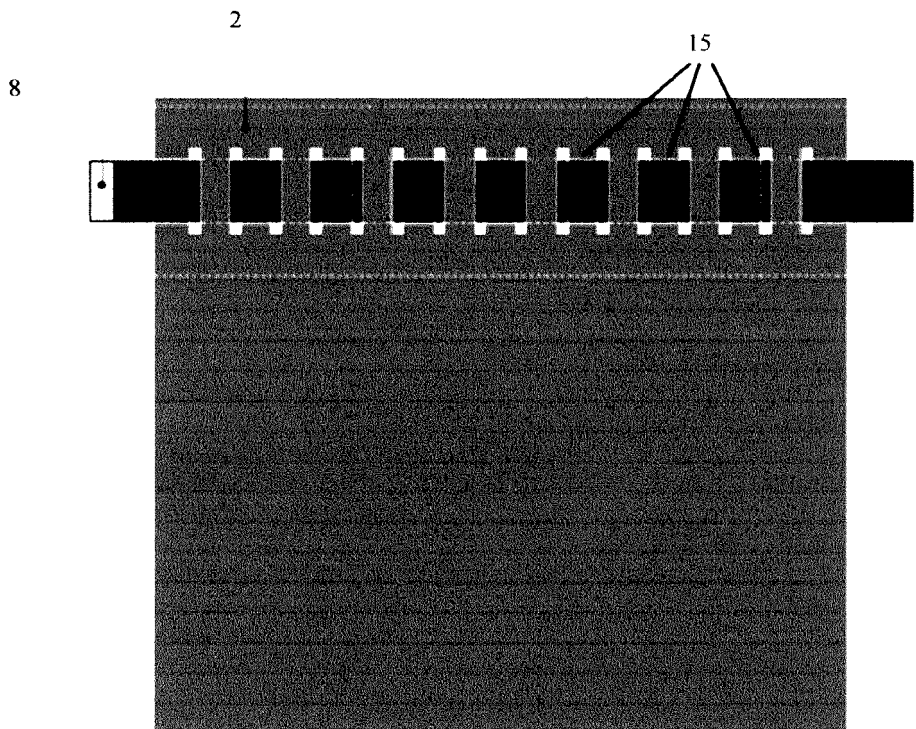


FIG. 6



EUROPEAN SEARCH REPORT

Application Number
EP 18 42 5102

5

10

15

20

25

30

35

40

45

50

55

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	US 4 586 272 A (FORSTER HELMUT [DE]) 6 May 1986 (1986-05-06) * figures 1, 2 *	1-10,12,13 11	INV. A41D17/00
A	-----		
X	ES 2 349 822 A1 (MARIN GENESCA MARC [ES]) 11 January 2011 (2011-01-11) * figures 1, 3 *	1-10,12,13 11	
A	-----		
X	US 2013/133228 A1 (NUGENT SAMANTHA [US]) 30 May 2013 (2013-05-30) * figure 2 *	1	
A	-----		
	DE 93 06 079 U1 (ASTHOFF FRANK [DE]) 9 December 1993 (1993-12-09) * figures 1, 2 *	1-13	

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A41D A44B A43B
Place of search		Date of completion of the search	Examiner
The Hague		26 March 2019	Krüger, Sophia
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 03.02 (P04C01)

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

EP 18 42 5102

5

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.

26-03-2019

10

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 4586272 A	06-05-1986	DE 8315953 U1 JP S6068853 A US 4586272 A	17-11-1983 19-04-1985 06-05-1986
ES 2349822 A1	11-01-2011	NONE	
US 2013133228 A1	30-05-2013	NONE	
DE 9306079 U1	09-12-1993	NONE	

15

20

25

30

35

40

45

50

55

EPO FORM P0459

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