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

(11) **EP 3 563 702 A1**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
06.11.2019 Bulletin 2019/45

(21) Application number: **18871803.5**

(22) Date of filing: **21.03.2018**

(51) Int Cl.:
A41B 3/06 *(2006.01)*

(86) International application number:
PCT/MX2018/000030

(87) International publication number:
WO 2019/164387 (29.08.2019 Gazette 2019/35)

(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

(30) Priority: **20.02.2018 MX 2018002187**

(71) Applicant: **González Torres, Victor Manuel**
Pachuca de Soto, Hidalgo (MX)

(72) Inventor: **González Torres, Victor Manuel**
Pachuca de Soto, Hidalgo (MX)

(74) Representative: **Lucke, Andreas**
Boehmert & Boehmert
Anwaltspartnerschaft mbB
Pettenkoferstrasse 22
80336 München (DE)

(54) DEVICE FOR PROVIDING STIFFNESS AND DRAPE TO FABRIC COLLARS

(57) The present invention refers to a device (100) specially designed to provide rigidity and fall to textile garments, which is constituted by a laminar body with a globally rectangular cross section that at one of its ends has an angled tip (101), where said tip has at its end a rounding (102) which is responsible for shaping said tip, also has a beveled profile (103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located in each of the ends that in its lower part has a tongue (106). The invention also relates to a portion of fabric comprising said device and a garment.

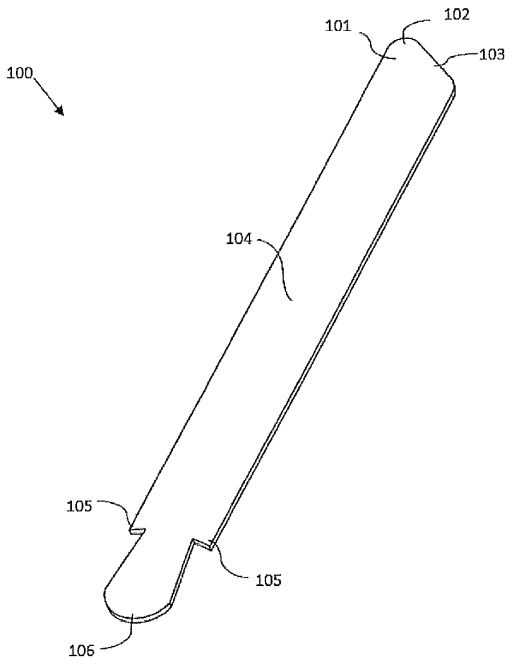

Figure 1

EP 3 563 702 A1

Description

TECHNICAL FIELD

[0001] The present invention belongs to the technical field of human needs, more specifically to a branch of the textile industry, particularly clothing, more particularly to devices designed for implementation in clothing, more specifically to the devices implemented in garment collars to obtain a better presentation for a longer time in them and still more specifically, the present invention refers to a device and channel to provide stiffness and fall to collars woven in t-shirts type polo, shirts and other garments.

BACKGROUND

[0002] It is known that the development of polo style shirts began in the 20th century to standardize the players of this sport where the riders needed a light and fresh garment with an optimal and dynamic design for the movement of the arms. In the twenties, the famous French tennis player Rene Lacoste teamed up with the cloth fabric expert Andre Gillier to "refine" the design of the first polo shirts. Together, they created the famous lightweight but sturdy and breathable pique cotton to allow the body to breathe while having a good image and falling fabric. In 1933, Rene Lacoste examined the attire of a polo player Lord Cholmondeley and thus, designed a revolutionary shirt with a buttoned collar and short sleeves. In 1961, René Lacoste patented his polo neck, a wide neck that could be lifted to protect the neck of the sun during the game.

[0003] The polo shirt has become a basic garment, it is elegant and comfortable. Its design consists of a shirt with short or long sleeves, with cuffs and necks woven in cardigan also has a flap with two or three buttons, for facilitate the entrance of the head and in the lower part of the side "pigeons" or in free fall (Figure 16). The classic polo shirt is usually made of cotton pique or a mixture of polyester and cotton. It is a perfect garment for free time, it is usual to wear it with jeans, shorts or swimsuits.

[0004] The collars and cuffs of polo shirts are manufactured in straight double-faced machines, on average with three or four strands of yarn. The strands of thread acquire rigidity as the point is tightened, the thicker and tighter this point of the neck the less deformation the neck will have, in the same way they will have less strech, being too rigid they hurt, since they have a rough texture.

[0005] It is also known that the company Brown, Davis & Co. in 1871 obtained the first patent of a shirt that buttoned all the way in front. Previously, the shirts were dragged over the head. The collars of the dress shirts with the passing of the years were perfected, in order to improve their image, fall and a natural movement giving it more elegance. These collars were given a better image and fall with reinforcements and sewing techniques. The neck stiffener, neck stays and lancets, among others are some of the most used reinforcements. In this sense it is also known that the neck stiffeners on the shirts were originally made with whale bones and were used for the corsets in the sixteenth and eighteenth centuries while at present they are made of metal, plastic and other materials used in the corsets, fasteners and shirt collars to give shape and elegance to the garment are also called Collar Stay or Collar Stiffner, Baleine. The stiffeners are placed in formal shirts that have a small opening in the neck to insert these thin rods remaining inside the peaks of the neck. Its main function is to keep the neck straight, without kinks, lifting, among other effects that remain present at the neck of the garment.

[0006] Also known are the magnetic collar stiffeners that is an alternative that consists of a stiffener made of metal that is placed on the neck to avoid lifting of the peak. Similarly, it has a small magnet that is placed on the inside of the shirt. These two pieces having opposite polarities are attracted and thus avoid lifting and threading the neck. However, the strength of the magnets makes the neck look unnatural, so it is forced, without a natural fall and without movement removing the naturalness, presence and subtract elegance in the garment.

[0007] It is also known that in the Chinese patent application CN101273798 (A) where a method for manufacturing portions of collar-filled sleeve wherein a clamping collar is referenced at the edge of a sleeve, and a method of machine-sewn is a collar that is embedded in the short edge or the long edge of the collar of the shirt near a point of the same neck, thus having the effect of supporting and strengthen the collar and keep the neck point to be fixed; after washing several times, the entire collar, particularly at the point of the neck, can maintain the outer effect of roundness, smoothness, flatness and stiffness, and the point of the neck does not occur the unwanted phenomenon of bending towards the bottom from the surface of the collar or folds to the front surface of the collar. In this document, reference is generally made in what consists of the application of lancets in the collars of the shirts; where lancets or neck stays are clothing accessories. The lancets are usually made of metal or plastic, among other materials and are placed on the collars of dress shirts to avoid folds in the collars and thus give a better image to the garment. This invention relates to placing a lancet on the neck edge of a shirt. It also consists of a method of machine sewing in which a neck gap is joined at the edge of the same neck of the shirt and this lance gives a support effect thereto. Its main function is to avoid twisting and lifting the neck, thus giving presence and elegance to the garment. This technique is applied in dress shirts, depending on the fabric and the design, among other factors. Unlike stiffeners, lancets can not be easily removed and changed since they are inside the neck, so if the lancet has already lost its strength it will have to be uncovered and replaced. This method of making is to make a kind of bag at the end of the neck, to insert the lancet and avoid kinking or lifting the neck.

[0008] Another known document that discloses in a general manner the state of the art of the present invention is that found in patent EP1529452 (B1) wherein a method for manufacturing pieces of shirt with neck filling is described wherein a second eyelet is provided in a front fabric of an internal fold of a band for the neck of a dress shirt. A left end of a rubber band is sewn into a back fabric. A left end of a fill is stitched at the right end of it. A lining cloth is stitched at the right end of the filling. A right end of the lining fabric is sewn into the back fabric of the neck band. A vertical ribbon has an upper end and a lower end sewn into the back fabric under the cushion. A horizontal ribbon is passed between them and has its opposite ends sewn on the back sides of the padding and the lining fabric, respectively. Therefore, a structure is provided in which a vertical ribbon is held between a moving fabric, which is made of the pad and the lining fabric, and the horizontal ribbon. When a top button is engaged in the second buttonhole of the front web and moved to the right against a pulling force of the rubber web, it can move smoothly. In addition, a neckline can be adjusted to the desired length without a flashy action. This invention relates to a shirt or blouse that is buttoned at the neck just at the ends where the buttons are at the back of the neck. The main function of the buttons is to maintain the shape of the neck, prevent movement, twisting or lifting. This invention is particularly applicable in tie shirts. It should be mentioned that the invention maintains a correct appearance of the garment, however, the neck is forced by the buttons and lacks a natural fall. There are different ways to apply this invention.

[0009] The previous inventions have been applied on formal shirt collars, blouses and sports shirts, among other pieces of flat weave. However, the foregoing the present invention is applicable in knitted necks and of any type of garment. The object of the present invention also has as its main objective to avoid kinking, lifting, improving the presence of the woven collar on the shirt and maintaining a natural movement in the garment, in order to increase the useful life and elegance of the knitted necks for a longer time. It is important to note that this invention provides greater support and aesthetics to the neck, making the garment more elegant and providing a natural movement to the neck.

[0010] Devices with similar technologies are found in documents US3842435A, US2769979A, US3132347A, FR1377849A, US3624664A, US20070204374A1, US9756879B2, US3733614A, US2033680A, US2903702A, US3237207A, US7146647B2, US20170367412A1.

[0011] The disadvantages found in the prior art occur mainly in that, most of these devices, are oriented to implement the use of components that damage the integrity of the garment, to be in direct contact with this and mainly by the interaction of these with the the same, resulting in a bad appearance found in the enroscamientos of the tips of the necks, the disintegration of tissues caused by the implementation of for example a buttonhole, until the break caused by the wear derived from the friction between the components that are added to the neck of the garment.

[0012] The above results in notorious disadvantages for the user since the integrity and appearance of his garments is affected with the passage of time, the washing and ironing process, as well as the storage of the garment.

[0013] For these reasons there is a need to have a device that provides the possibility of maintaining the neck of the garment with the rigidity, fall and support needed to improve the image, increase elegance and especially the life of the garment.

BRIEF DESCRIPTION OF THE INVENTION

[0014] Therefore, the present invention has the task of presenting a device that solves the above-described drawbacks and offers significant advantages in its utility, since it is a device and channel to provide rigidity and fall to necks woven into T-shirts polo type, shirts and other garments of analogous characteristics to those described in the aforementioned documents, with a series of components in its structure that allow an easy and simple manipulation, manufacture and implementation of the same, without neglecting at a given moment the integrity of the garment where it is implemented.

[0015] In this sense, the main object of protection refers to a device (100) for providing rigidity and fall to textile garments, characterized in that it is constituted by a laminar body with a globally rectangular cross section that at one of its ends has an angled tip (101), where said tip has its end a rounding (102) that is responsible for shaping said tip, also has a beveled profile (103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located on each of the ends that have a tongue (106) on the lower part.

[0016] A second object of protection contemplated is a portion of fabric characterized because it comprises a receiving channel (200) which is housed in each of the lateral ends of a neck portion (201) and is disposed in the middle of at least two layers of tissue specially designed to house a device (100) to provide rigidity and fall to textile garments, which is constituted by a laminar body with a globally rectangular cross section that at one of its ends has an angled tip (101), where said tip has a rounding (102) at its end that is responsible of shaping said tip, it also has a beveled profile
(103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located in each of the ends that in its lower part has a tongue (106); said receiving channel (200) is arranged from the base of the neck portion (202) to the bottom (203), where in turn, on each of its flanks is in correspondence with an outer edge

(204), an inner edge (205) and in the lower part of the neck portion (201) in the area coinciding with the receiving channel (200) there is an inlet (206) through which the device (100) is inserted During its placement process.

[0017] A third object of protection also refers to a garment characterized in that it comprises a portion of fabric having a receiving channel (200) which is housed at each of the lateral ends of a portion of the fabric. neck (201) and disposed in the middle of at least two layers of fabric specially designed to house a device (100) for providing stiffness and fall to textile garments, which is constituted by a laminar body with a globally rectangular cross section that in one his ends has an angled tip (101), where said tip has at its end a rounding (102) that is responsible for shaping said tip, also has a beveled profile (103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located in each of the ends that in its lower part has a tongue (106); said receiving channel (200) is arranged from the base of the neck portion (202) to the bottom (203), where in turn, on each of its flanks is in correspondence with an outer edge (204), an inner edge (205) and in the lower part of the neck portion (201) in The zone coinciding with the receiving channel (200) has an entrance (206) through which the device (100) is inserted during its placement process.

BRIEF DESCRIPTION OF THE FIGURES

[0018]

Figure 1. Front isometric view of the device and channel to provide rigidity and fall to necks woven in polo shirts, shirts and other garments.

Figure 2. Lateral isometric view of the device and channel to provide stiffness and fall to woven collars in polo shirts, shirts and other garments.

Figure 3. Front view of the device and channel to provide stiffness and fall to collars woven in polo shirts, shirts and other garments.

Figure 4. Isometric view of a portion of a garment fragment of clothing.

Figure 5. Top view of a portion of a piece of clothing for polo shirts, shirts and other garments.

Figure 6. Top view of a portion of a piece of clothing, where the canal of housing of the device to provide rigidity and fall to knitted necks.

Figures 7A-7C. Upper views of the device and channel to provide rigidity and fall to necks woven in sequence at the time of being introduced to the accommodation channel.

Figure 8. Top view of a portion of a piece of clothing with an extension showing the location of the device inside the accommodation channel.

Figure 9. Top view of a portion of a piece of clothing for polo shirts, shirts and other garments.

Figures 10A-10G. Photographic sequence of polo-type shirt subjected to different washing cycles.

Figures 11A-11B. Photographs of the appearance of polo shirts after 30 washing cycles.

DESCRIPTION OF THE INVENTION

[0019] The present invention refers to a device (100) specially designed to provide rigidity and fall to fragments of garments, particularly collars (300) fabrics, preferably in polo shirts, shirts and other garments, which has as a main object to solve the technical problem of improving the appearance of woven collars that are used in polo shirts, preferably but not in a limited way since they can also be used in shirts, jackets, blouses and other clothing related to this type of neck, so that in this way it is possible to give a better flight and fall in the presentation of the garment in general, the device (100) is designed to be introduced on a receiving channel (200) located at the lateral ends of fragments of garments, particularly knitted collars, preferably on polo shirts, shirts and other garments.

[0020] The device (100) for providing rigidity and fall to collars woven in polo shirts, shirts and other garments is constituted by a laminar body made preferably of polyurethane pelectalate preferably of at least 35, 45 or even 55 caliber, depending on the thickness of the neck tissue, has a general shape of lancet, with a globally rectangular cross section that at one of its ends has a angled tip (101) with an angle of at least 45 ° with respect to the axis of the device, wherein said tip has in its end a rounding (102) that is responsible for shaping said tip that is the most extreme of the neck portion (201), in an area close to the rounding (102), also has a beveled profile (103) with the purpose of having a simpler introduction to the fabric housing channel (200), with the proviso that the device (100) must be inserted into the fabric housing channel (200) in such a way that the beveled profile (103) is arranged in the direction of the inner side of the neck portion (201) since in this way the neck (300) acquires a more aesthetic and defined presence, the middle section (104) of the device (100) possesses a rectangular shape and is available to give the exact size to the size of the neck, and can be variable. For infant collars a measurement of at least 3cm is recommended, while for adult necks, at least 4cm is suggested, depending on the width of the neck and / or the measurement of the outer edge. In an area proximal to the lower part of the device (100) there are two pointed endings (105) located on each of the ends, with an angle of at least 20 ° with respect to

the axial axis; wherein these pointed endings (105) are responsible for preventing the device (100) from moving inside the receiving channel (200) being out of position and canceling the aforementioned advantages that justify its presence and that derived of the movement could be displaced remaining in any other area within the aforementioned channel, and that at the same time each of those tip terminations (105), in its lower part are corresponding with a tongue (106) in order to give it a better presence to the neck (300) of the garment and avoid marking the ter tip jaws (105) therein as well as allowing maintenance of a continuity to the woven structure of the receiving channel (200) and avoids breaks in the vertices.

[0021] The device (100) is preferably made of polyurethane pelectalate preferably from caliber of at least 35, 45 or even 55 since said material presents good resistance to heat, chlorine and other detergents used in the laundry cycle of the garment as well as providing the ideal weight to avoid the lifting and threading of the neck of said garment, in addition to good performances have been demonstrated in the reinforcements of shirt collar with the use of this material; In the same sense, in a preferred embodiment of material, the inclusion of stainless steel is made since it does not deform with heat and has an excellent resistance to chlorine and other detergents during the washing cycle, in the same way The use of other polymeric materials such as PVC or laminated nylon is also contemplated, since the use of these in the device and channel to provide rigidity and fall to necks woven in polo shirts, shirts and other garments (1) confers a good weight to avoid lifting and twisting the neck in the press as well as having a lower cost.

[0022] The receiving channel (200) object of the present invention is housed in each of the lateral ends of a neck portion (201) of a garment and is arranged in the middle of at least two layers of fabric that confer the characteristic to remain hidden and in a disposition to receive the device (100), in its interior, the receiving channel (200) is arranged from the base of the neck portion (202) to the bottom (203) of said accommodation channel (200), where in turn, in each of its flanks is in correspondence with an outer edge (204), an inner edge (205), finally in the lower part of the neck portion (201) in the area coinciding with the receiving channel (200) there is an entrance (206) through which device (100) is inserted during its placement process.

[0023] The portion of neck (201) inside the garment provides the necessary structure and provides the dimension to the press, has the advantage that it can be knitted in a continuous and smooth way in rectilinear machines of two fronts, also, if these are equipped with electronic or mechanical selection, it is possible to make the drawings that the selector allows.

[0024] Depending on the size of the device (100), it is required to make the channel of different width, where the narrowest is a point, and which is formed by an English type mesh, up to a channel of 5 or 6 points, formed with the same amount of meshes, the design is based on the appearance and duration that the designer intends to give the garment, however preferentially suggest 5mm for being the best performance, between appearance, weight to give fall and flight to the edge or outer edge of the collar, strength and durability of the garment.

[0025] The receiving channel (200) and the device (100) operate with a harmonic ratio of measurements, do not allow slack, or too tight tolerances since this would cause the device (100) to be out of place, giving a bad appearance or causing that being excessively tight prematurely breaks the fiber used in the tissue of the neck.

BEST METHOD FOR CARRYING OUT THE INVENTION

[0026] The present examples are illustrative and not limiting, since a person skilled in the art will understand that there are variants that fall within the scope of the invention. scope of protection of the present invention.

Example 1. Washing tests.

[0027] The garments with the collars woven with the invention were tested for durability, effects after washing, ironing, condition of the neck and aesthetics of the garment. For which the following procedure of use and washing was established to simulate the wear and deformation of the neck in a sample of polo shirts:

Two universes of 5 shirts were prepared each, group one without the invention and group two, with the devices of the invention.

[0028] It was determined that it would be used during a working day of 9 hrs., In office activities, and light manufacturing, but within the same facilities, to guarantee the same climatic conditions, in 10 different users, who should carry out their activities daily, and at the end of the day, the samples were collected to carry out the washing cycle. Once the t-shirts are collected, the 10 t-shirts are washed in a homemade vertical blade washer, with another 10 pieces (they will always be the same clothes to simulate a similar wear in a home washing process) to occupy the capacity of the washing machine , which is programmed with the average water level and a 10-minute wash cycle for normal (medium) clothes, with detergent biodegradable commercial, and then a rinse cycle with synaptic water, and centrifuged, then hung in the shade for complete drying.

[0029] The next day a process of ironing is performed at medium temperature and is available for another cycle of use. In figure 10A the shirt with the device (100) is observed at the beginning of the test, in figure 10B the result is observed after a cycle of use and washing, practically no alterations are seen in presence or wear, in the figure 10C you can see the result after five cycles of use and washing, you can see a slight wear on the fabric and finished, but the neck maintains the appearance and aesthetics, in figure 10D the garment is presented after 10 cycles of use and washing, where wear and slight defor-

mation can be observed in flap and cloth, but the appearance and aesthetics of the garment is maintained, in figure 10E, the garment can be observed after 15 cycles of use and washing, where can see wear and deformation in the garment, but the neck maintains a good presence, in figure 10F the garment is observed after 20 washes and cycles of use, observing wear on the garment, but maintaining a presence in the neck or very esthetic, in figure 10G we can see the last scope in terms of use cycles, with 30, where it is observed that the garment maintains its appearance and aesthetics, so we can deduce that the present invention if it solves the problem that appears in the knitted necks of the polo shirts and other garments where this type of fabrics is needed.

[0030] The comparative results at the end of the 30 washing cycles can be seen, on the one hand, a conventional shirt (figure 11A) and another with the device of the present invention (Figure 11B), wherein a presentation of the neck, without corrugations or ripples, very different from the case of the conventional shirt, where you can see the corrugation, coriscado and bad presentation of the neck, comparing both samples is had a very acceptable presentation with the invention, despite the wear to which they were subjected. From what is proven, the utility and benefits provided by the present invention.

[0031] Although the above description was made taking into account the preferred embodiments of the invention, it should be taken into account by those experts in the field, that any modification of form and detail will be included within the spirit and scope of the device and channel to provide rigidity and fall to collars woven in polo shirts, shirts and other garments. The terms in which this report has been written should always be taken in a broad and non-limiting sense. The materials, form and description of the elements will be subject to variation as long as this does not mean an alteration of the essential characteristic of the device and channel to provide rigidity and fall to necks woven in polo shirts, shirts and other garments.

Claims

1. A device (100) for providing rigidity and fall to textile garments, **characterized in that** it is constituted by a laminar body with a globally rectangular cross section that at one of its ends has an angled tip (101), wherein said tip has at its end a rounding (102) that is responsible for shaping said tip, also has a beveled profile (103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located in each of the ends that in its lower part has a tongue (106).

2. The device (100) for providing rigidity and fall to textile garments according to claim 1, **characterized in that** the angle of the tip (101) is at least 45 ° with respect to the axis of the device.

3. The device (100) for providing stiffness and fall to textile garments according to claim 1, **characterized in that** the pointed ends (105) located at each of the ends have an angle of at least 20 ° with respect to the axial axis.

4. The device (100) for providing rigidity and drop to textile garments according to claim 1, **characterized in that** it is preferably made of polyurethane pelectalate preferably of caliber of at least 35, preferably 45 or 55.

5. A portion of fabric **characterized in that** it comprises a receiving channel (200) which is housed in each of the lateral ends of a neck portion (201) and is disposed in the middle of at least two layers of fabric specially designed to accommodate a device (100) for providing rigidity and fall to textile garments, which is constituted by a laminar body with a globally rectangular cross section that at one of its ends has an angled tip (101), wherein said tip at its end a rounding (102) that is responsible for shaping said tip, also has a beveled profile (103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located in each of the ends that in its lower part has a tongue (106); said receiving channel (200) is arranged from the base of the neck portion (202) to the bottom (203), where in turn, on each of its flanks is in correspondence with an outer edge (204), an inner edge (205) and in the lower part of the neck portion (201) in the area coinciding with the receiving channel (200) there is an inlet (206) through which the device (100) is inserted during its placement process.

6. The fabric portion according to claim 5, **characterized in that** the device (100) is located in the woven receiving channel (200) in such a way that the beveled profile (203) is disposed in the direction of the inner side of the neck portion (201).

7. The fabric portion according to claim 5, **characterized in that** the receiving channel (200) is formed, preferably by an English type mesh, up to a channel of 5 or 6 points, formed with the same number of meshes.

8. The portion of fabric according to claim 5, **characterized in that** the fabric portion is preferably a collar for a garment, selected from shirt or T-shirt.

9. A garment **characterized in that** it comprises a portion of fabric having a receiving channel (200) which

is housed in each of the lateral ends of a neck portion (201) and disposed in the middle of at least two layers of fabric specially designed to house a device (100) for providing rigidity and fall to textile garments, which is constituted by a laminar body with a globally rectangular cross section that at one of its ends has an angled tip (101), wherein said tip has at its end a rounding (102) that is responsible for shaping said tip, also has a beveled profile (103); in its middle section (104) it has a rectangular shape and is arranged to give an exact dimension to the size of a piece of fabric; in an area proximal to the lower part there are two pointed endings (105) located in each of the ends that in its lower part has a tongue (106); said receiving channel (200) is arranged from the base of the neck portion (202) to the bottom (203), where in turn, on each of its flanks is in correspondence with an outer edge (204), an inner edge (205) and in the lower part of the neck portion (201) in the area coinciding with the receiving channel (200) there is an inlet (206) through which the device (100) is inserted during its placement process.

10. The garment according to claim 9, **characterized in that** the garment is preferably selected as a shirt or T-shirt.

11. The garment according to claim 10, **characterized in that** the T-shirt is preferably a polo type.

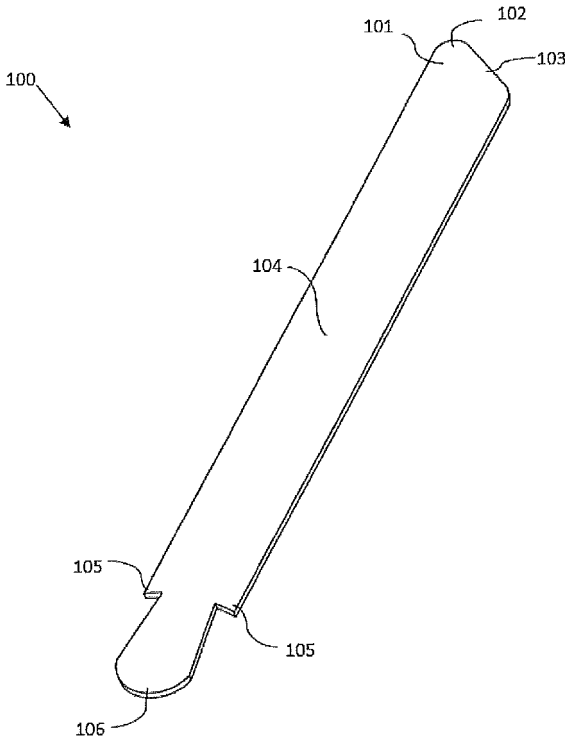

Figure 1

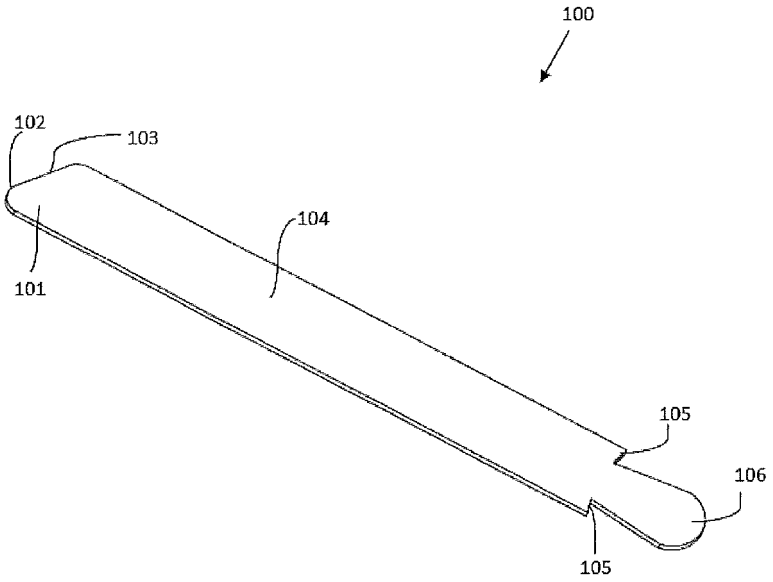

Figure 2

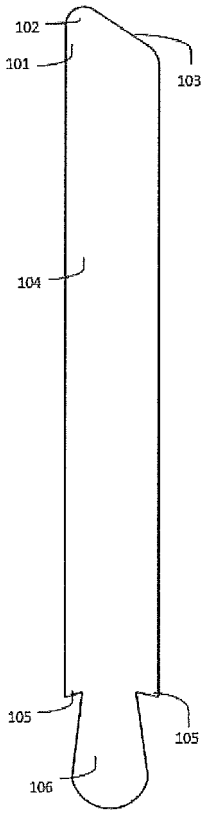

Figure 3

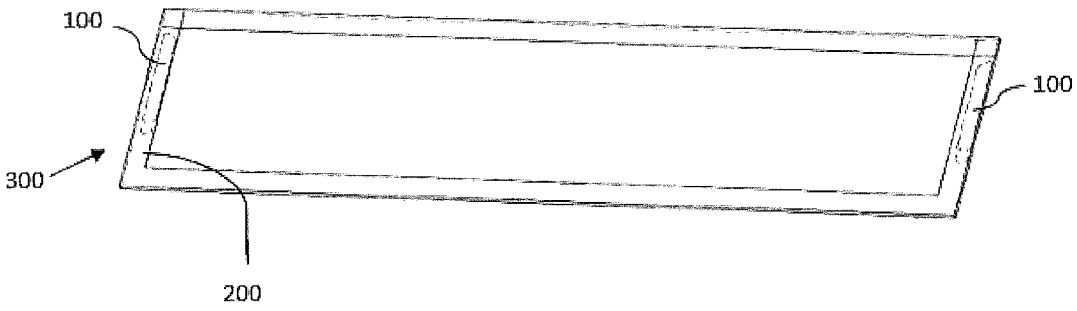

Figure 4

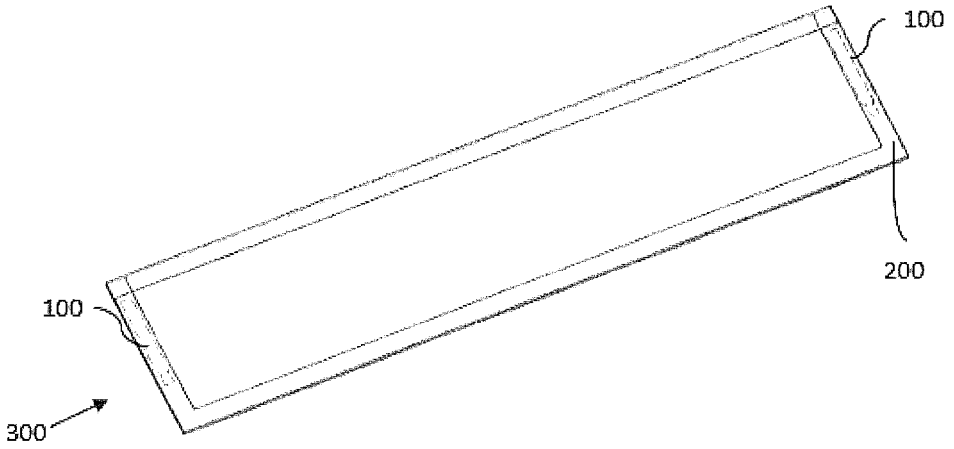

Figure 5

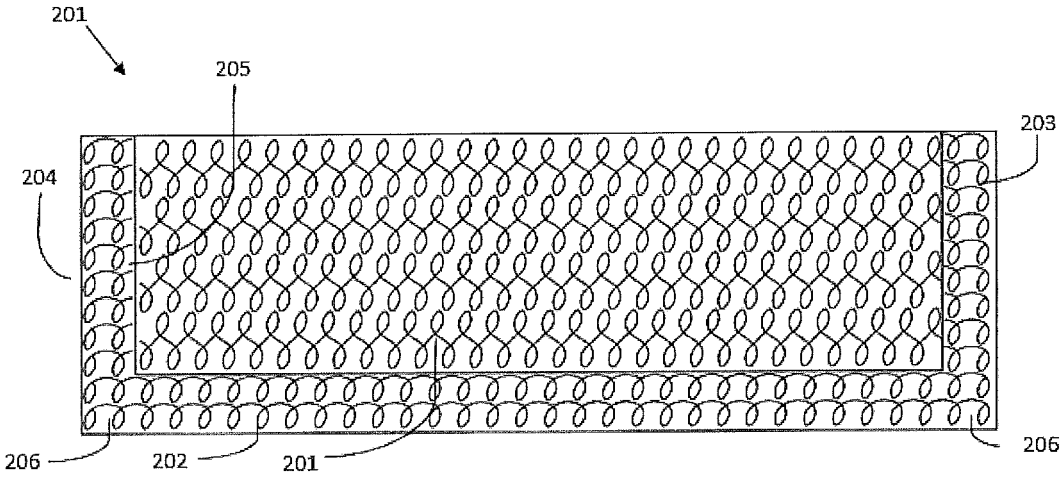

Figure 6

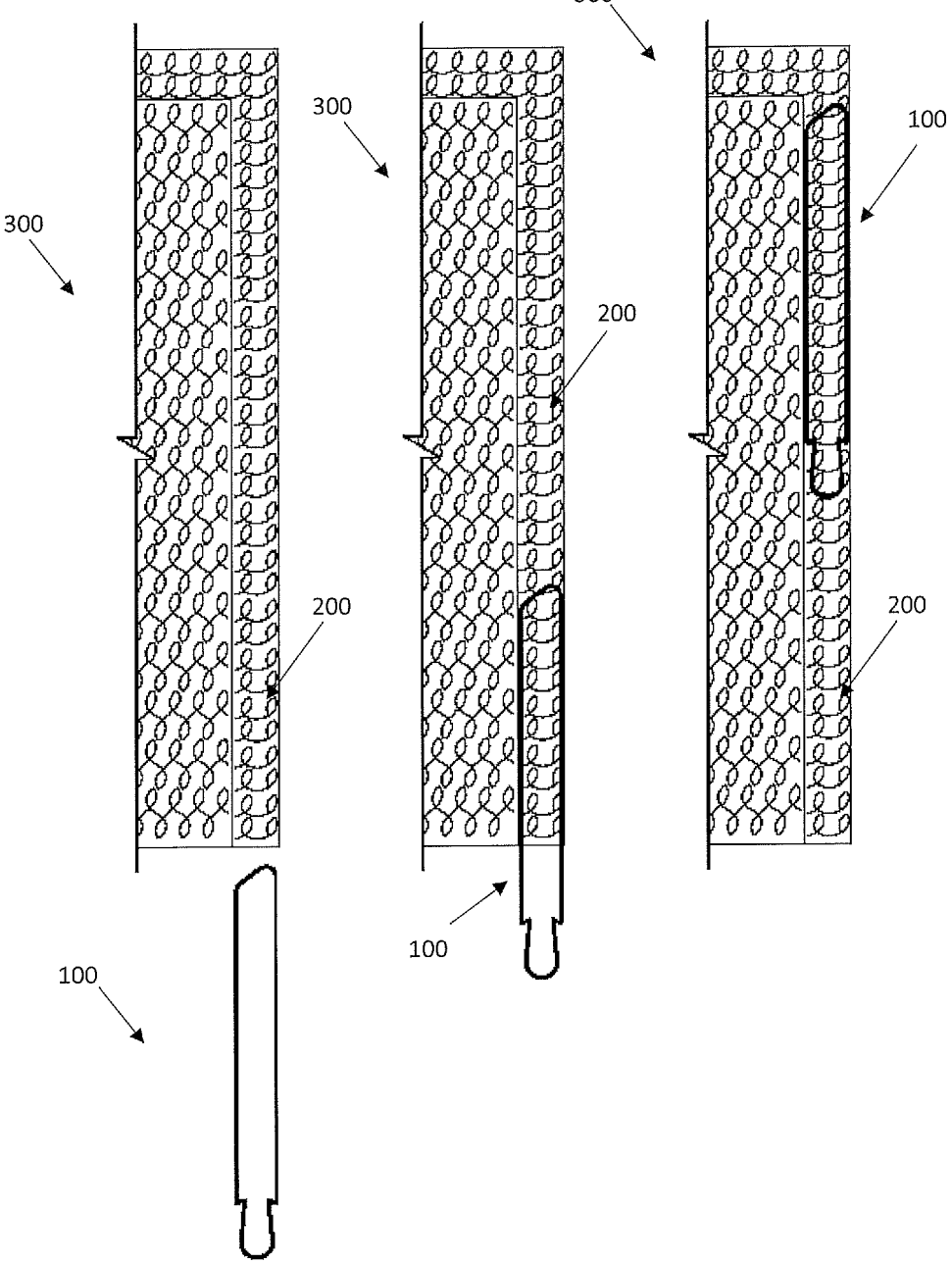

Figure 7A Figure 7B Figure 7C

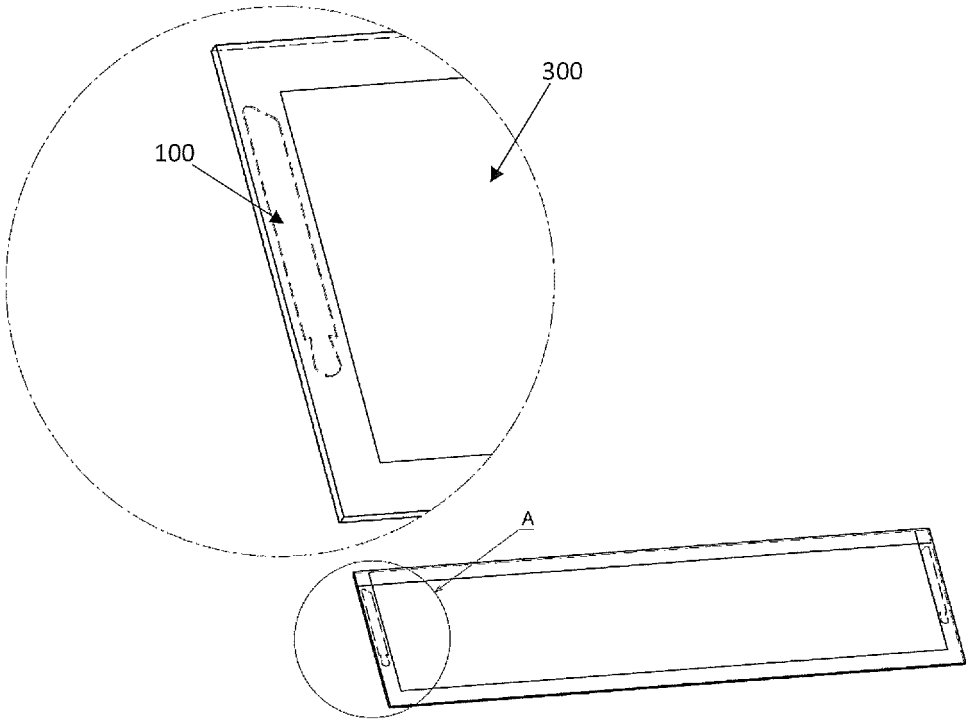

Figure 8

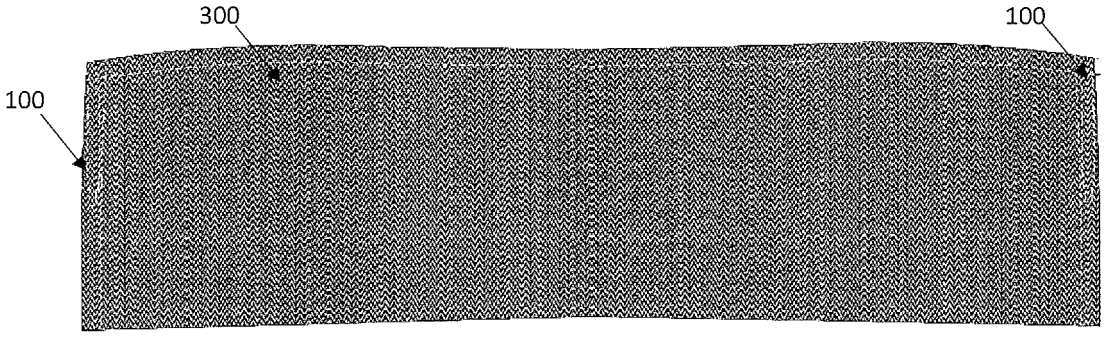

Figure 9

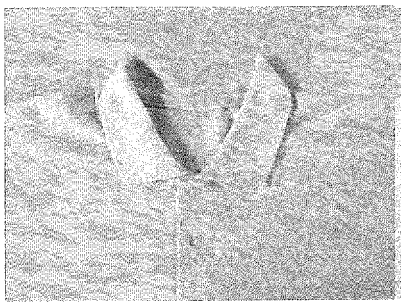

Figure 10A

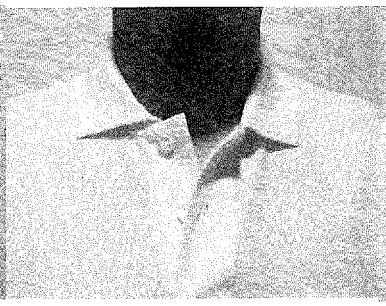

Figure 10B

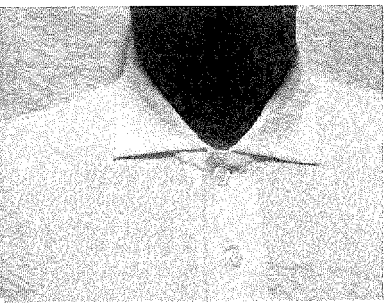

Figure 10C

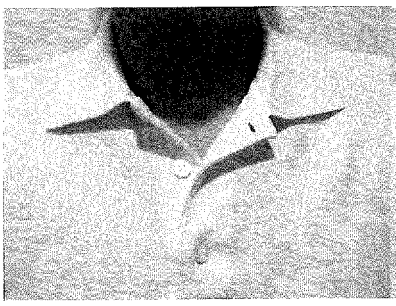

Figure 10D

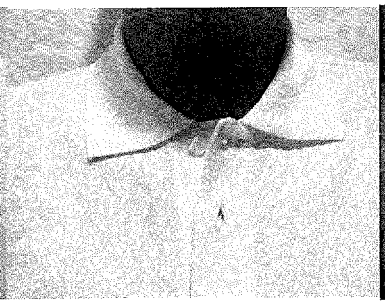

Figure 10E

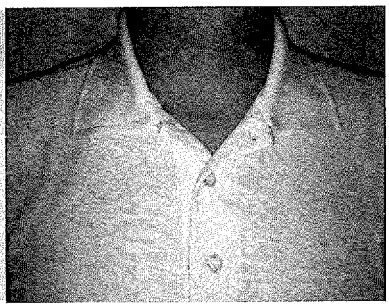

Figure 10F

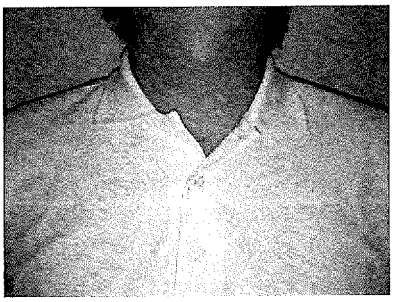

Figure 10G

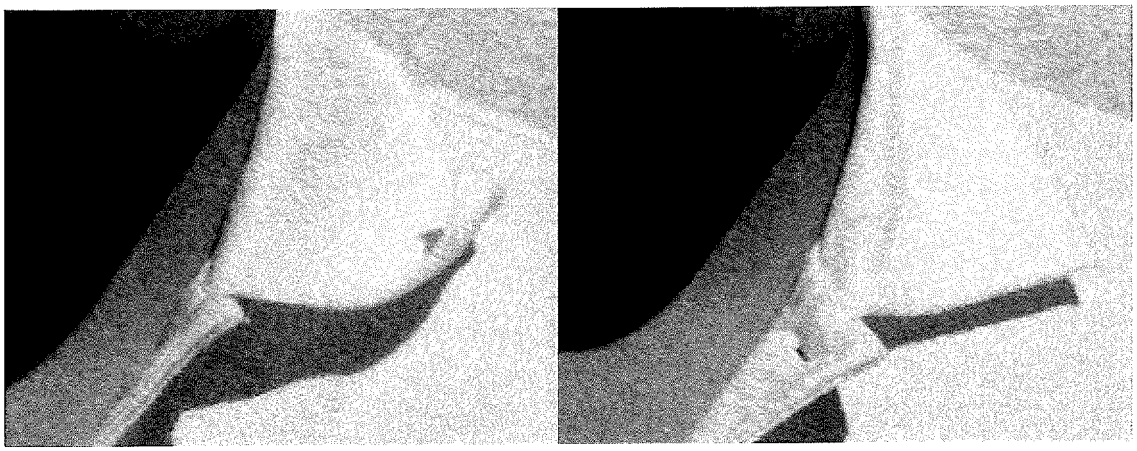

Figure 11A

Figure 11B

INTERNATIONAL SEARCH REPORT

International application No.
PCT/MX2018/000030

A. CLASSIFICATION OF SUBJECT MATTER

A41B3/06 (2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
A41B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

INVENES, EPODOC, WPI, USPTO PATENT DATABASE, GOOGLE PATENTS.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 1377849 A (SEIDENSTICKER HERREN WÄSCHEFAB G.M.B.H.) 06/11/1964, the whole document.	1-11
A	GB 1238271 A (W.P. THOMPSON & CO) 07/07/1971, the whole document.	1-11
A	ES 0173660 U (D.H.J. WINKEL, S.A.) 16/03/1972, page 3, line 20 – page 4, line 21; Figs. 1-5.	1-11
A	US 2007204374 A1 (BIER et al.) 06/09/2007, paragraphs [0005] - [0010]; Figs. 1-23	1-11

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance.
"E" earlier document but published on or after the international filing date
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure use, exhibition, or other means.
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other documents , such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
04/10/2018	**(05/10/2018)**
Name and mailing address of the ISA/ OFICINA ESPAÑOLA DE PATENTES Y MARCAS Paseo de la Castellana, 75 - 28071 Madrid (España) Facsimile No.: 91 349 53 04	Authorized officer M. García Grávalos Telephone No. 91 3493404

Form PCT/ISA/210 (second sheet) (January 2015)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/MX2018/000030

Patent document cited in the search report	Publication date	Patent family member(s)	Publication date
FR1377849 A	06.11.1964	NONE	
GB1238271 A	07.07.1971	NONE	
US2007204374 A1	06.09.2007	NONE	

Form PCT/ISA/210 (patent family annex) (January 2015)

REFERENCES CITED IN THE DESCRIPTION

This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.

Patent documents cited in the description

- CN 101273798 A **[0007]**
- EP 1529452 B1 **[0008]**
- US 3842435 A **[0010]**
- US 2769979 A **[0010]**
- US 3132347 A **[0010]**
- FR 1377849 A **[0010]**
- US 3624664 A **[0010]**
- US 20070204374 A1 **[0010]**
- US 9756879 B2 **[0010]**
- US 3733614 A **[0010]**
- US 2033680 A **[0010]**
- US 2903702 A **[0010]**
- US 3237207 A **[0010]**
- US 7146647 B2 **[0010]**
- US 20170367412 A1 **[0010]**