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

(11) **EP 3 864 999 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
18.08.2021 Bulletin 2021/33

(51) Int Cl.:
A45D 40/12 *(2006.01)* ***A45D 40/04*** *(2006.01)*

(21) Application number: **21155965.3**

(22) Date of filing: **09.02.2021**

(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: **13.02.2020 CN 202010091832**

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(54) MECHANISM FOR COSMETIC CONTAINER AND CONTAINER COMPRISING SAID MECHANISM

(57) The present invention provides a mechanism for a cosmetic container and a container including said mechanism. The mechanism includes a cup for receiving the cosmetic, a sleeve mounted around the cup, and a damping member which is elastically deformable, wherein the damping member is disposed on the cup and located between the cup and the sleeve, the damping member is in contact with an inner wall of the sleeve to generate a frictional resistance against the sleeve when the cup moves within the sleeve. During the movement of the cosmetic, the damping member generates a resistance through friction with the inner wall of the sleeve, thereby providing twisting force for the rotational movement, which facilitates the perception of the amount of lipstick being dispensed. Thus, it is easier for the user to adjust the lipstick to a suitable position, which improves the user experience.

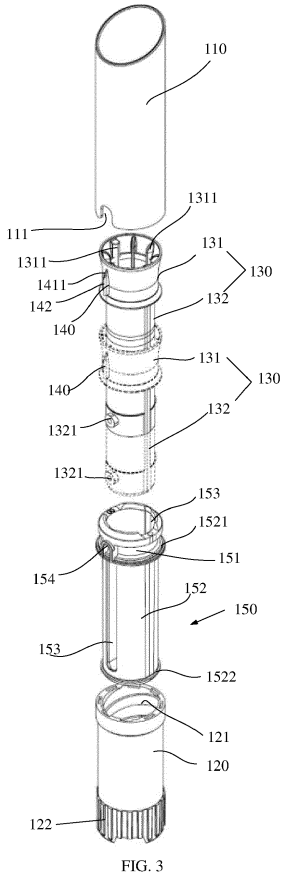

FIG. 3

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Description

TECHNICAL FIELD

[0001] The present invention relates to a mechanism for a container for applying a cosmetic, in particular a lipstick, a lip cream and the like, and relates to a container including said mechanism.

BACKGROUND

[0002] For some cosmetic containers, such as a lipstick container shown in Fig. 1, it is usually necessary to manually rotate a sheath d of the container to drive a cup for receiving a lipstick bar to axially move within the sleeve b. When the lipstick bar is moved to a suitable position, the user may apply the lipstick.

[0003] The cup in Fig. 1 is formed by a head portion a and a main body c. Since the cup moves within the sleeve b, a significant assembly stress is generated when the size of the cup is close to the size of the sleeve b. The significant assembly stress will cause a greater rotation resistance, which makes the lipstick container inconvenient to use.

[0004] In order to avoid the above disadvantage, the size of the cup is usually smaller than the size of the sleeve. However, this arrangement results in that the cup and the sleeve are loosely fitted, and thus the rotation resistance is small, so that the cup wobbles when moving along the axial direction of the sleeve. Therefore, it is difficult to accurately design the size of the sleeve and the cup to ensure that the assembly stress between them is appropriate.

SUMMARY

[0005] In order to address the above technical problem, embodiments of the present invention provide a mechanism for a cosmetic container and a container including said mechanism.

[0006] The above objective of the present invention can be achieved by the following technical solutions.

[0007] A first aspect of the present invention provides a mechanism for a cosmetic container. The mechanism includes:

a cup for receiving a cosmetic;

a sleeve, mounted around the cup; and

a damping member which is elastically deformable, in which the damping member is disposed on the cup and located between the cup and the sleeve, the damping member is in contact with an inner wall of the sleeve to generate a frictional resistance against the sleeve when the cup moves within the sleeve; or

the damping member is disposed on the sleeve and located between the cup and the sleeve, the damping member is in contact with an outer wall of the cup to generate a frictional resistance against the cup when the cup moves within the sleeve.

[0008] In an embodiment, the damping member has an inclined guiding surface, and the guiding surface is configured to guide the assembly of the sleeve with the cup.

[0009] In an embodiment, an edge of the damping member is bent toward a tangential direction of a peripheral side of the cup.

[0010] In an embodiment, the mechanism includes at least two damping members distributed regularly along a circumferential direction of the cup, and bending directions of edges of the at least two damping members are identical.

[0011] In an embodiment, the sum of an inner diameter of the cup and a width of the damping members diametrically opposed in a radial direction of the cup is larger than an inner diameter of the sleeve.

[0012] In an embodiment, the cup includes:

an upper cup, the cosmetic being received inside the upper cup, the damping member being mounted on the upper cup, and

a lower cup, the lower cup being connected with the upper cup, the upper cup and the lower cup being separate structures or being formed in one piece.

[0013] In an embodiment, the cup further includes ribs, and the ribs are located on an inner wall of the upper cup.

[0014] In an embodiment, the cup further includes at least one protrusion, and the protrusion is disposed on the lower cup.

[0015] The mechanism further includes:

a guide, the guide having a guiding groove disposed along an axial direction of the guide, the guide being connected with the sleeve; and

a sheath, the sheath including at least one helical groove, the sheath being mounted around the guide; the protrusion passing through the guiding groove and cooperating with the helical groove to move along an axial direction of the sleeve when being driven by the rotation of the sheath.

[0016] In an embodiment, the upper cup includes:

a head portion, the diameter of the head portion gradually increasing upward along the axial direction of the sleeve; and

a tail portion, the tail portion being connected with the head portion and being disposed coaxially with

the head portion, the diameter of the tail portion gradually increasing downward along the axial direction of the sleeve from a position of the tail portion connected with the head portion.

[0017] A second aspect of the present invention provides a cosmetic container, characterized in that the container includes a bottom casing, a top cover and a mechanism according any one of above embodiments. The bottom casing is mounted around the mechanism, and the top cover is detachably covered on the bottom casing.

[0018] The present invention provides a mechanism for a cosmetic container and a container including said mechanism. During the movement of the cosmetic, the damping member generates a resistance through friction with the inner wall of the sleeve or through friction with the outer wall of the cup, thereby providing resistance to the movement of the cup in the sleeve. The elastic deformation of the damping member makes the movement of the cup more smooth, and also makes the design of the size of the damping member more flexible. Moreover, the assembly stress between the cup and the sleeve can be adjusted by adjusting the friction force between the damping member and the sleeve, which reduces the design difficulty of the cup size and the sleeve size. The damping element prevents the cup from shaking in the sleeve, ensures the stability of the cup during the movement, and also facilitates the perception of the amount of lipstick being dispensed. Thus, it is easier for the user to adjust the lipstick to a suitable position, which improves the user experience.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019]

FIG. 1 is an exploded view of an optional structure of a container in the prior art;

FIG. 2 is an assembly view of an optional structure of a mechanism of a cosmetic container according to an embodiment of the present invention;

FIG. 3 is an exploded view of the mechanism in FIG. 2;

FIG. 4 is a longitudinal sectional view of the mechanism in FIG. 2;

FIG. 5 is a sectional view taken along the line A-A in FIG. 4;

FIG. 6 is a schematic side view of an optional structure of an assembly formed by an upper cup and damping members according to an embodiment of the present invention;

FIG. 7 is a schematic view of another optional structure of an assembly formed by an upper cup and damping members according to an embodiment of the present invention;

FIG. 8 is a schematic side view of the assembly in FIG. 7 at an angle;

FIG. 9 is a schematic side view of the assembly in FIG. 7 at another angle;

FIG. 10 is a bottom view of the assembly in FIG. 7;

FIG. 11 is a schematic view of another optional structure of an assembly formed by an upper cup and damping members according to an embodiment of the present invention, this figure showing a schematic view of the state of the assembly and the sleeve before being assembled;

FIG. 12 is a schematic view of the state of the assembly and the sleeve in FIG. 11 after being assembled.

List of reference numerals:

[0020] 100 mechanism; 110 sleeve; 111 notch; 120 sheath; 121 helical groove; 122 outer spline; 130 cup; 131 upper cup; 1311 rib; 1312 head portion of the upper cup; 1313 tail portion of the upper cup; 132 lower cup; 1321 protrusion; 140 damping member; 141 top of the damping member; 1411 guiding surface; 142 edge of the damping member away from the cup; 143 bottom of the damping member; 150 guide; 151 head portion of the guide; 152 main body of the guide; 1521 upper flange; 1522 lower flange; 153 guiding groove; 154 finger.

DETAILED DESCRIPTION

[0021] In order to make the objectives, technical solutions, and advantages of the embodiments of the present invention clearer, the technical solutions of the embodiments of the present invention will be described clearly and completely in conjunction with the accompanying drawings of the embodiments of the present invention. Apparently, the described embodiments are a part, rather than all of the embodiments of the present invention. All other embodiments obtained by those skilled in the art based on the described embodiments of the present invention belong to the scope of protection of the present invention.

[0022] In the description of the present invention, it should be understood that the orientation or position relationship indicated by the terms "upper", "lower", "top", "bottom", "inner", "outer", "clockwise" and the like refers to the orientation or position relationship of the user when using the cosmetic container in a non-limiting way.

[0023] In the embodiments of the present invention, a cosmetic (not shown) refers to a lipstick applied by friction

or alternatively a lip cream for lip care. It can be understood that the cosmetic in the embodiments of the present invention is not limited to a lipstick or a lip cream.

[0024] As shown in FIGS. 2 to 5, an embodiment of the present invention provides a mechanism for a cosmetic container. The mechanism 100 includes a cup 130, a sleeve 110 and a damping member 140.

[0025] The cup 130 is configured to receive a cosmetic. The cup 130 can cooperate with a guide 150 and a sheath 120 described below to realize a movement of the cup 130 within the sleeve 110. The movement includes an up-and-down movement of the cup 130 relative to the sleeve 110.

[0026] The sleeve 110 is mounted around the cup 130. Generally, as shown in FIG. 3, the sleeve 110 is a hollow piece which has an opening at each of an upper end and a lower end thereof. When the cup 130 dispenses the cosmetic along its axial direction, the cosmetic can be in contact with all or part of the inside of the sleeve 110 to ensure support for the cosmetic.

[0027] Further, the sleeve 110 is made of a metal material, which may be an anodized aluminum oxide. Due to the good thermal conductivity of the metal material, the cosmetic can be cooled faster when the cosmetic is injected with heat. As shown in FIGS. 2 and 4, the sleeve 110 is usually exposed, and the sleeve 110 made of a metal material can also improve the appearance for the cosmetic, for example, present a smoother appearance. Therefore, as an appearance part, the sleeve 110 also has a certain decorative effect.

[0028] The damping member 140 can be elastically deformable. In some embodiments of the present invention, the damping member 140 is disposed on the cup 130 and is located between the cup 130 and the sleeve 110. The damping member 140 is in contact with an inner wall of the sleeve 110 to generate a frictional resistance against the sleeve 110 when the cup 130 moves within the sleeve 110.

[0029] In other embodiments of the present invention, the damping member 140 may also be disposed on the sleeve 110, specifically, on the inner wall of the sleeve 110, and located between the cup 130 and the sleeve 110. The damping member 140 is in contact with an outer wall of the cup 130 to generate a frictional resistance against the cup 130 when the cup 130 moves within the sleeve 110.

[0030] The damping member 140 generates a frictional resistance against the inner wall of the sleeve 110 or the outer wall of the cup 130, so as to prevent the cup 130 from shaking in the sleeve 110. The elastically deformable damping member 140 also ensures the smoothness and stability of the cup 130 during the movement, and makes it easier for the user to perceive the amount of cosmetic being dispensed, so that it is easier to adjust the cosmetic to a suitable position, which improves the user experience. When the cup 130 is assembled with the sleeve 110, the damping member 140 can adjust the assembly stress between the cup and the sleeve through its own elastic deformation, which reduces the design difficulty of the size of the cup 130 and the sleeve 110.

[0031] Unrestrictedly, as shown in FIGS. 3 to 12, the damping member 140 is sheet-shaped, and the damping member 140 can be made of elastic materials, such as a metal or an elastic rubber. The sheet-shaped damping member 140 extends in the axial direction of the cup 130 and has a certain width extending radially outward from the outer wall of the cup 130. The sheet-shaped damping member 140 is simple to be manufactured and is more prone to deformation. The damping member 140 can also be other shapes, for example, a column shape, a cone shape, and the like.

[0032] Optionally, the mechanism 100 includes at least two damping members 140 distributed regularly along a circumferential direction of the cup 130. Arranging two or more damping members 140 distributed regularly along the circumferential direction of the cup 130 facilitates improving the stability of the cup 130 during the movement. FIGS. 3 to 12 exemplarily show two damping members 140 arranged symmetrically in a radial direction of the cup 130.

[0033] In order to further facilitate the assembly of the sleeve 110 with the cup 130, in some embodiments of the present invention, the damping member 140 has an inclined guiding surface 1411, and the guiding surface 1411 is configured to guide the assembly of the sleeve 110 with the cup 130.

[0034] When the damping member 140 is disposed on the cup 130, the guiding surface 1411 is located at a top 141 of the damping member 140, extends from top to bottom in the axial direction of the cup 130 and is inclined outward in the radial direction of the cup 130, as shown in FIGS. 3 to 5, and FIGS. 7 to 9.

[0035] When the damping member 140 is disposed on the sleeve 110, the guiding surface 1411 may be located at a bottom 143 of the damping member 140. Alternatively, each of the top 141 and the bottom 143 of the damping member 140 may be provided with the guiding surface 1411.

[0036] The inclined guiding surface 1411 has a guiding effect during the assembly of the cup 130 with the sleeve 110, which facilitates the installation of the sleeve 110 and the cup 130 having the damping member 140.

[0037] Before the sleeve 110 and the cup 130 are assembled, the damping member 140 may be bent in advance, and an edge 142 of the damping member 140 may be bent toward a tangential direction of a peripheral side of the cup 130.

[0038] Specifically, as shown in FIG. 6, in some embodiments of the present invention, only the top 141 of the damping member 140 provided with the guiding surface 1411 may be bent, and the top 141 of the damping member 140 is bent toward the tangential direction of the peripheral side of the cup 130. When the sleeve 110 and the cup 130 are assembled, the bending deformation of the top 141 of the damping member 140 can guide the deformation of other portions of the damping member

140.

[0039] Further, when two or more damping members 140 are disposed on the cup 130, the tops 141 of all damping members 140 are bent and deformed in a same direction, for example, in a clockwise direction. In this way, the damping members 140 are prevented from deforming in different directions when the sleeve 110 is assembled with the cup 130, which ensures uniform resistance on peripheral side of the cup 130.

[0040] In other embodiments of the present invention, as shown in FIGS. 7 to 9, the damping members 140 are disposed on the cup 130. All edges 142 of the damping members 140 away from the cup 130 can be bent in advance toward the tangential direction of the peripheral side of the cup 130. This bending deformation method can also prevent the damping members 140 from deforming in different directions, thereby ensuring the same resistance on the peripheral side of the cup 130. It can be understood that when the damping member 140 is disposed on the sleeve 110, the bent portion refers to an edge of the damping member 140 that extends away from the sleeve 110 and is close to or in contact with the cup 130.

[0041] Optionally, as shown in FIGS. 3 to 5, and FIGS. 7 to 10, the top 141 of the damping member 140 has an inclined guiding surface 1411, and the guiding surface 1411 can play a guiding role during the assembly of the sleeve 110 with the cup 130. At the same time, the edge 142 of the damping member 140 away from the cup 130 is bent and deformed toward the tangential direction of the peripheral side of the cup 130, which prevents damping members 140 from deforming in different directions and ensures the same resistance on the peripheral side of the cup 130.

[0042] Before the sleeve 110 and the damping member 140 are assembled, the damping member 140 may not be bent in advance.

[0043] In some embodiments of the present invention, as shown in FIG. 11, before the cup 130 is assembled with the sleeve 110, the damping member 140 is not deformed. As shown in FIG. 12, after the cup 130 is assembled with the sleeve 110, the damping member 140 is bent and deformed. At this moment, due to the restoring force of the damping member 140 that is bent and deformed, the edge 142 of the damping member 140 away from the cup 130 will generate a pressure on the inner wall of the sleeve 110, which increases the frictional resistance of the cup 130 during the movement.

[0044] In order to produce elastic deformation, a sum of an inner diameter of the cup 130 and a width of the damping member 140 diametrically opposed in a radial direction of the cup 130 is usually greater than an inner diameter of the sleeve 110. As shown in FIGS. 11 and 12, the sum of the inner diameter of the cup 130 and the width of the damping member 140 diametrically opposed in the radial direction of the cup 130 is denoted as D1, and the inner diameter of the sleeve 110 is denoted as D0, in which D1 is greater than D0. After the sleeve 110 is assembled with the cup 130, the damping member 140 is deformed.

[0045] Unrestrictedly, the cup 130 further includes an upper cup 131 and a lower cup 132. The cosmetic is received inside the upper cup 131. The damping member 140 is provided on the upper cup 131, and the upper cup 131 is provided on the top of the lower cup 132.

[0046] As shown in FIGS. 3 and 4, the upper cup 131 and the lower cup 132 are separate structures, and the upper cup 131 and the lower cup 132 are connected end to end. With further reference to FIGS. 6-10, the damping member 140 and the cup 130 are formed in one piece.

[0047] In addition, the upper cup 131 and the lower cup 132 may also be a physically inseparable integrated structure.

[0048] Optionally, the cup 130 further includes a rib 1311 located on an inner wall of the upper cup 131. As shown in FIGS. 3 to 5 and FIGS. 7 and 10, a plurality of ribs 1311 are provided in the circumferential direction of the inner wall of the cup 130. The ribs 1311 may be in contact with the cosmetic to better retain the cosmetic.

[0049] Unrestrictedly, the upper cup 131 includes a head portion 1312 and a tail portion 1313. The diameter of the head portion 1312 gradually increases upward along an axial direction of the sleeve 110. The tail portion 1313 is connected with the head portion 1312 and is disposed coaxially with the head portion 1312. The diameter of the tail portion 1313 gradually increases downward along the axial direction of the sleeve 110 from a position of the tail portion 1313 connected with the head portion 1312. Specifically, as shown in FIGS. 3, 4, 7 and 8, the upper cup 131 is a hollow piece which has an opening at each of two ends thereof. The head portion 1312 is in the shape of a trumpet, with a lager upper portion and a smaller lower portion, and the tail portion 1313 is in the shape of a trumpet, with a smaller upper portion and a larger lower portion. A top end of the head portion 1312 in the shape of the trumpet allows it to be located as close to the inner wall of the sleeve 110 as possible, and even be in contact with the inner wall of the sleeve 110, thereby sealing the inner space of the sleeve 110 to a certain extent, to avoid the entry of dust and other pollutants. The tail portion 1313 in the shape of the trumpet can play a guiding role when the upper cup 131 is assembled with the lower cup 132, which facilitates the assembly of the upper cup 131 with the lower cup 132.

[0050] The movement of the cup 130 in the sleeve 110 can be realized by the guide 150 and the sheath 120. Specifically, the mechanism 100 further includes the guide 150 and the sheath 120. The guide 150 has a guiding groove 153 disposed along an axial direction of the guide 150, and the guide 150 is connected with the sleeve 110. The sheath 120 includes at least one helical groove 121. The sheath 120 is mounted around the guide 150. The cup 130 further includes at least one protrusion 1321, which is specifically disposed on the lower cup 132. The protrusion 1321 passes through the guiding groove 153 and cooperates with the helical groove 121 to move along

the axial direction of the sleeve 110 when being driven by the rotation of the sheath 120

[0051] As shown in FIGS. 2 to 4, in this example, the dashed part in FIG. 3 represents another position of the cup 130 and of the damping member 140 during movement, and the dashed part in FIG. 4 represents another position of the upper cup 131 and of the damping member 140 during movement. The guide 150 is provided with two guiding grooves 153 symmetrically arranged in the radial direction. The lower cup 132 is provided with two protrusions 1321 corresponding to the guiding grooves 153. Two helical grooves 121 are provided inside the sheath 120. The protrusions 1321 of the cup 130 radially pass through the axial guiding grooves 153 of the guide 150, so that each protrusion 1321 cooperates with one of the helical grooves 121 of the sheath 120. As a result, the axial rotational movement of the sheath 120 around the cup 130 can cause the axial movement of the cup 130 to move the cup 130 between a retracted position and an applying position.

[0052] The sleeve 110 and the guide 150 are connected to each other end to end. Unrestrictedly, a bottom end of the sleeve 110 is provided with a notch 111 which intersects with a lower edge of the sleeve 110 delimited in the circumferential direction. The notch 111 is configured to match with a finger 154 described below to avoid a circumferential movement of the sleeve 110 relative to the guide 150. In addition, the sleeve 110 can also be connected with the guide 150 by gluing or crimping.

[0053] The guide 150 is a hollow piece. The guide 150 includes a head portion 151 and a main body 152 extending axially downward from the head portion 151. An upper end of the main body 152 is provided with an upper flange 1521, and a lower end of the main body 152 is provided with a lower flange 1522. The sheath 120 is mounted around the main body 152, and the axial movement of the sheath 120 relative to the guide 150 is limited by the upper flange 1521 and the lower flange 1522. The head portion 151 of the guide 150 is provided with a finger 154 matching with the notch 111 in terms of shape. When the guide 150 cooperates with the sheath 120, the finger 154 can be received in the notch 111.

[0054] An embodiment of the present invention also provides a container. The container includes a bottom casing (not shown), a top cover (not shown), and a mechanism 100 described in any of the foregoing embodiments. The bottom casing is mounted around the mechanism 100. Specifically, the bottom casing is mounted around the sheath 120, and the top cover is detachably covered on the bottom casing.

[0055] Specifically, an outer spline 122 is arranged along a circumference of a cylindrical side wall of the sheath 120, and the bottom casing is provided with an inner spline matching with the outer spline 122. The rotation of the bottom casing can drive the sheath 120 into rotation, so that the protrusion 1321 is moved in the helical groove 121. With the cooperation of the guide groove 153 of the guide 150, the cup 130 dispenses the cosmetic in its axial direction. The damping member 140 can provide resistance to the rotation process, to ensure the stability of the cup 130 during movement, facilitate the user to adjust the cosmetic to a suitable position, and improve the user experience.

[0056] The features disclosed in the several product embodiments provided in this application can be combined randomly without conflict, to obtain new product embodiments. Products include but are not limited to the aforementioned mechanism 100 and containers.

[0057] Other structures and operations of the product according to the embodiments of the present invention can be understood and can be easy to implement for those skilled in the art, and therefore will not be described in detail.

[0058] The foregoing descriptions are only preferred embodiments of the present invention, and are not used to limit the protection scope of the present invention.

Claims

1. A mechanism for a cosmetic container, **characterized in that** the mechanism (100) comprises:

   a cup (130) for receiving the cosmetic;
   a sleeve (110), mounted around the cup (130); and
   a damping member (140) which is elastically deformable, wherein
   the damping member (140) is disposed on the cup (130) and located between the cup (130) and the sleeve (110), the damping member (140) being in contact with an inner wall of the sleeve (110) to generate a frictional resistance against the sleeve (110) when the cup (130) moves within the sleeve (110); or
   the damping member (140) is disposed on the sleeve (110) and located between the cup (130) and the sleeve (110), the damping member (140) being in contact with an outer wall of the cup (130) to generate a frictional resistance against the cup (130) when the cup (130) moves within the sleeve (110).

2. The mechanism for a cosmetic container according to claim 1, **characterized in that** the damping member (140) has an inclined guiding surface (1411), the guiding surface (1411) being configured to guide the assembly of the sleeve (110) with the cup (130).

3. The mechanism for a cosmetic container according to claim 1 or 2, **characterized in that** an edge (142) of the damping member (140) is bent toward a tangential direction of a peripheral side of the cup (130).

4. The mechanism for a cosmetic container according to claim 3, **characterized in that** the mechanism

(100) comprises at least two damping members (140) distributed regularly along a circumferential direction of the cup (130), bending directions of edges (142) of the at least two damping members (140) being identical.

5. The mechanism for a cosmetic container according to claim 1, **characterized in that** the sum of an inner diameter of the cup (130) and a width of the damping members (140) diametrically opposed in a radial direction of the cup (130) is larger than an inner diameter of the sleeve (110).

6. The mechanism for a cosmetic container according to claim 1, **characterized in that** the cup (130) comprises:

an upper cup (131), the cosmetic being received inside the upper cup (131), the damping member (140) being mounted on the upper cup (131), and
a lower cup (132), the lower cup (132) being connected with the upper cup (131), the upper cup (131) and the lower cup (132) being separate structures or being formed in one piece.

7. The mechanism for a cosmetic container according to claim 6, **characterized in that** the cup (130) further comprises ribs (1311), the ribs (1311) being located on an inner wall of the upper cup (131).

8. The mechanism for a cosmetic container according to claim 6, **characterized in that** the cup (13) further comprises at least one protrusion (1321), the protrusion (1321) being disposed on the lower cup (132); the mechanism (100) further comprises:

a guide (150), the guide (150) having a guiding groove (153) disposed along an axial direction of the guide (150), the guide (150) being connected with the sleeve (110); and
a sheath (120), the sheath (120) comprising at least one helical groove (121), the sheath (120) being mounted around the guide (150); the protrusion (1321) passing through the guiding groove (153) and cooperating with the helical groove (121) to move along an axial direction of the sleeve (110) when being driven by the rotation of the sheath (120).

9. The mechanism for a cosmetic container according to any one of claims 6 to 8, **characterized in that** the upper cup (131) comprises:

a head portion (1312), the diameter of the head portion (1312) gradually increasing upward along the axial direction of the sleeve (110); and
a tail portion (1313), the tail portion (1313) being connected with the head portion (1312) and being disposed coaxially with the head portion (1312), the diameter of the tail portion (1313) gradually increasing downward along the axial direction of the sleeve (110) from a position of the tail portion (1313) connected with the head portion (1312).

10. A cosmetic container, **characterized in that** the container comprises a bottom casing, a top cover and a mechanism (100) according any one of claims 1 to 9, the bottom casing being mounted around the sheath (120), the top cover being detachably covered on the bottom casing.

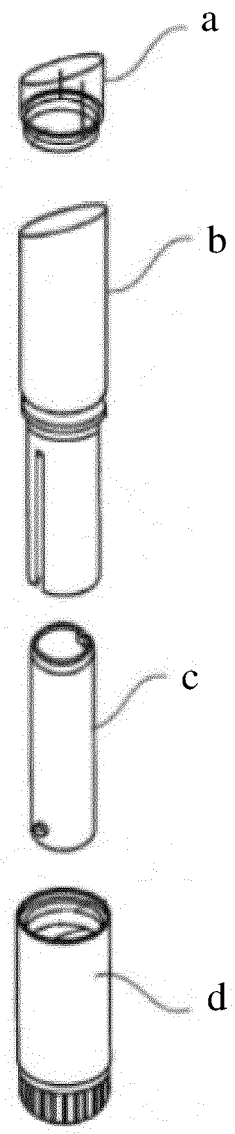

FIG. 1

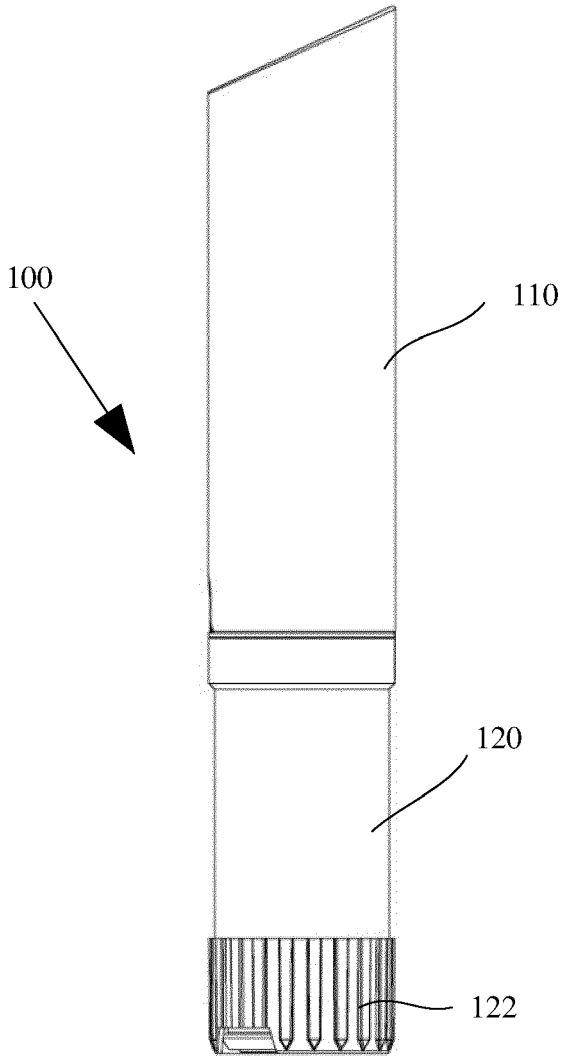

FIG. 2

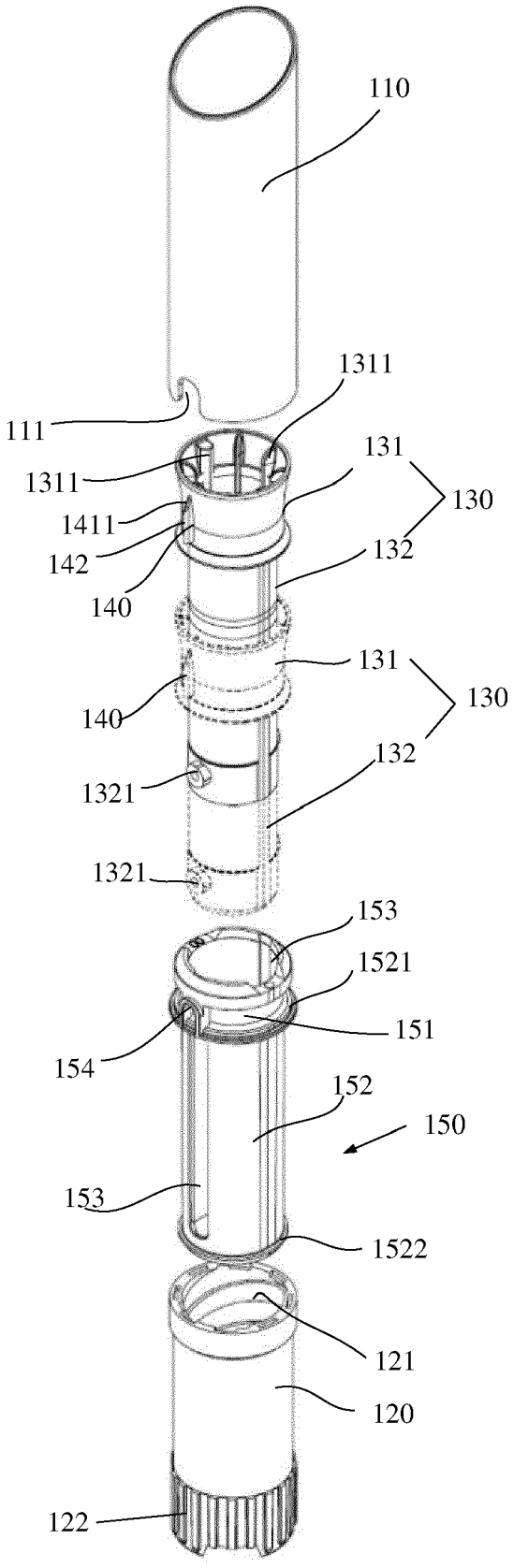
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FIG. 3

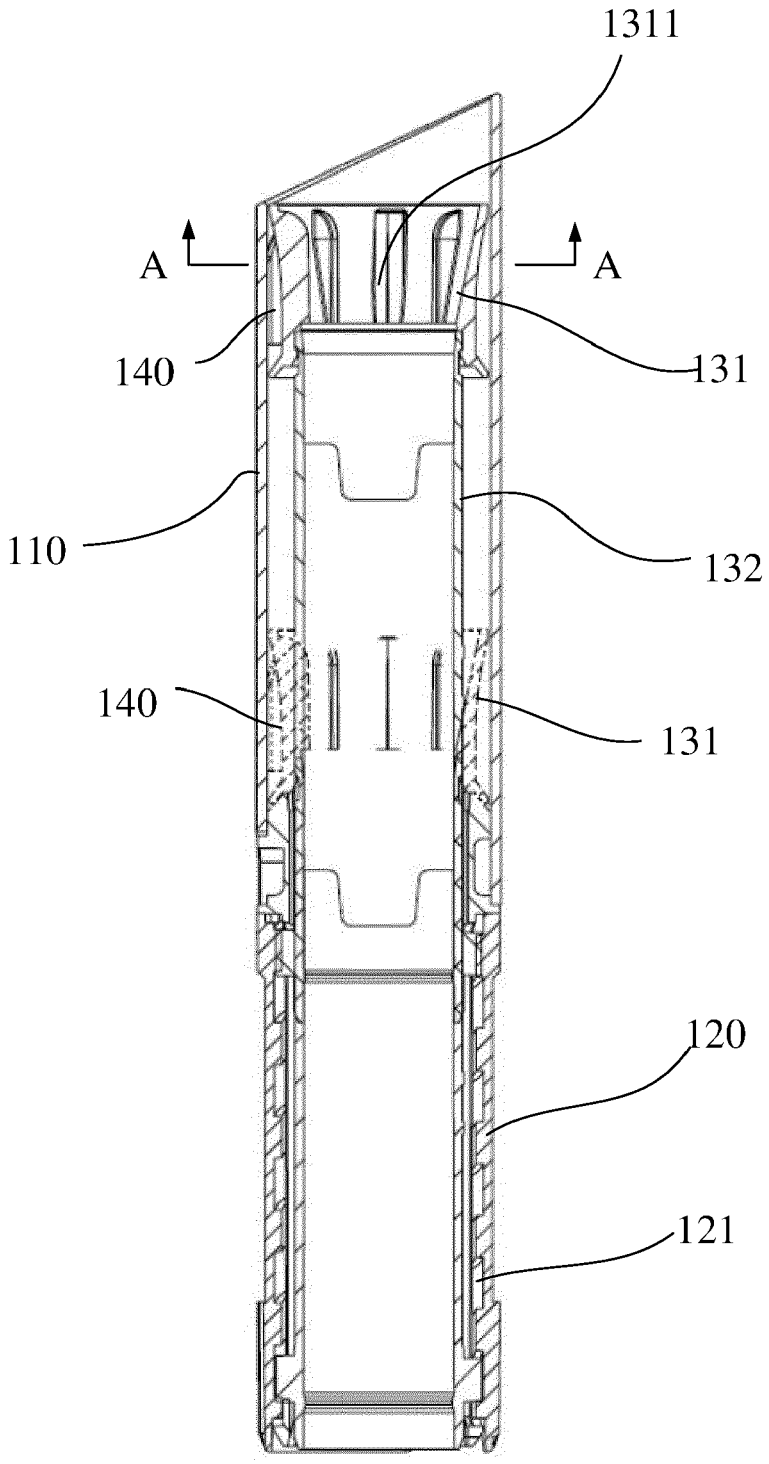

FIG. 4

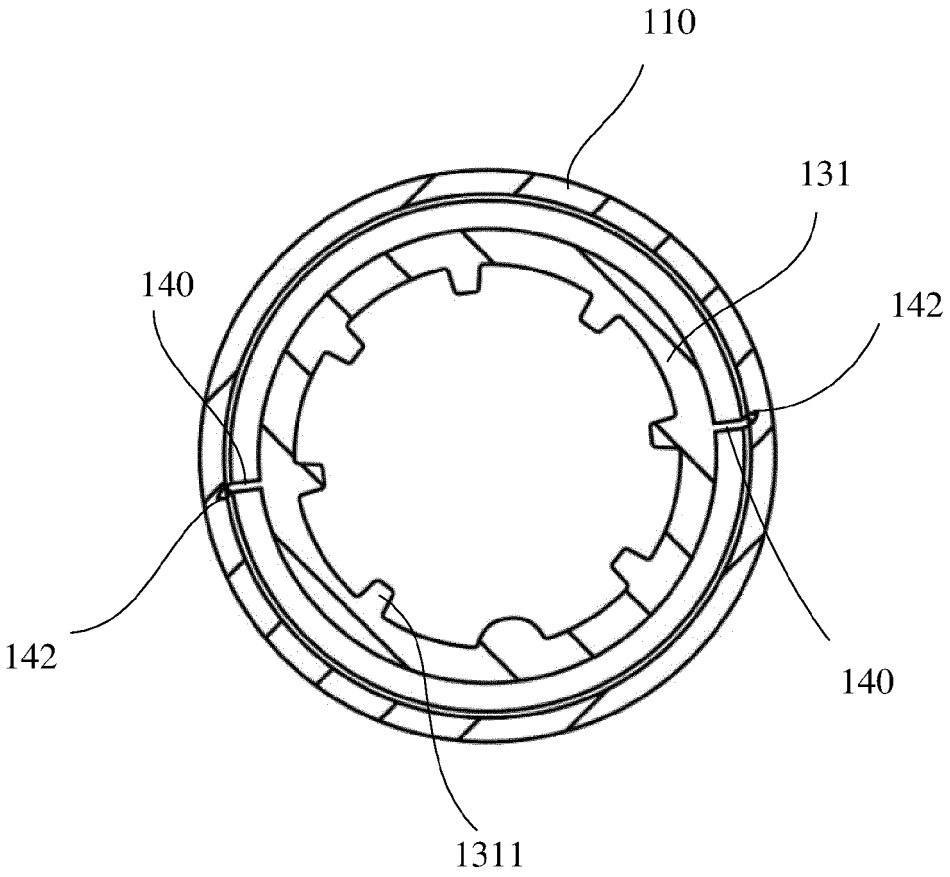

FIG. 5

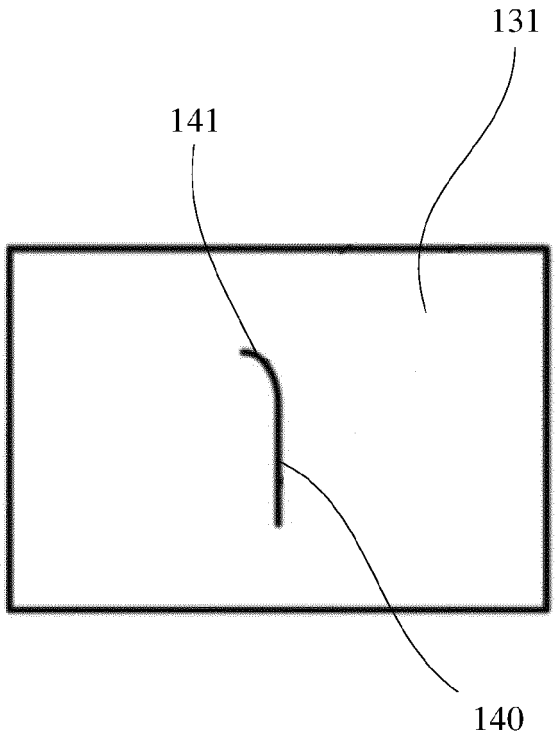

FIG. 6

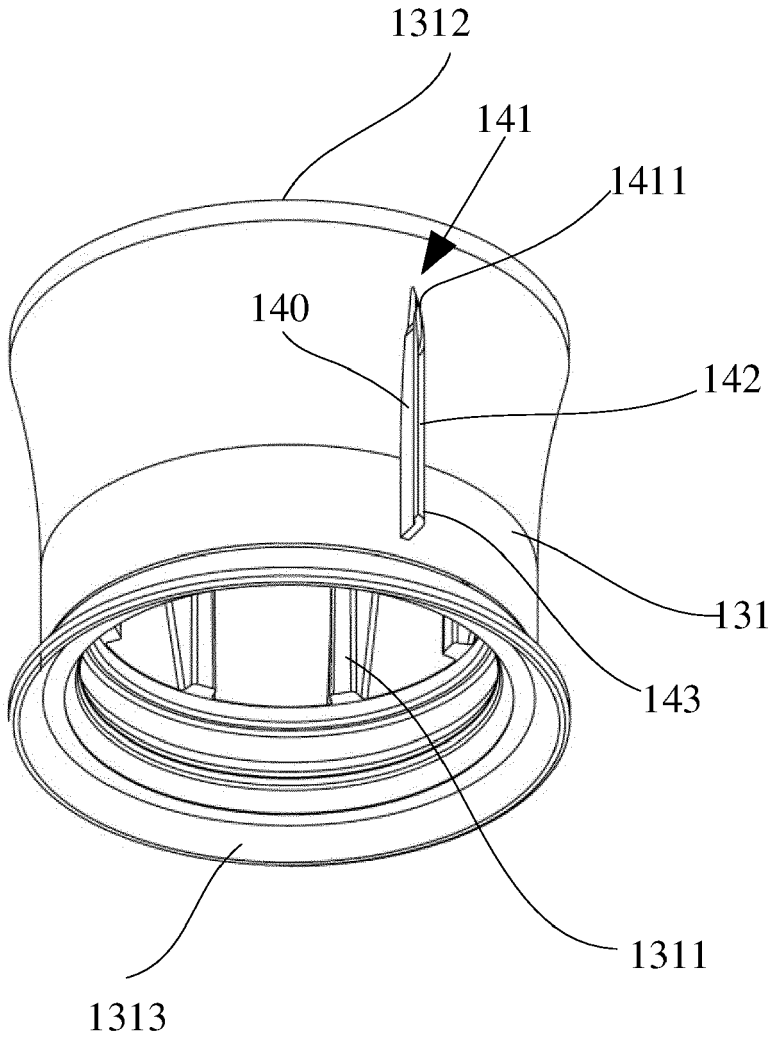

FIG. 7

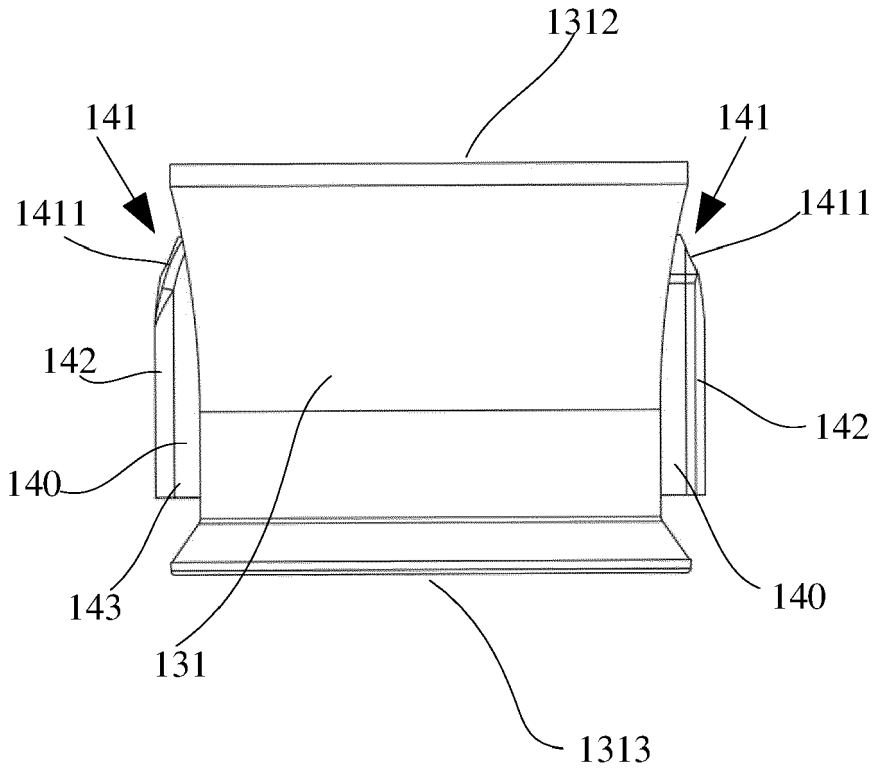
1312
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FIG. 8

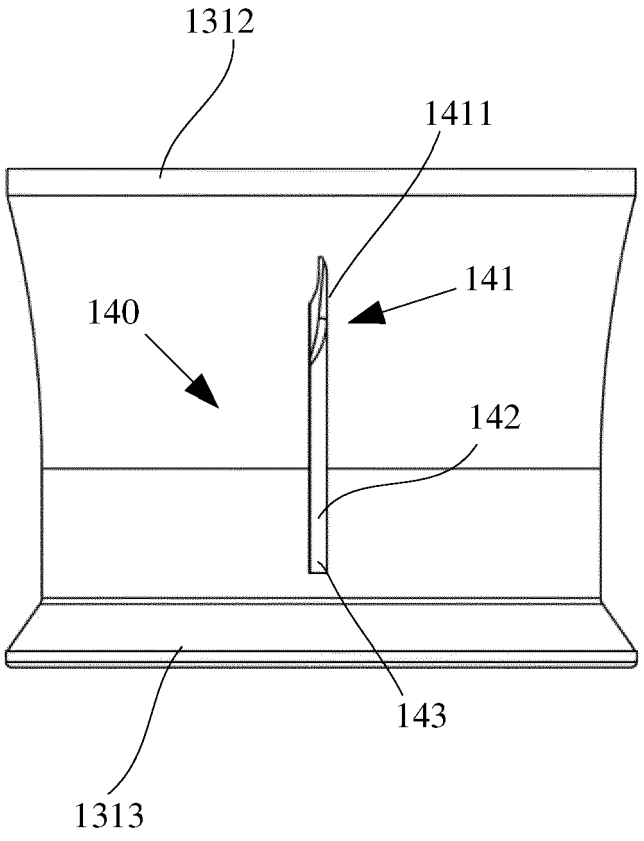
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FIG. 9

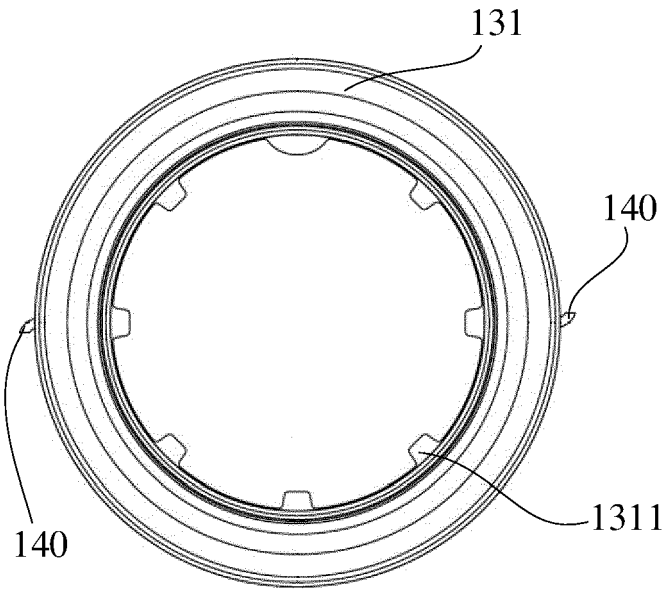

FIG. 10

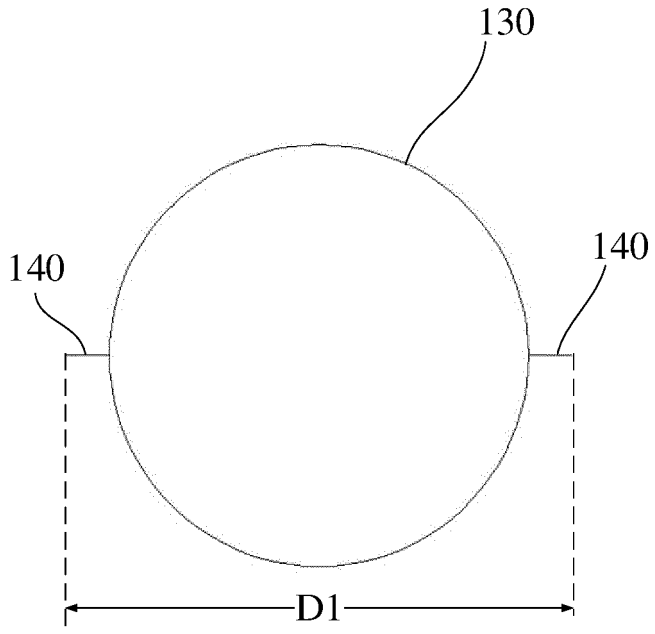

FIG. 11

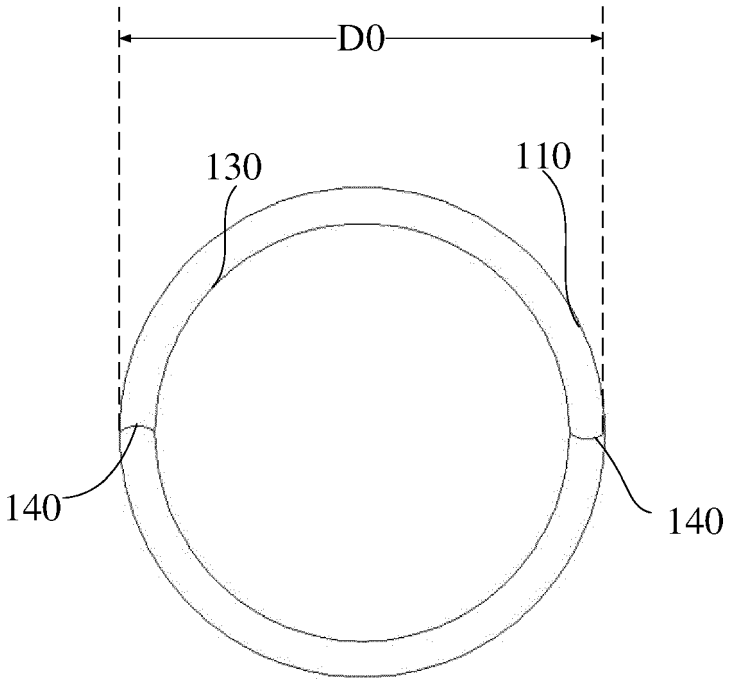

FIG. 12

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EUROPEAN SEARCH REPORT

Application Number
EP 21 15 5965

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 A	GB 1 098 773 A (AEROSOL INV S AND DEV S A AIDS) 10 January 1968 (1968-01-10) * the whole document *	1,5,8-10 6,7 2-4	INV. A45D40/12 A45D40/04
Y	WO 2017/182445 A1 (ALBEA SERVICES [FR]) 26 October 2017 (2017-10-26) * page 9, lines 23-28 *	6	
Y	US 5 851 078 A (BOW CLARK F [US] ET AL) 22 December 1998 (1998-12-22) * column 4, lines 52-62; figure 4 *	7	
X	US 6 200 049 B1 (PINHEL JOAQUIM JOSE LOPES [VE] ET AL) 13 March 2001 (2001-03-13) * the whole document *	1,5-10	

TECHNICAL FIELDS SEARCHED (IPC)

A45D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	19 May 2021	Nicolás, Carlos

CATEGORY OF CITED DOCUMENTS

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19-05-2021

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 1098773 A	10-01-1968	BE 676698 A	18-07-1966
		CH 439616 A	15-07-1967
		DE 1532894 B1	04-03-1971
		DK 117980 B	22-06-1970
		ES 323892 A1	01-12-1966
		FR 1454482 A	11-02-1966
		GB 1098773 A	10-01-1968
		NL 6602170 A	27-02-1967
		SE 307638 B	13-01-1969
		US 3380795 A	30-04-1968
WO 2017182445 A1	26-10-2017	CN 109068831 A	21-12-2018
		FR 3050365 A1	27-10-2017
		WO 2017182445 A1	26-10-2017
US 5851078 A	22-12-1998	AU 5093098 A	15-07-1998
		US 5851078 A	22-12-1998
		WO 9826688 A1	25-06-1998
US 6200049 B1	13-03-2001	AR 026649 A1	19-02-2003
		BR 0005628 A	27-11-2001
		CO 5280194 A1	30-05-2003
		MX PA00010472 A	20-08-2002
		US 6200049 B1	13-03-2001

EPO FORM P0459

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