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(54) **COSMETIC UNIT**

(57) Cosmetic unit with a storage container (1) containing the cosmetic with an extraction opening (2) for the cosmetic and neck (3) for the detachable fastening of a cap closing the extraction opening as well as such a cap and a sleeve (8) preferably enclosing at least the predominant part of the storage container, wherein the storage container has a first section (A1) further away from the storage container neck and a second section (A2) closer to the storage container neck, wherein the first and the second section are separated from one another by a step (4) which extends radially outwards, rotates obliquely to the longitudinal axis in the circumferential direction and, at its apex area closer to the extraction opening, exposes a passage (6) through which a positioning element (9) projecting radially inwards from the inner circumferential surface of the sleeve can pass into a receiving area (7) in which it remains permanently as long as the sleeve is firmly anchored to the storage container.

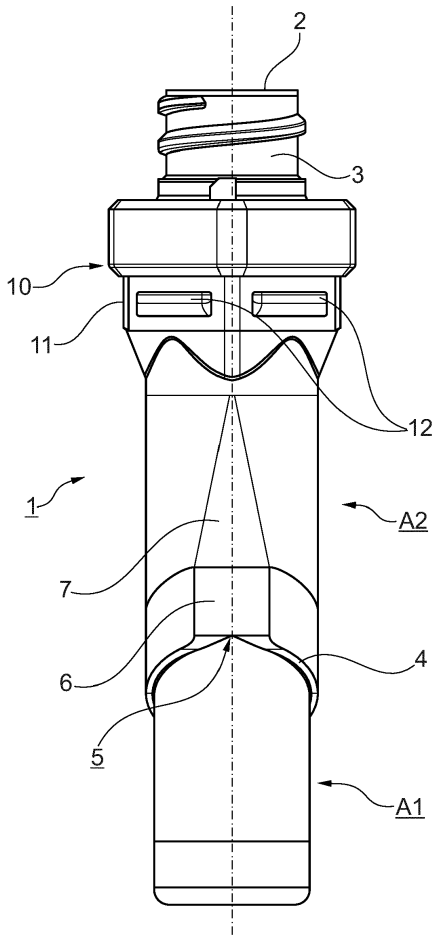

Fig. 3

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Description

FIELD OF INVENTION

[0001] The invention relates to a cosmetic unit with a storage container containing a cosmetic according to the generic concept of claim 1.

TECHNICAL BACKGROUND

[0002] Cosmetic units usually comprise a storage container containing the cosmetic, the storage container usually having an extraction opening for the cosmetic and a neck for releasably securing a cap closing the extraction opening.

[0003] In most cases, a cosmetic unit of this type also comprises a sleeve which encloses at least the major part of the storage container.

[0004] The currently used storage containers usually have a cylindrical or angular shape. Thus, for an oriented assembly of the storage container with the sleeve, an orientation mark is usually required, which is preferably located at the bottom of the storage container.

[0005] For this kind of oriented assembly, the corresponding assembly machine must have an additional function or feature to be able to work with the mentioned orientation mark and to be able to rotate the storage container and/or the sleeve into the correct position.

[0006] Regardless of how this orientation mark is designed, such a need for positioning leads to additional work steps and error possibilities during assembly and/or additional components and functions that the assembly machine must have. This ultimately leads to increased effort and expenses.

OBJECT OF THE INVENTION

[0007] Accordingly, it is the object of the invention to provide a means by which the assembly of a cosmetic unit is simplified.

SOLUTION ACCORDING TO THE INVENTION

[0008] A solution to this problem is provided by claim 1.

[0009] For this purpose, a cosmetic unit with a storage container containing the cosmetic and having an extraction opening for the cosmetic and a neck for the detachable fastening of a cap closing the extraction opening, as well as such a cap and a sleeve preferably enclosing at least the predominant part of the storage container is proposed. In this case, the storage container has a first section (hereinafter also referred to as A1) further away from the neck of the storage container, and a second section (hereinafter also referred to as A2) closer to the neck of the storage container.

[0010] The cosmetic unit according to the invention is characterized in that the first and second sections are separated from each other by a step extending radially outwardly and circumferentially at an angle - and thus not at right angles or parallel - to the longitudinal axis, wherein the step, at its apex area closer to the extraction opening, opens a passage through which a positioning element projecting radially inwardly from the inner circumferential surface of the sleeve can pass into a receiving area in which it remains permanently as long as the sleeve is firmly anchored to the storage container.

[0011] Said step between A1 and A2 is preferably realized by an abrupt change of the circumference, A2 preferably having a larger circumference than A1. This step is preferably designed in such a way that it can be used as a guide surface along which the sleeve, and in particular the positioning element of the sleeve, slides. If the sleeve is thus slipped over A1 in a first assembly step and displaced in the direction of the neck, or if the storage container is displaced in the direction of the bottom of the sleeve, the positioning element of the sleeve comes into contact with the step in any relative rotational position - unless the positioning element happens to have already entered the passage without first making contact with the step.

[0012] Possible relative rotational movement of the sleeve with respect to the storage container thus allows the positioning element to slide along the step toward the passage. Due to the oblique shape of the step, such a rotational movement can also be achieved, for example, by a force acting purely in the longitudinal axis, preferably by pressing the supply container into the sleeve.

[0013] Furthermore, the cosmetic unit is such that - when the positioning element has arrived at the passage - the positioning element can, under the action of further force in the direction of the longitudinal axis, penetrate further into this passage in the direction of the neck and finally advance into the receiving area and there advance even further in the direction of the neck until the sleeve is firmly anchored - preferably by further fastening mechanisms - to the storage container.

[0014] Thus, a simple system is created with which an assembly of a cosmetic unit is significantly simplified. The relative rotational position of sleeve and storage container at the start of assembly is irrelevant here and does not have to be determined by a machine, for example. Preferably, the cosmetic unit is designed in such a way that the storage container can rather be screwed into the sleeve by a simple force in the direction of the longitudinal axis and the storage container thereby moves into the desired assembly position by itself. Moreover, if said force is further applied, the positioning element enters the receiving area via the passage. This eliminates the step of detecting the relative rotational position of the sleeve and storage container, reduces the possibility of errors during assembly, and simplifies the assembly machine.

PREFERRED DESIGN OPTIONS OF THE INVENTION

[0015] Further preferred design options are defined in

the dependent claims.

[0016] A preferred design option is that the receiving area becomes narrower in a wedge shape from its side facing the storage container bottom to its side facing the storage container neck. This has the effect that the positioning element can advance in a defined manner in the direction of the neck of the storage container and finally preferably comes to rest in a defined position on the narrow side of said wedge.

[0017] Furthermore, it is particularly preferred if A1 and/or A2 are substantially round on the outside in their circumferential direction. In this way, said relative rotational movement of the outer side of the storage container and the inner side of the sleeve can take place ideally.

[0018] In addition, it is particularly preferred if the storage container - preferably directly adjacent to its neck - has a ledge projecting radially outwards which forms a longitudinal stop for the sleeve with its one end ring side. This is a simple way of ensuring a defined stop during assembly.

[0019] In addition, it is particularly preferred if the ledge forms a stop for the cap closing the extraction opening on its other end ring side. This is another simple way of ensuring a defined stop during assembly.

[0020] Another preferred embodiment is that the ledge is predominantly non-circular on its visible side and the course of its circumferential surface preferably corresponds to the course of the adjacent circumferential surface of the sleeve. In this way, the sleeve can be flush with the ledge in the installed state.

[0021] In addition, it is particularly preferred if the ledge has a recess on its side facing away from the neck, which engages in the inner area of the fully assembled sleeve, and preferably forms a centering seat for the sleeve, and ideally has at least one latching dent or a latching projection into which a counter-latching element or a counter-latching dent of the sleeve can latch, invisible to the observer of the finished cosmetic unit. In this way, the already discussed firm anchoring of the sleeve to the storage container can be realized.

[0022] Further design possibilities, modes of operation and advantages can be seen in the following description of the embodiment and/or on the basis of the figures.

FIGURE LIST

[0023]

Figure 1 shows a three-dimensional view of a storage container according to the invention.

Figure 2 shows a front view of the storage container according to the invention.

Figure 3 shows a rear view of the storage container according to the invention.

Figure 4 shows a plan view of the storage container according to the invention.

Figure 5 shows the storage container according to the invention in section C-C, which is indicated in Fig. 4.

Figure 6 shows a three-dimensional view of a sleeve according to the invention.

Figure 7 shows a top view of the sleeve according to the invention.

Figure 8 shows the sleeve according to the invention in section B-B, which is indicated in Fig. 7.

PREFERRED EMBODIMENT

[0024] Fig. 1 to Fig. 5 show a preferred embodiment of the storage container 1 according to the invention.

[0025] In this case, the storage container 1 comprises the storage container bottom, which preferably merges into the first section A1, wherein A1 is further away from the neck 3 of the storage container 1 than the second section A2. The second section A2 preferably adjoins the first section A1, these being separated from one another by a step 4. In this case, the step 4 extends radially outwardly and runs circumferentially at an angle to the longitudinal axis of the storage container 1.

[0026] While the apex area of the step 4, which lies further away from the extraction opening 2, preferably tapers to a point, particularly preferably in a V-shape, the apex area 5, which lies closer to the extraction opening 2, reveals a passage 6 (see Fig. 3). This passage 6 is preferably realized as a flattening of the otherwise preferably essentially round second section A2. As already explained at the outset, a positioning element 9 projecting radially inwards from the inner circumferential surface of the sleeve 8 can enter through this passage 6. The sleeve 8 will be explained in more detail in the further course of the description.

[0027] Preferably directly adjoining the passage 6, the receiving area 7 extends at A2, which preferably becomes narrower in a wedge shape towards its side facing the neck 3 (see Fig. 3). Preferably adjoining the second section A2 is a ledge 10 which projects radially outward.

[0028] Preferably, the ledge 10 has a predominantly non-circular design on its visible side, preferably in such a way that the course of its circumferential lateral surface corresponds to the course of the adjacent circumferential lateral surface of the sleeve 8. The ledge 10 is preferably divided into at least two sections, preferably separated by a further step, the section which lies in the direction of the storage container bottom having a smaller circumference and being called "recess". This recess 11 engages in the inner area of the fully assembled sleeve 8 and preferably forms a centering seat for the sleeve 8. In addition, the recess 11 preferably has at least one, particularly preferably at least two, and ideally at least four

latching dents 12, which can latch into a counter-latching element 13 of the sleeve 8. It is also possible that this latching is implemented in such a way that the recess 11 has the latching elements and the sleeve 8 has the latching dents.

[0029] The section of the ledge 10 with the larger circumference is preferably also used as a longitudinal stop. In this way, this ledge 10 and here in particular its end ring side, which points in the direction of the storage container bottom, can be used as a longitudinal stop for the sleeve 8 during assembly. On the other hand, this ledge 10, and here in particular its end ring side, which points in the direction of the storage container neck 3, can be used as a longitudinal stop for the cap during assembly.

[0030] In addition, the storage container neck 3 (or just "neck"), which contains the extraction opening 2, is preferably directly adjacent to the ledge 10. Fig. 5 also shows a recess 14, which is preferably used for the engagement of a positioning extension.

[0031] Finally, Fig. 6 to Fig. 8 show a preferred embodiment of the sleeve 8 according to the invention. As already explained above, the sleeve 8 comprises counter-latching elements 13 arranged in correspondence with the latching dent 12 of the storage container 1 on its inner circumferential surface. In addition, the sleeve 8 has at least one positioning element 9 which projects radially inwardly from the inner peripheral surface of the sleeve 8. Here, this positioning element 9 is designed in such a way that it can abut against the step 4 when it is pushed onto the storage container 1, which is necessary for assembly, and can slide along this step 4 - during a relative rotation of the sleeve 8 and the storage container 1 with respect to one another. Moreover, this positioning element 9 is preferably designed so that it can enter the passage 6 and finally the receiving area 7 and advance parallel to the longitudinal axis towards the neck 3.

REFERENCE LIST

[0032]

1	Storage container
2	Extraction opening
3	Neck of the storage container
4	Step
5	Apex area
6	Passage
7	Receiving area
8	Sleeve
9	Positioning element
10	Ledge
11	Recess
12	Latching dent
13	Counter-latching element
14	Recess
A1	First section
A2	Second section

Claims

1. Cosmetic unit with a storage container (1) containing the cosmetic with an extraction opening (2) for the cosmetic and neck (3) for the detachable fastening of a cap closing the extraction opening (2) as well as such a cap and a sleeve (8) preferably enclosing at least the predominant part of the storage container (1), wherein the storage container (1) has a first section (A1) further away from the storage container neck (3), and a second section (A2) closer to the storage container neck (3), **characterized in that** the first and the second section (A1; A2) are separated from one another by a step (4) which extends radially outwards, rotates obliquely to the longitudinal axis in the circumferential direction and, at its apex area (5) closer to the extraction opening (2), exposes a passage (6) through which a positioning element (9) projecting radially inwards from the inner circumferential surface of the sleeve (8) can pass into a receiving area (7) in which it remains permanently as long as the sleeve (8) is firmly anchored to the storage container (1).

2. Cosmetic unit according to claim 1, **characterized in that** the receiving area (7) becomes narrower in a wedge shape from its side facing the storage container bottom to its side facing the storage container neck (3).

3. Cosmetic unit according to any one of the preceding claims, **characterized in that** the first section (A1) and/or the second section (A2) are substantially outwardly round in their circumferential direction.

4. Cosmetic unit according to one of the preceding claims, **characterized in that** the sleeve (8) has a non-circular shape on its visible side, at least in sections, as seen in the circumferential direction.

5. Cosmetic unit according to one of the preceding claims, **characterized in that** the storage container (1) - preferably directly adjacent to its neck (3) - has a ledge (10) projecting radially outwardly, which with its one end ring side forms a longitudinal stop for the sleeve (8).

6. Cosmetic unit according to claim 5, **characterized in that** the ledge (10) forms a stop for the cap closing the extraction opening (2) on its other end ring side.

7. Cosmetic unit according to one of claims 5 or 6, **characterized in that** the ledge (10) is predominantly non-circular on its visible side and the course of its circumferential lateral surface preferably corresponds to the course of the adjacent circumferential lateral surface of the sleeve (8).

8. Cosmetic unit according to one of claims 5 to 7, **characterized in that** the ledge (10) has a recess (11) on its side facing away from the neck (3), which engages in the inner area of the completely assembled sleeve (8) and preferably forms a centering seat for the sleeve (8) and ideally has at least one latching dent (12) or a latching projection into which, invisible to the observer of the finished cosmetic unit, a counter-latching element (13) or a counter-latching dent of the sleeve (8) can latch.

9. Cosmetic unit according to one of the preceding claims, **characterized in that** the storage container (1) preferably has, on its bottom side facing away from the extraction opening (2), a recess (14) for the engagement of a positioning extension.

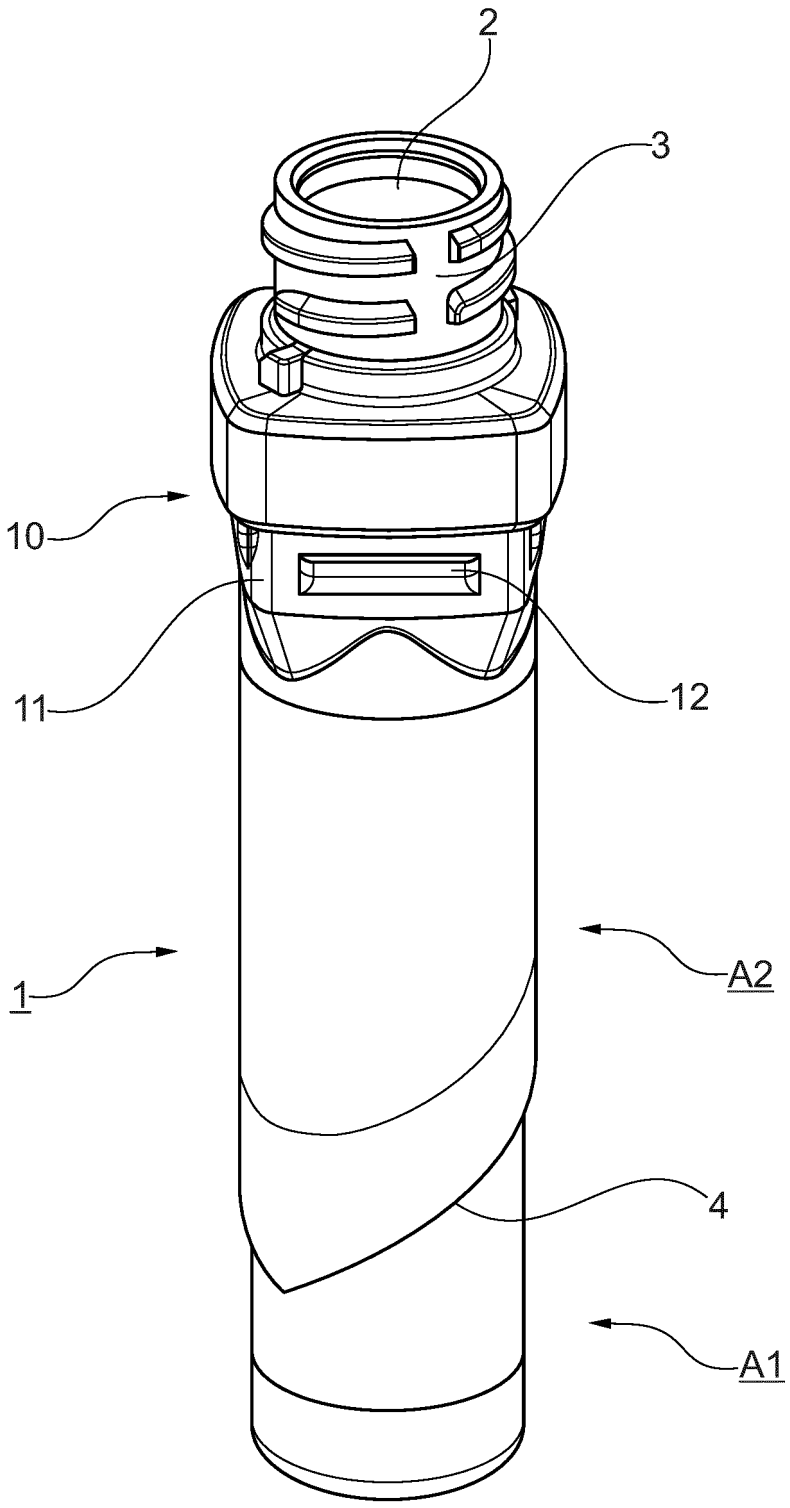

Fig. 1

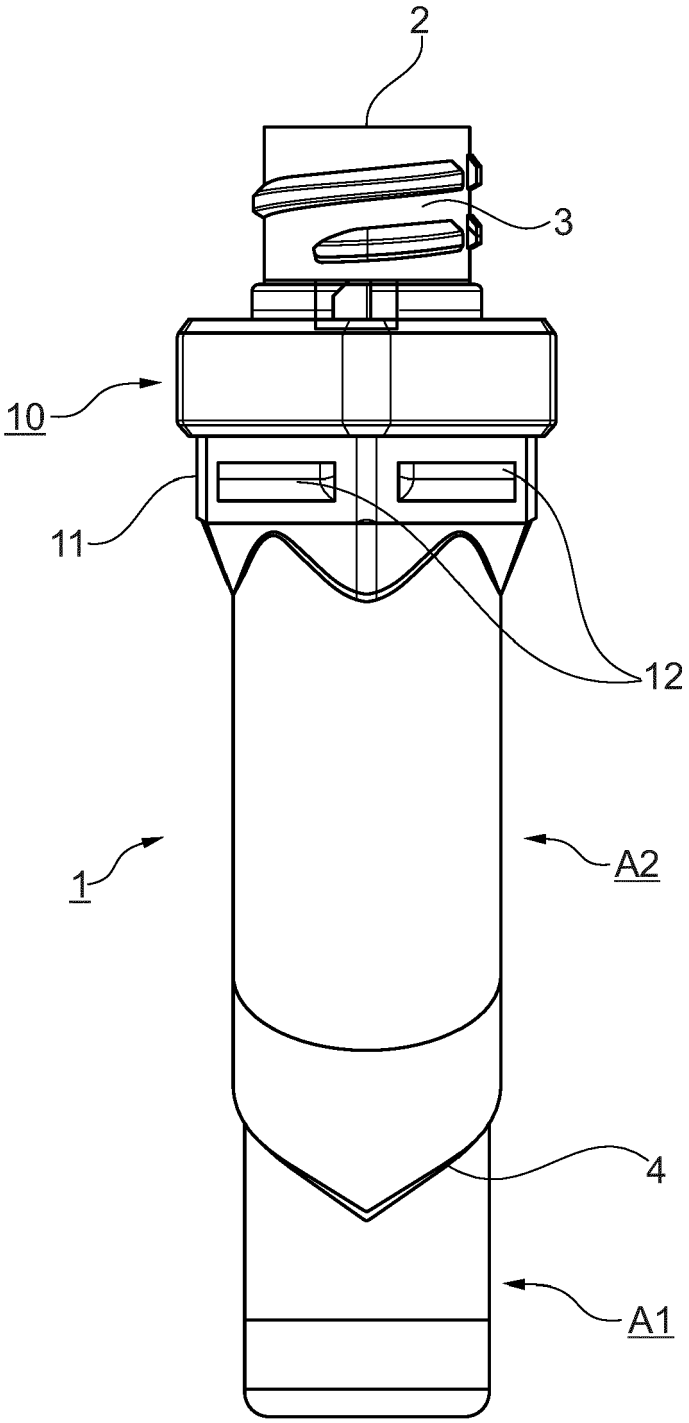

Fig. 2

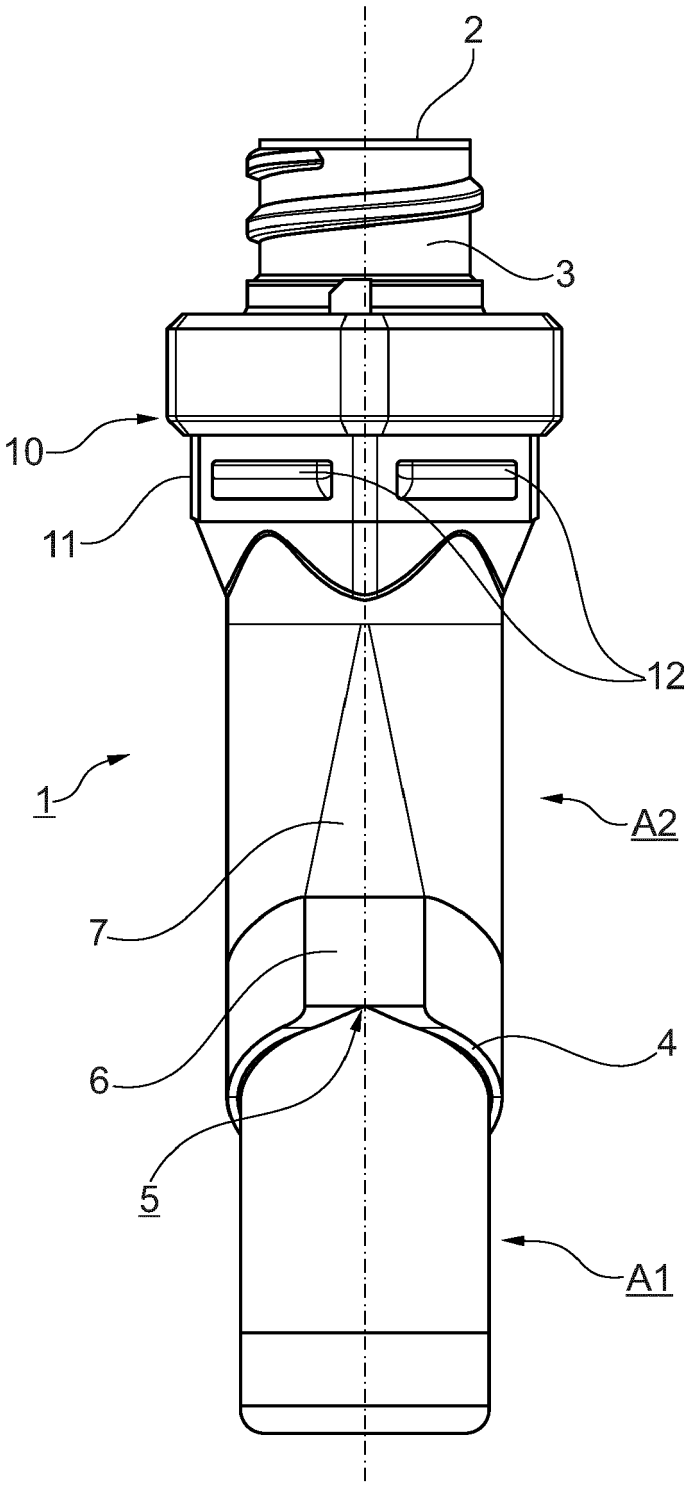

Fig. 3

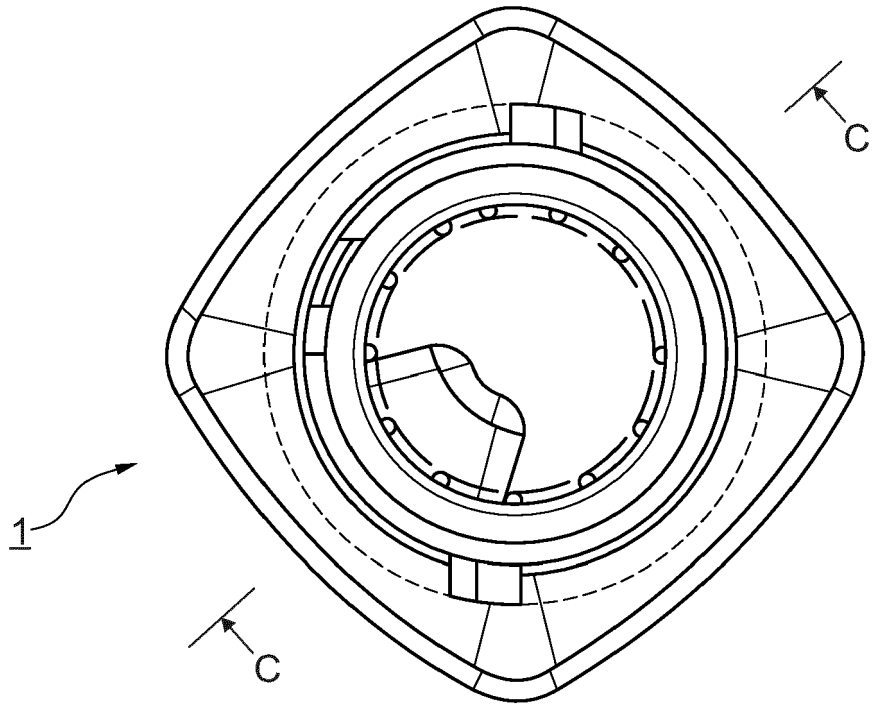

Fig. 4

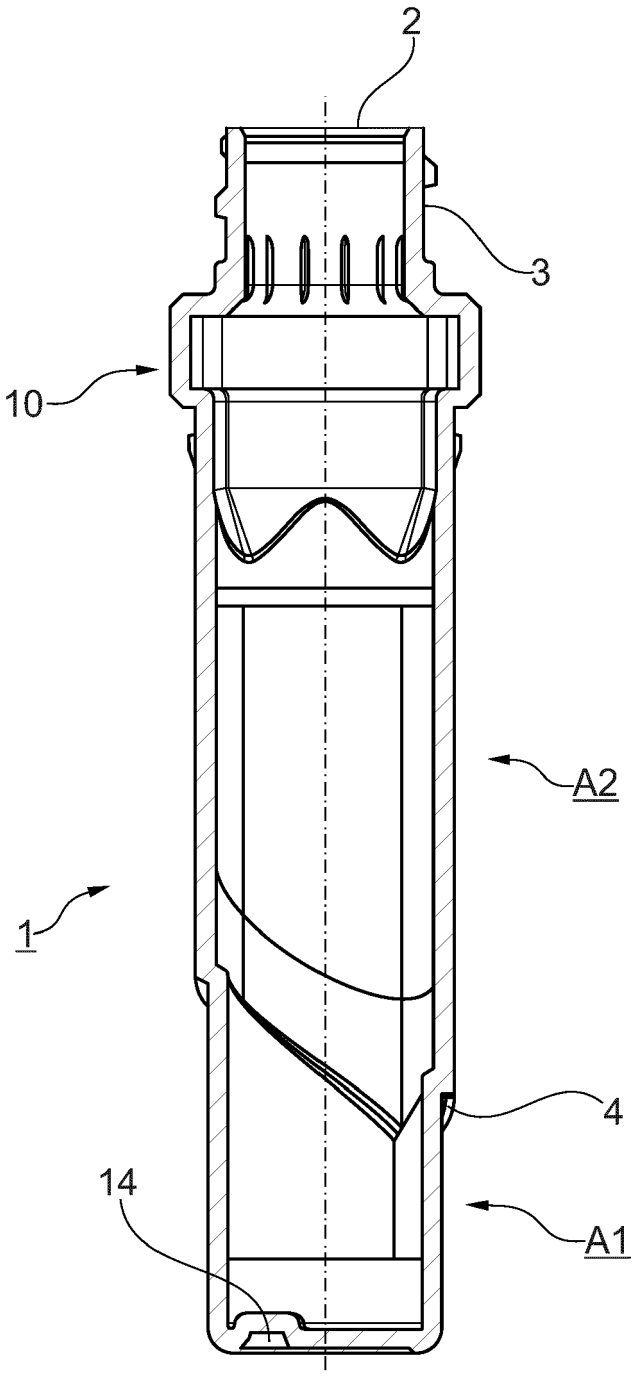

Fig. 5

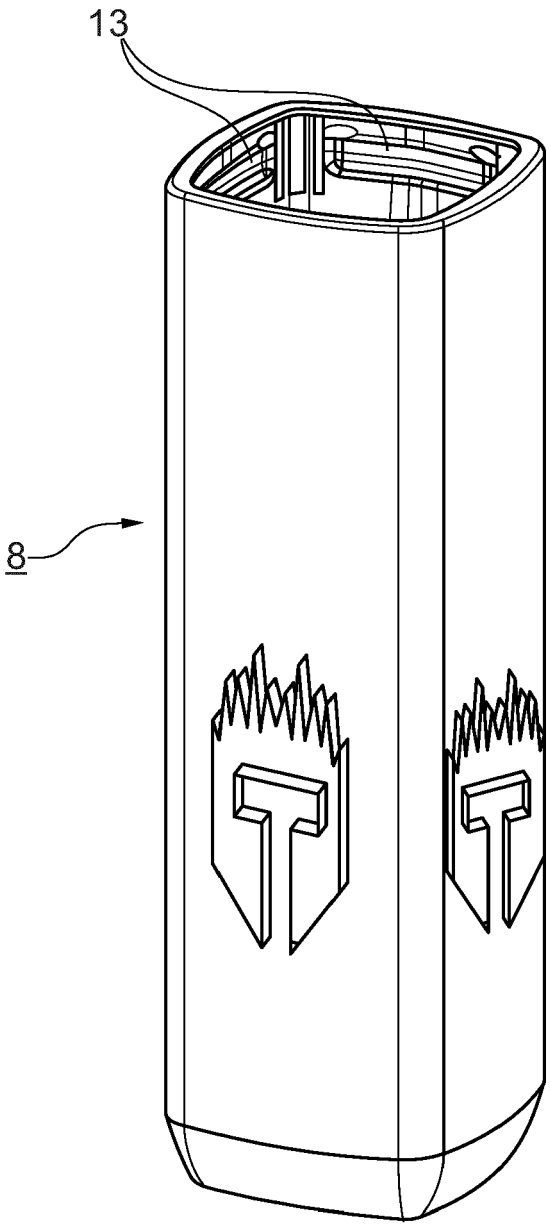

Fig. 6

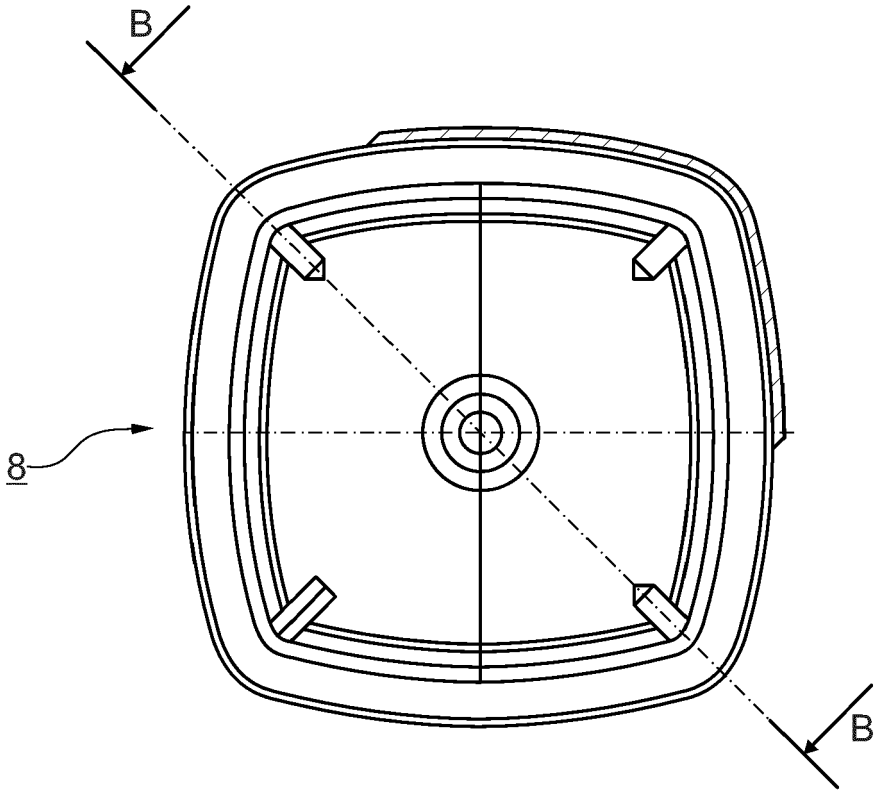

Fig. 7

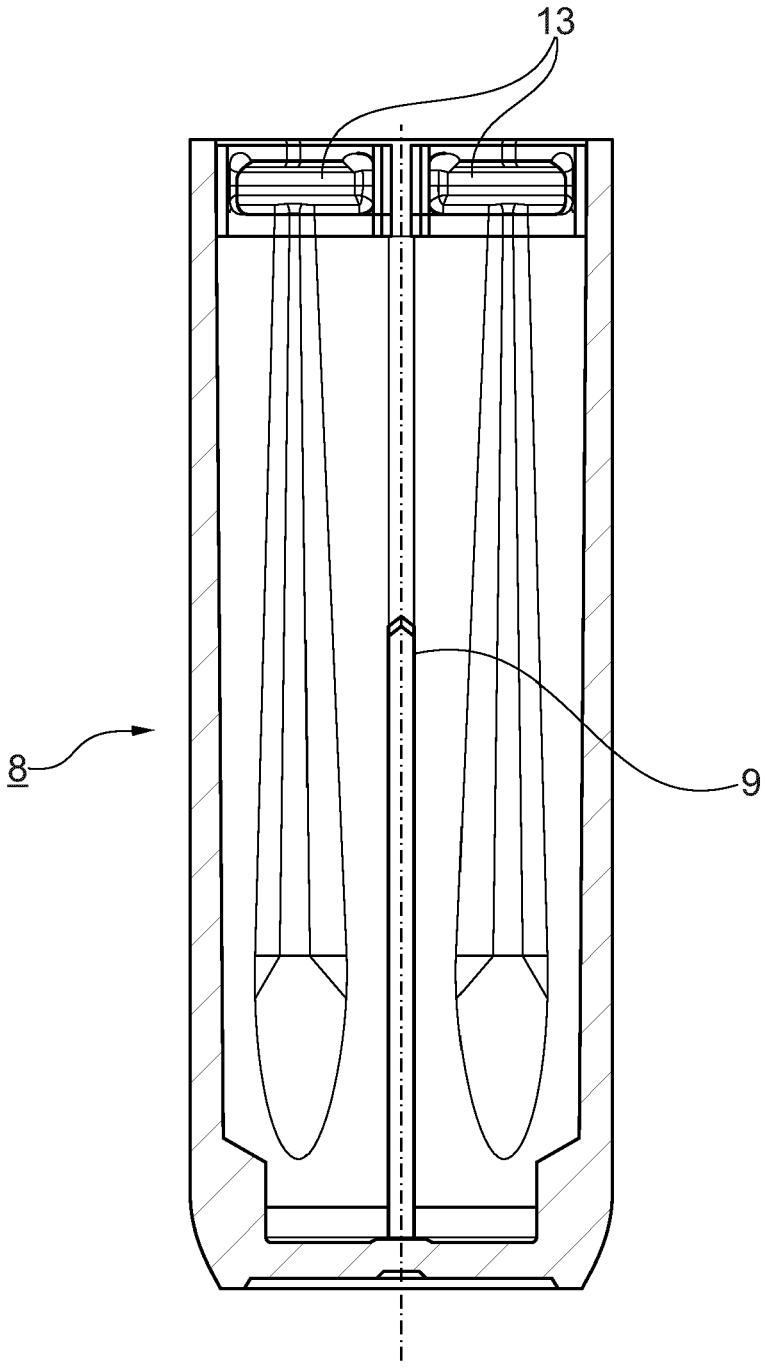

Fig. 8

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EUROPEAN SEARCH REPORT

Application Number
EP 23 16 1877

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2019/142137 A1 (REGGIANI MURILO [BR]) 16 May 2019 (2019-05-16) * figures 1-4,12-16 *	1-9	INV. A45D34/04 A45D40/26 B65D77/04
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A	FR 3 042 392 A1 (OREAL [FR]) 21 April 2017 (2017-04-21) * figures 1A-1E *	1-9	

TECHNICAL FIELDS SEARCHED (IPC)

A45D
B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	19 July 2023	Witkowska-Piela, A

CATEGORY OF CITED DOCUMENTS

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