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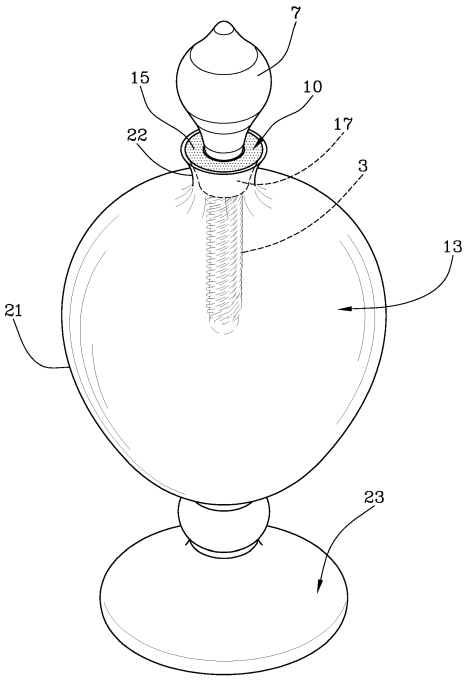
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## (54) A FLACON FOR PERFUME

(57) A flacon for perfume, comprising: a housing body for housing a perfume in liquid form; at least one dispensing member (5) for dispensing said perfume that is associated with said body (2) so as to distribute the liquid towards the external environment; a supporting container (13) for supporting said body (2) and that defines at least one access opening (14) for access to an internal compartment of the container (13); and an associated adapter element (10) at said opening (14); said housing body (2) for housing the perfume being removably engageable to the adapter element (10) between a state of non-use, in which it is at least partially housed in the internal compartment of the container (13) and a state of use, in which it is removed from the container (13).

Fig.1




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## Description

**[0001]** The object of the present invention is a flacon for perfume.

**[0002]** In particular, the present invention finds use in containing substances in liquid form and generally alcohol-based, including for example scented essences for aesthetic use, which are known to be perishable as a function of the method adopted for the containment and/or preservation thereof.

**[0003]** As is known, perfume flacons are constituted by containers of any shape or size and made of glass, a material that is capable of not altering the characteristics of the perfume.

**[0004]** In fact it should be considered that the liquid mixtures with which the perfumes are obtained can be easily damaged if they are in contact with some materials, including for example plastic materials, which are capable of contaminating the mixture, jeopardizing the characteristics thereof that are perceivable by the sense organs, such as the scent, colour and consistency.

**[0005]** The glass containers are preferably in the form of a bottle and shaped according to the ornamental effect one wishes to give to the product.

**[0006]** For example, the bottles used may be coloured and externally their shape reproduces a given design or form apt for enhancing the value of the perfume contained therein, lending a particular aesthetic value to the entire product.

**[0007]** The bottles have an upper neck defining an opening with which a dispensing member for dispensing the perfume is associated. The dispensing member can consist of a pump for atomizing the product or an element for blocking the opening and suitable for metered dispensing of the liquid. The dispensing members are designed and suitably conceived for distributing the perfume without altering the characteristics thereof and with this aim, in the case of a spray dispensing pump, a dispenser pushbutton is utilized without the use of possible propellants.

**[0008]** The dispensing member is clamped or screwed to the neck of the container (which in this case has a suitable outer thread) by using adequate gaskets.

**[0009]** The gaskets guarantee an optimal fluid-seal for ensuring proper preservation of the liquid, considering also that alcohol-based solutions with high vapour pressure are used in the cosmetics sector.

**[0010]** The Applicant, however, has found that the perfume flacons of the prior art and briefly described above have a drawback that lies in a low level of aesthetic versatility characterizing the glass bottles.

**[0011]** In particular, it should be noted that artisanally-made glass flacons, including for example containers made of Murano glass, cannot be utilized.

**[0012]** This drawback results from the fact that to ensure proper preservation of the liquid, container systems are realized with perfect dimensioning in the seal areas and particularly in the area in which the dispensing member is engaged to the neck of the bottle. Therefore, to obtain maximum precision, the bottles are produced industrially with minimum tolerances precisely in order to be coupled in an optimal manner to the dispensing member.

**[0013]** In this context, it is impossible to use artisanally-made bottles, such as containers made of blown glass, as such products are not capable of maintaining the dimensions and tolerances required for proper sealing with the dispensing members.

**[0014]** As a result, the aesthetic effect of the flacons is limited exclusively to bottles realized in industrial processes with resulting drawbacks in terms of versatility of use with glass containers that are handmade and thus of considerable aesthetic value.

**[0015]** The aim of the present invention is therefore to resolve the problem found with the prior art by offering a flacon for perfume that is free of the drawbacks cited herein.

**[0016]** Therefore, an aim of the present invention is to make available a flacon for perfume that is capable of using any type of glass container, especially glass containers made artisanally by glassblowing, including for example Murano glass.

**[0017]** A further aim of the present invention is to realize a flacon for perfume that is capable of perfectly preserving the liquid contained therein, even in the case of the use of artisanally-made containers and with tolerances that are not necessarily predetermined.

**[0018]** A different and further aim of the present invention is that of making available a flacon for perfume that is structurally simple, easy to use and with limited costs of realization.

**[0019]** Some of these and other aims are substantially achieved by a flacon for perfume according to that which is set forth in one or more of the attached claims.

**[0020]** Further characteristics and advantages will become more apparent from the detailed description of some non-exclusive embodiments of a flacon for perfume according to the present invention.

**[0021]** This description is provided with reference to the accompanying figures, which are also provided purely by way of illustrative and thus non-limiting example, of which:

- Figure 1 is a perspective view of a flacon for perfume according to the present invention;
- Figure 2 is a exploded perspective view of the flacon illustrated in Figure 1;
- Figure 3 is a side elevation of a detail of the flacon of the Figure 1;
- Figure 4 is a partial sectional view of the detail illustrated in Figure 3;
- Figure 5 is a perspective and partial sectional view of a portion of the device of Figure 1;
- Figure 6 is a perspective and partial sectional view of a structural detail of the flacon of Figure 1 in a respective coupling stage;

- Figure 7 is a partial sectional side elevation of a detail of the flacon according to a first embodiment; and
- Figure 8 is a partial sectional side elevation of a detail of the flacon according to a second embodiment.

**[0022]** With reference to the accompanying figures, a flacon for perfume according to the present invention is indicated in its entirety by the number 1.

**[0023]** In particular, as illustrated in Figures 1 and 2, the flacon 1 comprises a housing body 2 for housing a perfume preferably constituted by an essence for aesthetic use in liquid form.

**[0024]** In further detail, the housing body 2 comprises a vial 3 made of glass and having an access mouth 4 for access to an internal compartment containing the above-mentioned perfume.

**[0025]** Solely by way of illustrative and thus non-limiting example, a vial 3 is illustrated in the accompanying figures having a visible external surface shaped with substantially helical decorative forms. However, it should be specified that the visible form and aesthetic effect of the vial 3 can be of any type whatsoever in accordance with various production needs. Moreover, the vial 3 has an elongate shape extending along a longitudinal axis X. In this case as well, the overall form of the vial can be of any type, depending on the particular aesthetic effect that is to be given to the flacon 1.

**[0026]** As illustrated more clearly in Figure 4, the access mouth 4 of the vial 3 is defined by a neck to which at least one perfume dispensing member 5 apt for distributing the liquid towards the external environment is engaged. The dispensing member 5, which is not described or illustrated in detail as it is of a known type, is preferably constituted by an atomizer pump equipped with a pushbutton 6 protruding out of the vial 3.The perfume is dispensed from the above-mentioned vial 3 by pressing the pushbutton 6.For this purpose, in the state of non-use, the pushbutton 6 is covered by a respective closure element 7 that can be coupled by interference fitting on the dispensing member 5. The closure element 7 is constituted by a cap that can be switched from an open state in which it is disengaged from the dispensing member 5, thereby enabling access to the pushbutton 6, to a closed state in which it is engaged on the dispensing member 5 and the pushbutton 6 is closed in a compartment 7a defined internally of the closure element 7 (Figure 4).

**[0027]** At the level of the compartment 7a, the closure element 7, which can also be of any shape or size, has an outer ring 8 on which a logo or writing identifying the product can be imprinted.

**[0028]** The vial 3 further comprises a collar 9 for coupling to an adapter element 10 (which is described further herein below) and that is disposed circumferentially around the neck of the vial 3, thereby defining the access mouth.

**[0029]** The collar 9 is substantially annular in shape and defines an external cylindrical surface 11 from which a plurality of protrusions 12 extend equidistant from each other, distributed along the entire circumferential outline of the collar 9.

**[0030]** Preferably, the protrusions 12 are substantially hemispherical in shape and the radial dimension thereof can be equivalent to the radial dimension of the outer ring 8 (Figure 7), or the radial dimension thereof can be greater than the radial dimension of the outer ring 8 (Figure 8).

**[0031]** The flacon 1 advantageously further comprises a supporting container 13 for supporting the body 2 and that defines at least one access opening 14 for access to an internal compartment of the container 13.

**[0032]** The access opening 14 is equipped with the above-mentioned adapter element 10 to enable the housing body 2 for housing the perfume to be movable between a state of non-use, in which it is at the least partially housed in the internal compartment of the container 13 (Figure 1) and a state of use, in which it is removed from the container 13.

**[0033]** In further detail, the adapter element 10 comprises a sleeve 15 of a substantially tubular shape and defining a through hole 16 for holding the housing body 2, and an external surface 17 for coupling to the access opening 14 of the container 13.

**[0034]** The sleeve 15 is made of flexible, preferably elastic material such as rubber or a similar material. In this manner, the sleeve 15 can be snap-fitted within the access opening 14 of the container 13.

**[0035]** Moreover, the external surface 17 of the sleeve 15 is substantially of a truncated cone shape so as to define an external diameter of the entire adapter element 10 varying along the longitudinal section. Advantageously, the sleeve 15 proves to be coupleable to the container 13 irrespectively of the dimensions of the access opening 14. Furthermore, with reference to Figures 5 to 8, note that the sleeve 15 comprises a plurality of longitudinal grooves 18 afforded on an internal surface 19 defining the through hole 16.

**[0036]** In this manner, each protrusion 12 is slidably insertable in a respective groove 18 so as to define the above-mentioned state of non-use of the housing body for housing the perfume.

**[0037]** Note also that each groove 18 has a shoulder 20 defined by a step and that is apt for supporting the entire body 2 and for providing a rest surface for the respective protrusion 12 (Figures 5 to 8).

**[0038]** According to the first embodiment appearing in Figures 5 to 7, the grooves 18 are afforded in a portion of the hole 16 that defines a smaller diameter of the internal surface 19. In this solution, the grooves 18 extend only in this portion of the hole 16, the portion remaining comprised within the sleeve 15.

**[0039]** According to the second embodiment appearing in Figure 8, the grooves 18 extend from a top edge of the hole 16.

**[0040]** In both embodiments, it should be noted that in the state of non-use of the body 2, in which the protrusions

12 rest on the shoulders 20, the vial 3 is disposed inside the container 13, suspended therein, whereas the outer ring 8 and the collar 9 are housed inside the sleeve 15. As a result, only the closure element 7 proves to protrude out of the container 13 and to be visible externally.

**[0041]** Additional, technically equivalent solutions can also be provided for housing and supporting the body 2 within the adapter element 10. Advantageously, the presence of the protrusions 12 inserted in the grooves 18 also makes it possible to prevent relative rotation about the axis X of the body 2 with respect to the container 13.

**[0042]** The supporting container 13 preferably comprises a vessel 21 having a neck 22 defining the access opening 14.In this situation (referring to Figure 5), note that the external surface 17 of the adapter element 10 is coupled to the internal surface of the neck 22 by interference fitting. This coupling results from the elastic deformation capacity of the sleeve 15 fitted inside the neck 22. The vessel 21 is preferably also provided with a base area 23 configured to be rested on a surface and extending at the opposite end with respect to the neck 22.

**[0043]** Advantageously, the supporting container 13 is made of blown glass, preferably Murano glass. Moreover, the container 13 can be of any shape or size, based on the decorative characteristics that are to be given to the product.

**[0044]** Again, the container 13 can be made of clear glass, which is capable of revealing, from the outside, the presence of the vial 3 placed within it, or it can be made of opaque glass.

**[0045]** The present invention resolves the problems found in the prior art and leads to the following advantages.

**[0046]** Firstly, it should be noted that the flacon 1 can make use of any type of container 13, particularly glass containers made artisanally by glassblowing, including for example Murano glass.

**[0047]** This advantage is afforded by the presence of the adapter element 10, which is provided with a variable section and is thus capable of being coupled to containers with different neck diameters.

**[0048]** In this manner, it is possible to utilize containers 13 of any shape and with any decorative features, possibly made artisanally and therefore without necessarily arranging for predetermined dimensions and tolerances.

**[0049]** Advantageously, the perfume is perfectly preserved inside the vial 3, which is produced industrially with the tolerances and dimensions being predetermined so as to ensure perfect sealing with the dispensing member.

**[0050]** In other words, the sealing function is not extended to the container 13 visible externally, but to the vial that is contained within the container 13.

**[0051]** It should also be considered that the flacon constituting the object of this invention proves to be structurally simple, given the presence of individual portions, the container and vial, which are coupleable by means of the interposition of the adapter element 10.

**Claims**

1. A flacon for perfume, comprising:

   - a housing body (2) for housing a perfume in liquid form; and
   - at least one dispensing member (5) for dispensing said perfume that is associated with said body (2) so as to distribute the liquid towards the external environment;

   **characterized in that** it further comprises a supporting container (13) for supporting said body (2) and that defines at least one access opening (14) for access to an internal compartment of the container (13), and an associated adapter element (10) at said opening (14); said housing body (2) for housing the perfume being removably engageable to the adapter element (10) between a state of non-use, in which it is at least partially housed in the internal compartment of the container (13) and a state of use, in which it is removed from the container (13).

2. The flacon according to the preceding claim, **characterized in that** said housing body (2) comprises a vial (3) made of glass and having an access mouth (4) for access to an internal compartment containing said perfume; said dispensing member (5) being coupled to the access mouth (4) of the vial (3).

3. The flacon according to the preceding claim, **characterized in that** said dispensing member (5) comprises an atomizer pump equipped with a pushbutton (6) protruding out of the vial and **in that** it further comprises a closure element (7) that can be switched from an open state in which it is disengaged from the dispensing member (5) so as to enable user access to the pushbutton (6) and a closed state in which it is engaged on the dispensing member (5) and the pushbutton (6) is closed in a compartment (7a) defined internally of the closure element (7).

4. The flacon according to claim 2 or 3, **characterized in that** said housing body (2) further comprises a collar (9) for coupling to the adapter element (10) and that is disposed circumferentially around a neck of the vial (3), thereby defining said access mouth (4).

5. The flacon according to the preceding claim, **characterized in that** said collar (9) comprises a plurality of protrusions (12) emerging from an external cylindrical surface (11) of the collar (9) and developing along the entire circumferential outline of the collar (9).

6. The flacon according to any one of the preceding claims, **characterized in that** said adapter element (10) comprises a sleeve (15) of a substantially tubu-

lar shape and defining a through hole (16) for holding the housing body (2) and an external surface (17) for coupling to the access opening (14) of the container (13).

7. The flacon according to the preceding claim, **characterized in that** said sleeve (15) is made of flexible, preferably elastic material, so as to be fitted inside the access opening (14) of the container (13).

8. The flacon according to claim 6 or 7, **characterized in that** the external surface (17) of the sleeve (15) is substantially of a truncated cone shape, said sleeve (15) exhibiting a diameter varying along the longitudinal section.

9. The flacon according to claim 6, when dependent on claim 5, **characterized in that** said adapter element (10) comprises a plurality of longitudinal grooves (18) afforded on an internal surface (19) of the sleeve (15) defining the through hole (16), each protrusion (12) being slidably insertable in a respective groove (18) in the state of non-use of the housing body (2) for housing the perfume.

10. The flacon according to the preceding claim, **characterized in that** in the condition of non-use of the housing body (2), the protrusions (12) rest on respective shoulders (20) afforded in the grooves (18) so as to dispose the vial (3) in the internal compartment of the container (13).

11. The flacon according to any one of the preceding claims, **characterized in that** said supporting container (13) comprises a vessel (21) having a neck (22) defining said access opening (14); said external surface (17) of the adapter element (10) being coupled to the internal surface of the neck (22) by interference fitting.

12. The flacon according to any one of the preceding claims, **characterized in that** said supporting container (13) is made of blown glass, preferably Murano glass.

Fig.1

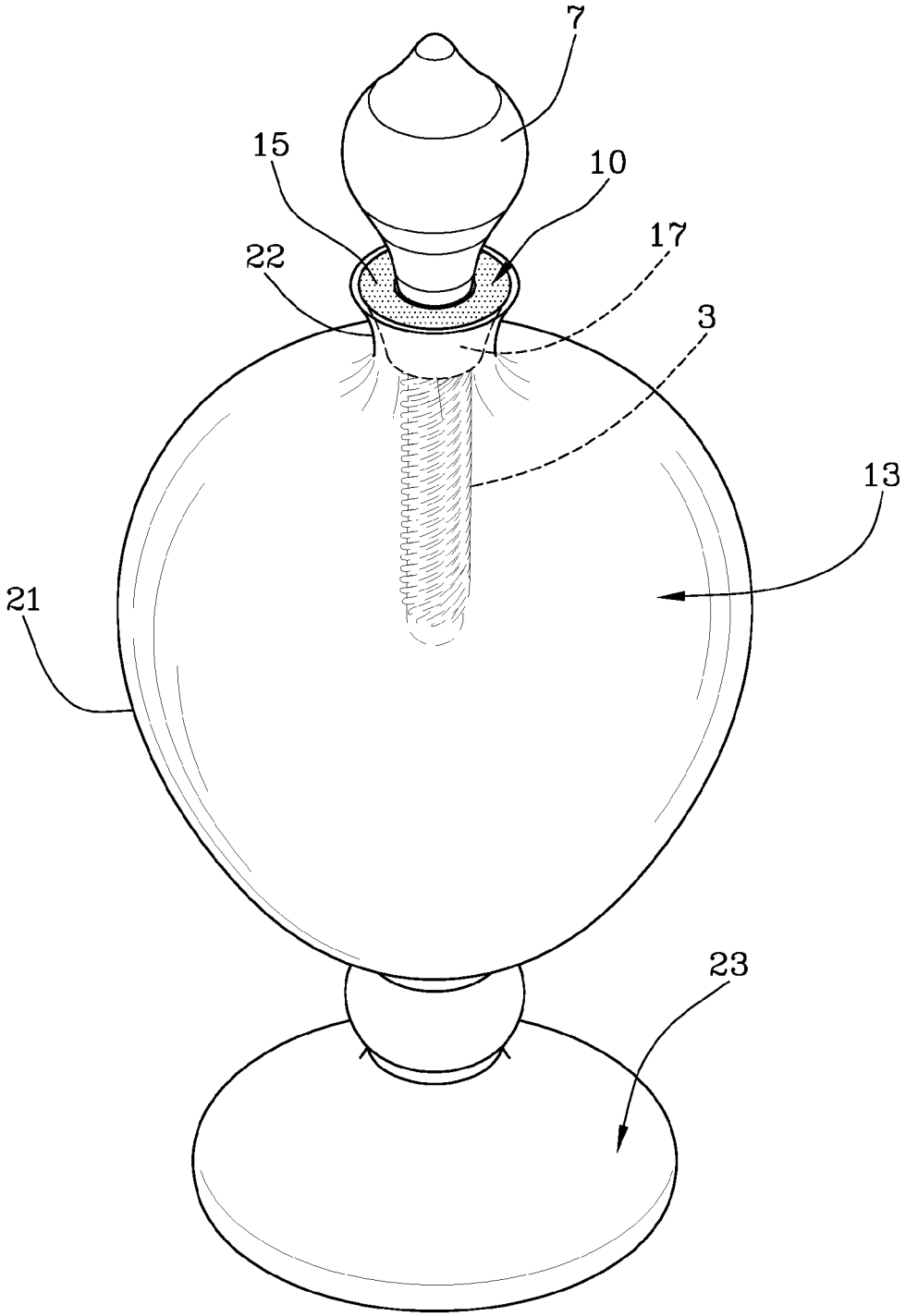


Fig.2

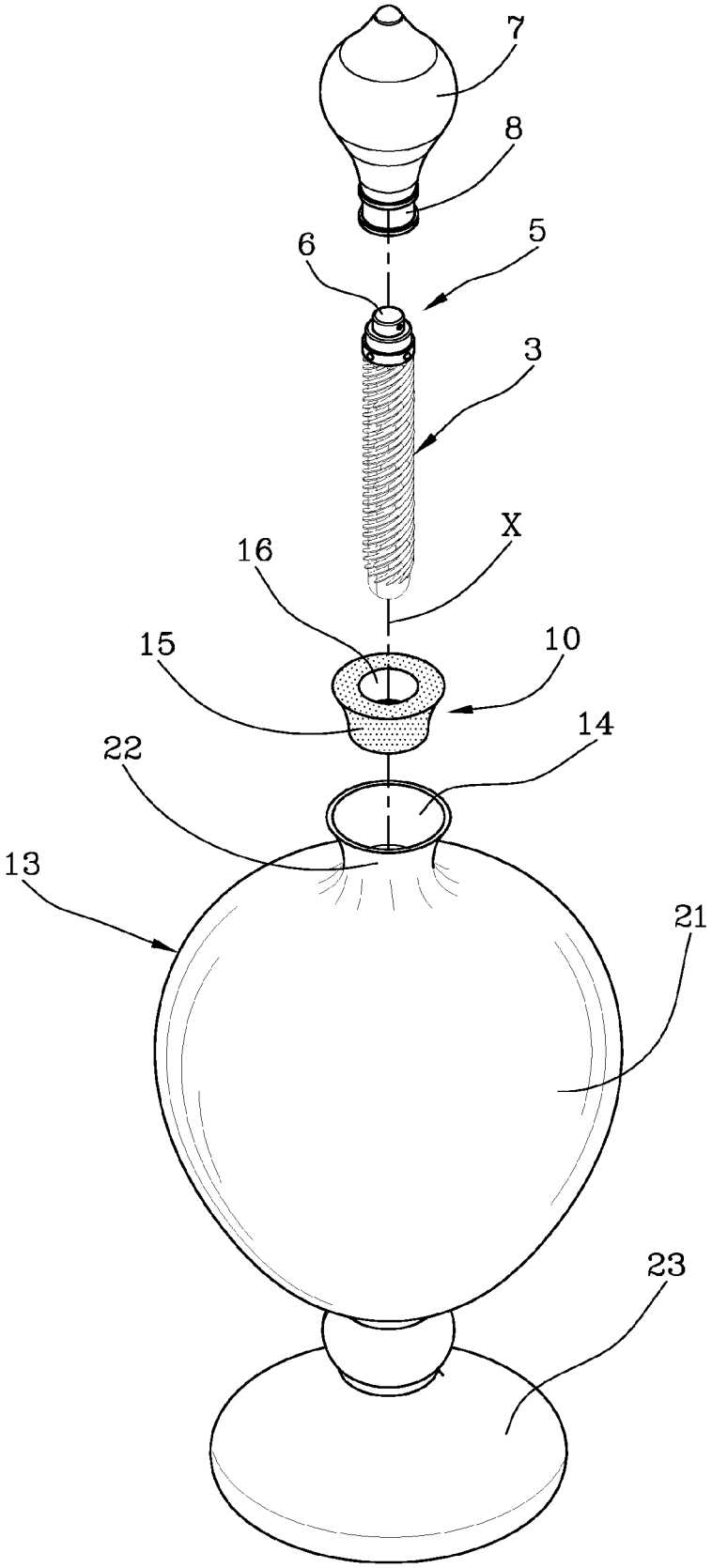


Fig.4

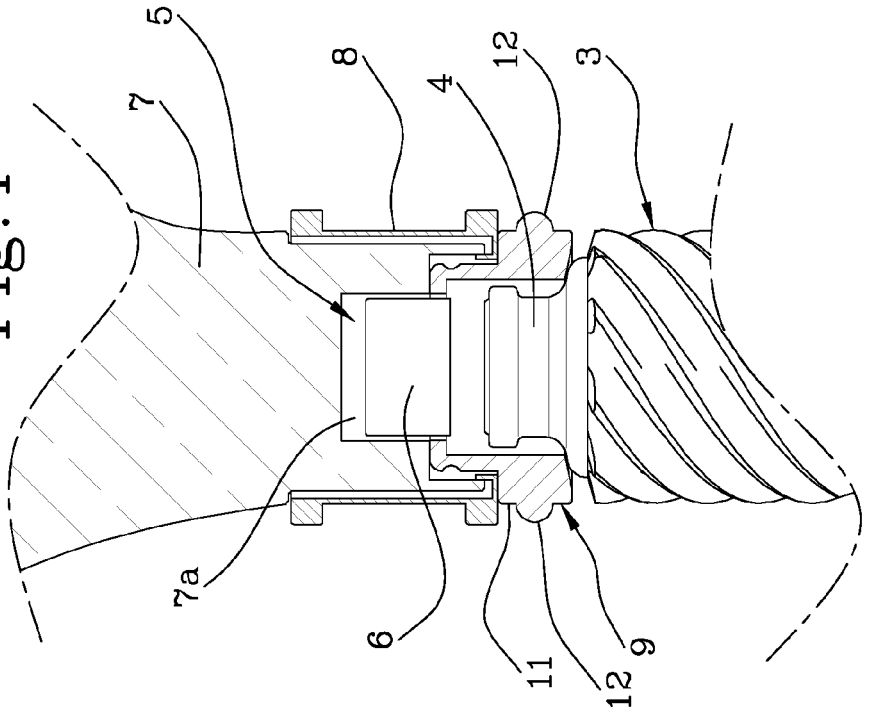



Fig.3

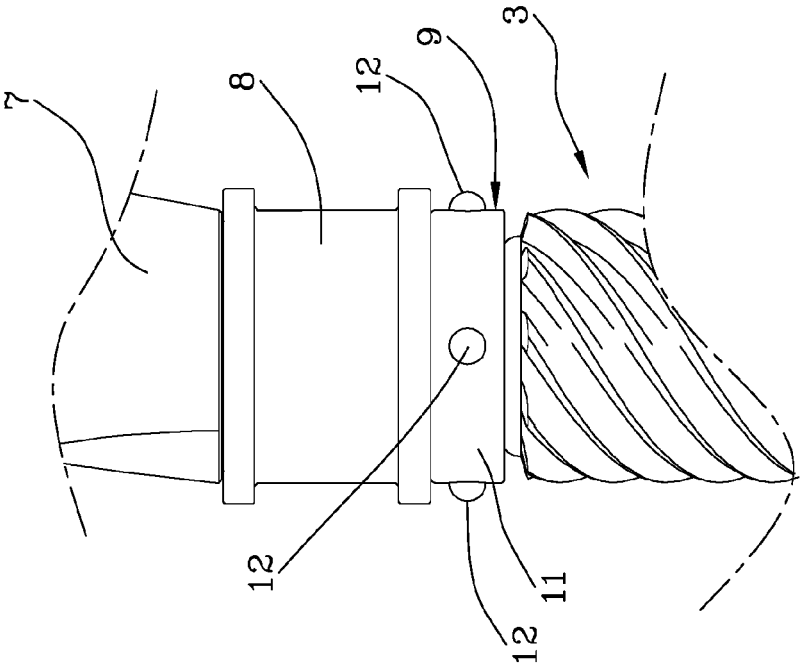


Fig.6

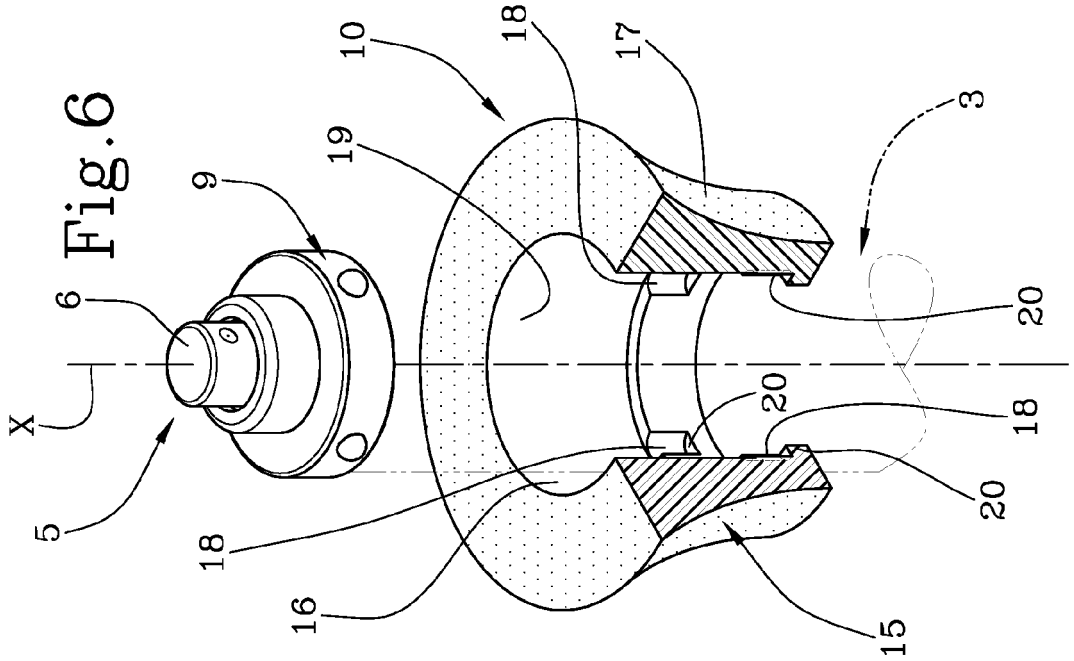



Fig.5

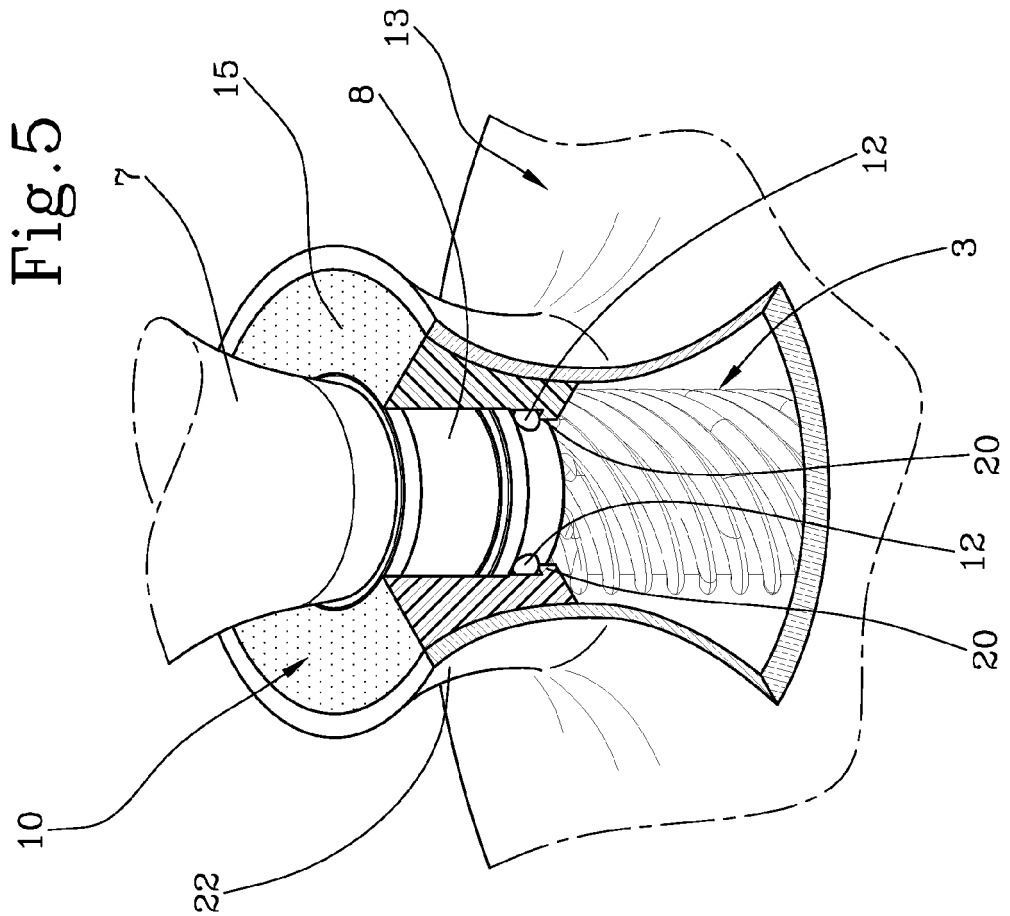


Fig.7

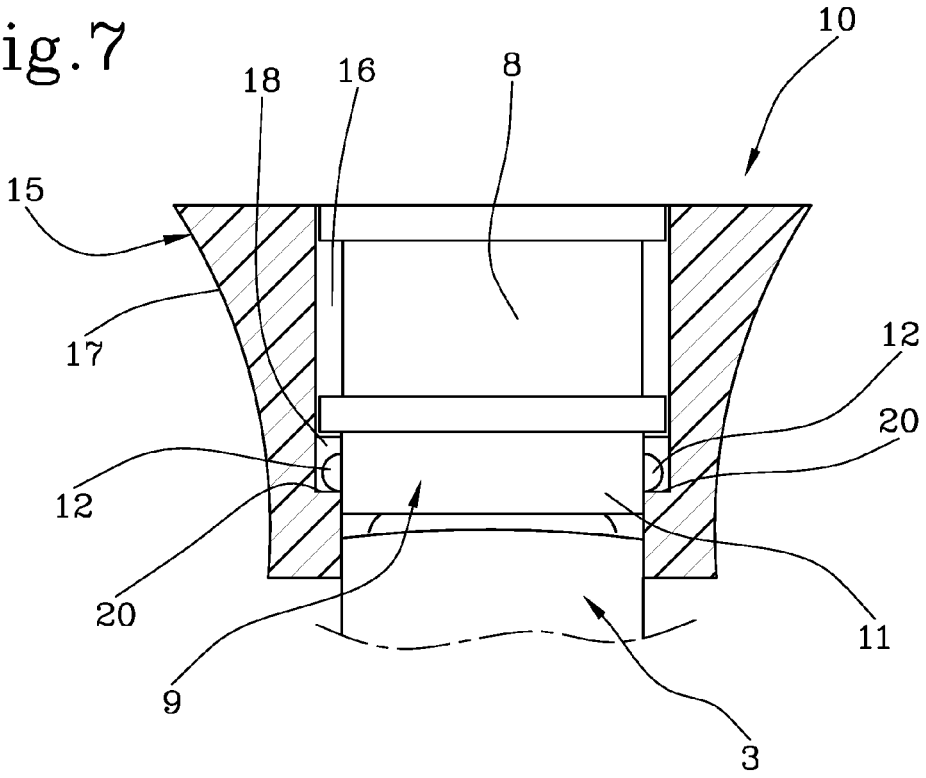
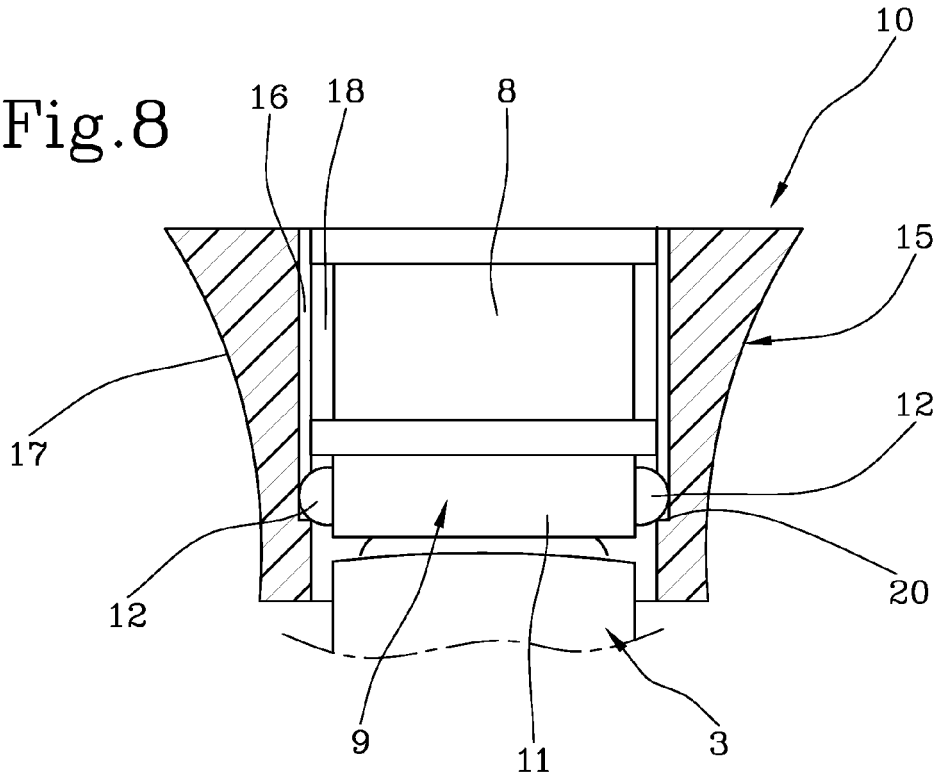



Fig.8



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# EUROPEAN SEARCH REPORT

Application Number
EP 15 18 6170

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The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| The Hague | 4 February 2016 | Witkowska-Piela, A |

CATEGORY OF CITED DOCUMENTS

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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 15 18 6170

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04-02-2016

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