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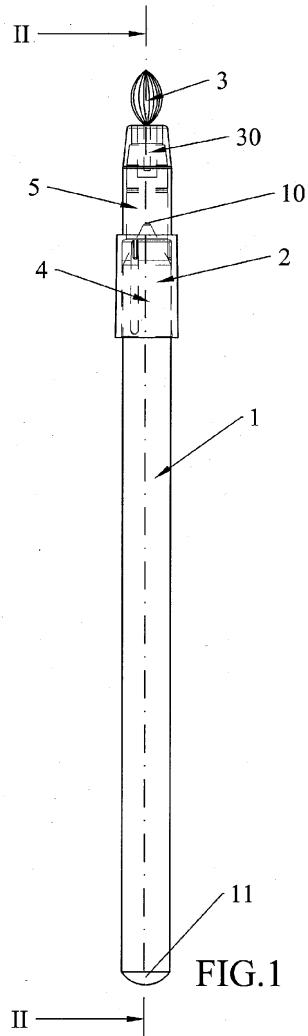
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(54) **Cosmetic pencil with tip protector cap with interchangeable cosmetic element**

(57) There is described a cosmetic pencil (1) with tip protector cap (2) with interchangeable cosmetic element (3), comprising said hollow tip protector cap (2) with a through opening (20) and mountable directly both interlocking over the tip (10) of the cosmetic pencil (1), and interlocking over the other end (11) of the cosmetic pencil (1) itself, where an interchangeable cosmetic element (3) is insertable within said through opening (20) of said tip protector cap (2).



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## Description

**[0001]** The present invention relates to a cosmetic pencil with tip protector cap with interchangeable cosmetic element.

**[0002]** Cosmetic pencils provided with tip protector cap for protecting the tip thereof are available on the market. Some of said cosmetic pencils are fitted on the end opposite the tip with a cosmetic element such as a thin comb or a brush.

**[0003]** Said cosmetic element is glued on the end, as each element is typically used for a single type of cosmetic pencil.

**[0004]** The cosmetic element and the pencil are used alternately and quickly.

**[0005]** Disadvantageously, the cosmetic element cannot be re-used when the cosmetic pencil is used up.

**[0006]** A further drawback is the use of glues, hardly disposable in the environment, during the industrial production for gluing the cosmetic element on the other end of the cosmetic pencil.

**[0007]** Solutions can be found in the prior art to overcome such a drawback, as described for example in the patent document KR461478Y1, which describes a cosmetic pencil contained in a container provided with a tip protector cap fitted with a fixed cosmetic element. Said tip protector cap is not mounted on the cosmetic pencil but is screwed on the container of the cosmetic pencil itself so that the cosmetic pencil may be replaced.

**[0008]** Said container has the drawback of being difficult to handle by a female user who needs to alternately and quickly use the cosmetic pencil and then blend with the brush cosmetic element without having to each time screw said cosmetic element on the container of the cosmetic pencil.

**[0009]** Another solution to said drawbacks is that described in the patent document FR2946235A3 where a cosmetic pencil is described having a tip protector cap with an interchangeable cosmetic element and a penknife to sharpen the tip of the cosmetic pencil itself.

**[0010]** Said tip protector cap is only applicable on the tip of the cosmetic pencil itself.

**[0011]** A first housing is carved on said tip protector cap for inserting therein from above another element provided with a penknife, which said other element includes a second housing for inserting therein from above a cosmetic element.

**[0012]** A third housing of the same shape and size as said second housing is carved also into the other end of the cosmetic pencil.

**[0013]** The cosmetic element is provided with a male element that fits within said second and third housings.

**[0014]** Disadvantageously, the cosmetic pencil must be provided with said second and third carved housings for inserting the cosmetic element.

**[0015]** Disadvantageously, the tip protector cap for the cosmetic pencil must be cumbersome, it being provided with said first carved housing for inserting said other el-

ement provided with a penknife on which said other element said second housing is in turn carved for inserting the cosmetic element.

**[0016]** A further drawback is the complexity and the relatively high cost of the cosmetic element, together with the relatively high cost of the cosmetic pencil itself which must be provided with a tip protector cap and with three different housings.

**[0017]** The object of the present invention is to provide a simplified tip protector cap for cosmetic pencils, compact and cost-effective and with an easily interchangeable cosmetic element.

**[0018]** According to the invention, such objects are achieved with a cosmetic pencil with tip protector cap with interchangeable cosmetic element, characterized in that said tip protector cap is hollow with a through opening and is mountable directly both interlocking over the tip of the cosmetic pencil, and interlocking over the other end of the cosmetic pencil itself, where an interchangeable cosmetic element is insertable inside said through opening of said tip protector cap.

**[0019]** These and other features of the present invention will appear more clearly from the following detailed description of a practical embodiment thereof, made by way of a non-limiting example with reference to the accompanying drawings, in which:

Figure 1 shows a front view of a cosmetic pencil with tip protector cap with interchangeable cosmetic element;

Figure 2 shows a sectional view according to line II-II in Figure 2;

Figure 3 shows a detail of Figure 2;

Figure 4 shows a front view of a tip protector cap for the cosmetic pencil;

Figure 5 shows a sectional view according to line V-V in Figure 4;

Figure 6 shows a front view of an adapter element of the interchangeable cosmetic element;

Figure 7 shows a section according to line VII-VII in Figure 6;

Figure 8 shows a front view of an alternative of the adapter element of the interchangeable cosmetic element;

Figure 9 shows a section according to line IX-IX in Figure 8.

**[0020]** With reference to the above figures, a cosmetic pencil 1 with tip protector cap 2 with interchangeable cosmetic element 3 is shown.

**[0021]** As shown in Figures 1-5, said tip protector cap 2 is hollow with a through opening 20 and is a user-mountable directly both interlocking over tip 10 of the cosmetic pencil 1, and interlocking over the other end 11 of the cosmetic pencil 1 itself.

**[0022]** Said cosmetic element 3 is interchangeable by a manufacturer and it fits inside said through opening 20 of said tip protector cap 2 as shown in Figures 1-2.

**[0023]** As shown in Figures 4-5, said tip protector cap 2 includes two hollow cylindrical portions 4, 5: a first lower cylindrical portion 4, mounting superimposed over sides 12 of each of the respective ends 10, 11 of the cosmetic pencil 1, as shown in Figure 2, and a second upper cylindrical portion 5 with a smaller diameter than said first lower cylindrical portion 4.

**[0024]** As shown in Figures 4-5, said first lower cylindrical portion 4 has a multiplicity of compressing fins 40 adapted to firmly engage each of the two ends 10, 11 of the cosmetic pencil 1 once the tip protector cap 1 has been fitted on one of the two ends 10, 11 of the cosmetic pencil 1 itself.

**[0025]** Each of said compressing fins 40 has a first lower part 41 and a second upper part 42.

**[0026]** Said first lower part 41 of the compressing fin 40 is raised with respect to the inner surface 21 of the through opening 20, and is adapted to exert a greater pressure on sides 12 of the cosmetic pencil 1 with respect to the inner surface 21 of the through opening 20 of the tip protector cap 2.

**[0027]** The first lower part 41 of the compressing fin 40 has a further chamfered part 43 in order to allow the passage of air.

**[0028]** Said upper part 42 of the compressing fin 40 is even more raised with respect to the first lower part 41 and is adapted to be engaged on the oblique surface of tip 10 of the cosmetic pencil 1 to prevent the tip protector cap 2 from being pushed too deeply by the user, thereby damaging tip 10 itself.

**[0029]** As shown in Figures 4-5, said second upper cylindrical portion 5 in turn comprises a lower piece 51 of constant diameter and an upper piece 52 tapered towards the top.

**[0030]** Said second cylindrical portion 5 of the tip protector cap 2 is provided with a raised portion 55 of ring-shape on the inner surface 21 of the through opening 20. Said raised portion 55 is adapted to separably engage with said cosmetic element 3 interchangeably as shown in Figures 2-3.

**[0031]** As shown in Figure 3, said raised portion 55 is positioned on the inner surface 21 of said lower piece 51 of the second upper cylindrical portion 5.

**[0032]** As shown in Figure 2, said raised portion 55 is arranged at such a distance from tip 10 of the cosmetic pencil 1 in order to safeguard it.

**[0033]** As shown in Figures 1-2, said cosmetic element 3 comprises an applying element mounted on an adapter element 30 adapted to be inserted from the bottom into said through opening 20 of said tip protector cap 2.

**[0034]** As shown in Figures 6-7, said adapter element 30 of the cosmetic element 3 comprises a first lower portion 31 of cylindrical shape and a second upper portion 32 tapered upwards.

**[0035]** Said first lower portion 31 comprises a lower base 33, adapted to be separably engageable with said raised portion 55 of said tip protector cap 2, as shown in Figure 3.

**[0036]** Said second upper portion 32 has a shape complementary to the inner surface 21 of said upper piece 52 of the second upper cylindrical portion 5 of said tip protector cap 2.

**[0037]** As shown in Figures 5-7, said upper portion 32 further comprises a step 35 adapted to be engaged on a catch 56 of the inner surface 21 of the through opening 20 near the upper piece 52 to prevent the adapter element from escaping from the through opening 20 itself, as shown in Figure 2.

**[0038]** Said step 35 of the upper portion 32 of the adapter element 30 of the cosmetic element 3 divides said upper portion into two parts: a cone 37 and an upper cylinder 34. Said upper cylinder 34 is provided with a carved housing 36 on the upper base 38 thereof. Said carved housing 36 has different shapes depending on the applying element of the cosmetic element 3 fitted by the manufacturer.

**[0039]** Applying elements of the cosmetic element 3 may be small combs, brushes, blending brushes, sponges.

**[0040]** The tip protector cap 2 may be transparent, as in the example shown, or opaque or colored or metallic.

**[0041]** Advantageously, the tip protector cap may be fitted with different alternative types of adapter elements 30 of the cosmetic element 3, as shown in Figures 6-9.

**[0042]** Advantageously, the manufacturer has a great saving by being able to produce a single tip protector cap 2 and several cosmetic elements 3 with different applying elements, each mounted on a different adapter element 30.

**[0043]** As regards the operation of the cosmetic pencil 1 with tip protector cap 2 with interchangeable cosmetic element 3, the user removes the tip protector cap 2 from tip 10 of the cosmetic pencil 1 and mounts the tip protector cap 2 on the other end 11 of the cosmetic pencil 1 itself.

**[0044]** The user uses the cosmetic pencil 1 and can mount and remove the tip protector cap 2 both on tip 10 of the cosmetic pencil 1 and on the other end 11 without distinction.

**[0045]** When the user mounts the tip protector cap 2 on the other end of the cosmetic pencil 1, the lower cylindrical portion 4 is superimposed on surface 12 of the cosmetic pencil 1.

**[0046]** The compressing fins 40 exert a pressure on surfaces 12 of the cosmetic pencil 1 such as not to allow the tip protector cap 2 to escape from the other end 11 of the cosmetic pencil 1 during the cosmetic procedure by the user, unless the user imparts sufficient strength to pull the tip protector cap 2 from the other end 11.

**[0047]** When the user mounts the tip protector cap 2 on tip 10 of the cosmetic pencil 1, the compressing fins 40 exert, as already described above, a pressure on surfaces 12 of the cosmetic pencil 1 such as not to allow the tip protector cap 2 to escape from tip 10 of the cosmetic pencil 1.

**[0048]** Moreover, the second upper part 42 of said compressing fins 40 exerts both a pressure on the oblique

surface of tip 10 of the cosmetic pencil 1, and said second upper part 42 acts as a catch to prevent the user from pushing the tip protector cap 2 too low as to damage tip 10 of the cosmetic pencil 1 itself.

**[0049]** When the manufacturer wants to change said cosmetic element 3, he must remove the tip protector cap 2 from the cosmetic pencil 1 and advantageously press the upper base 38 of the adapter element 30 of the cosmetic element 3 up to overcome the pressure exerted by the raised portion 55 of the inner surface 21 of the through opening 20 of the tip protector cap 2. 5

**[0050]** Said adapter element 30 slides downwards in the direction of the lower cylindrical portion 4 of the tip protector cap 2.

**[0051]** The manufacturer uses another applying element of the cosmetic element 3 mounted on the adapter element 30 and pushes said adapter element 30 from below within the through opening 20 of the tip protector cap 2 until said adapter element 30 engages over the raised portion 55 of the inner surface 21 of the through opening 20 of the tip protector cap 2. 15

**[0052]** The manufacturer replaces the tip protector cap 2 on one of the two ends 10, 11 of the cosmetic pencil 1.

**[0053]** Advantageously, both the manufacturer and the user can easily interchange different cosmetic pencils 1 using the same tip protector cap 2. 25

**[0054]** Another advantage is that the cosmetic pencil 1 according to the present invention is extremely compact and space-saving.

**[0055]** A further advantage is that the manufacturer can easily interchange different types of said cosmetic element 3 while maintaining the same tip protector cap 2 and the same cosmetic pencil 1. 30

**[0056]** Yet another advantage is that the manufacturer saves on materials and glues, making said cosmetic pencil 1 with tip protector cap 2 with interchangeable cosmetic elements 3 an environmentally friendly product. 35

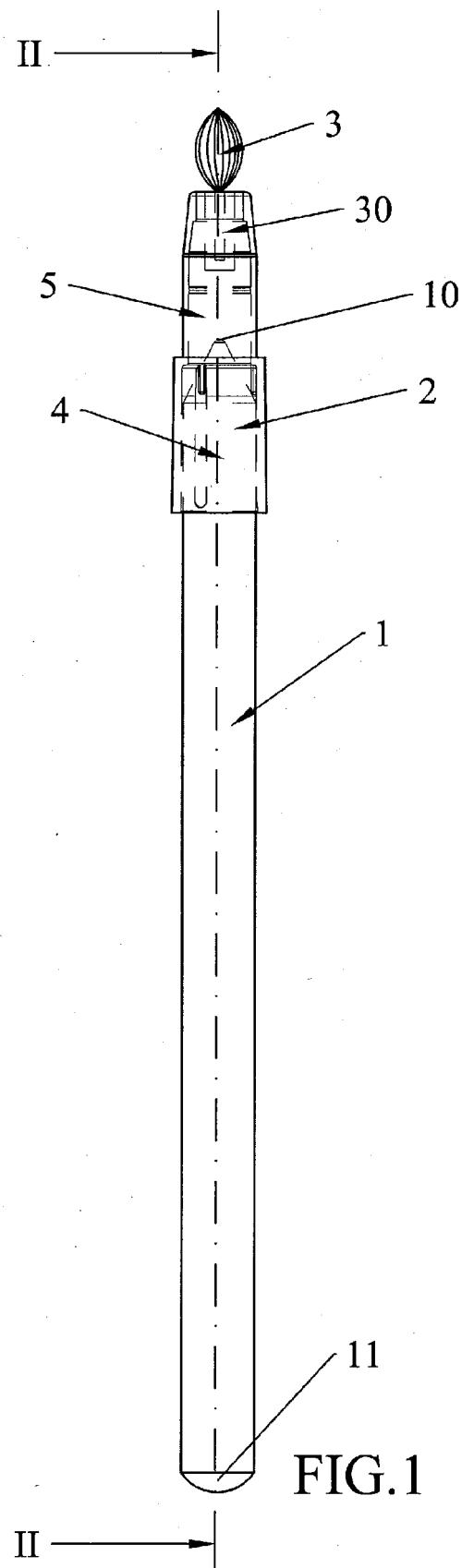
**[0057]** Yet another advantage is that the cosmetic pencil 1 according to the present invention is extremely simplified, easy to assemble and manufacture, very cost-effective for both the manufacturer and the user. 40

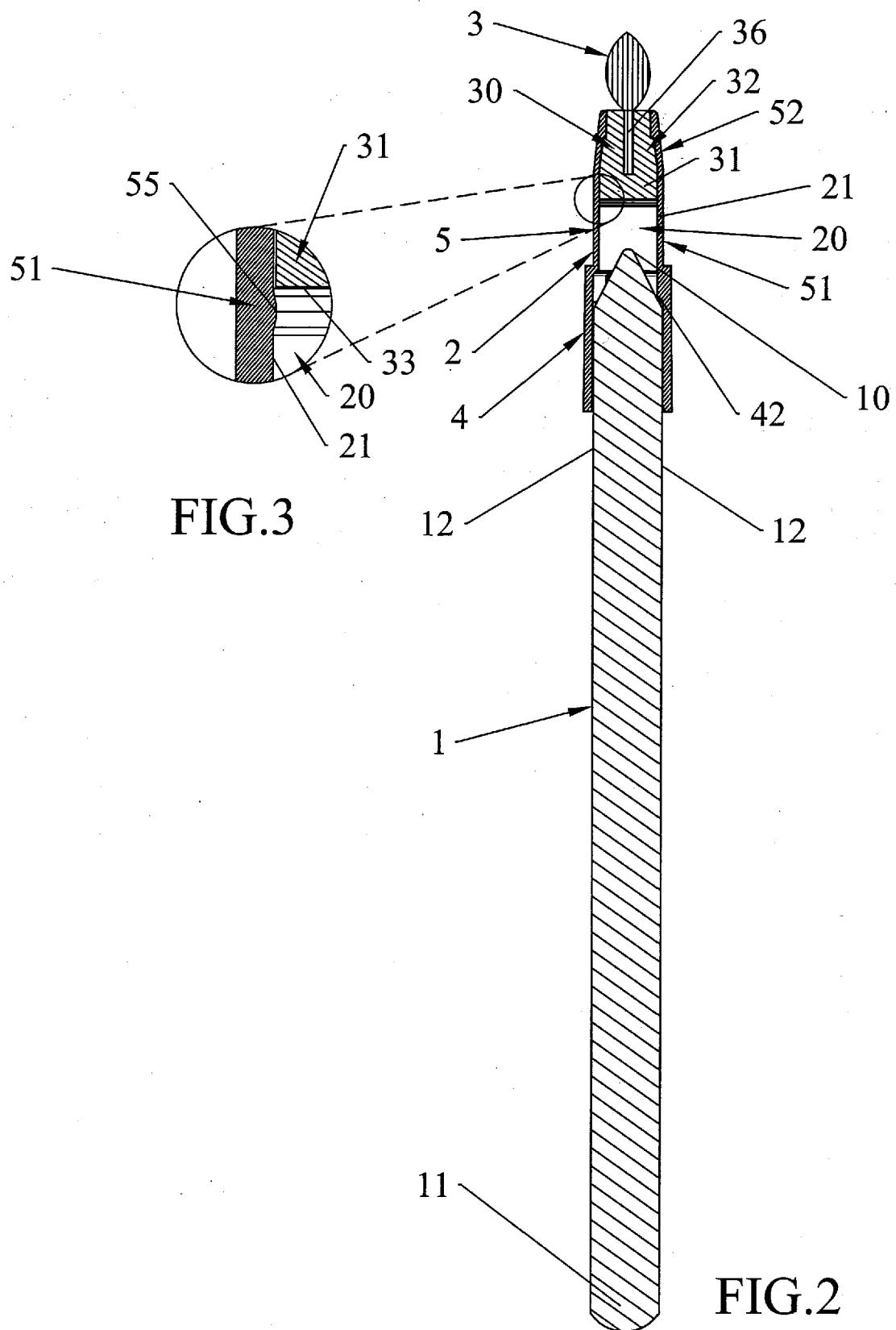
## Claims

1. Cosmetic pencil (1) with tip protector cap (2) with interchangeable cosmetic element (3), said tip protector cap (2) is hollow with a through opening (20) and is mountable directly both interlocking over the tip (10) of the cosmetic pencil (1), and interlocking over the other end (11) of the cosmetic pencil (1) itself, where a interchangeable cosmetic element (3) is insertable inside of said through opening (20) of said tip protector cap (2), said tip protector cap (2) comprising two hollow cylindrical portions (4, 5), namely a first lower cylindrical portion (4), mounting superimposed over sides (12) of each of the ends (10, 11) of the cosmetic pencil (1) and a second up- 50
- 55

per cylindrical portion (5) with a smaller diameter than said first lower cylindrical portion (4), which said second upper cylindrical portion (5) comprises in turn a lower piece (51) of constant diameter and an upper piece (52) tapered towards the top, which said second upper cylindrical portion (5) provides an inner surface (21) of the through opening (20) comprising a raised portion (55) of ring-shape and a catch (56), providing that said raised portion (55) is suitable for separably engaging with said interchangeable cosmetic element (3), which said raised portion (55) is positioned on the inner surface (21) of said lower piece (51) of the second upper cylindrical portion (5), which said raised portion (55) is arranged at such a distance from the tip (10) of the cosmetic pencil (1) in order to safeguard it and said retainer (56) is suitable for preventing the escape of an adapter element (30) of the interchangeable cosmetic element (3) from the through opening (20), **characterized in that** said interchangeable cosmetic element (3) comprises an applying element mounted in a carved housing (36) of said adapter element (30) suitable for being inserted into said through opening (20) of said tip protector cap (2) and said adapter element (30) of the interchangeable cosmetic element (3) comprises a first lower portion (31) of cylindrical shape and a second upper portion (32) tapered upwards, wherein said first lower portion (31) comprises a lower base (33), suitable for being separably engageable with said raised portion (55) of said tip protector cap (2) and said second upper portion (32) has a shape complementary to the inner surface (21) of said upper piece (52) of the second upper cylindrical portion (5) of said tip protector cap (2).

2. Cosmetic pencil (1) according to claim 1, **characterized in that** said lower cylindrical portion (4) of said tip protector cap (2) comprises a multiplicity of compressing fins (40) on the inner surface (21) of the through opening (20), each of said compressing fins (40) suitable for being engaged firmly to any one of said two ends (10, 11) of the cosmetic pencil (1), where each of said compressing fins (40) comprises a first lower part (41) and a second upper part (42), where said first lower part (41) of the compressing fin (40) is raised with respect to the inner surface (21) of the through opening (20), and is suitable for exerting a pressure greater on the sides (12) of the cosmetic pencil (1), and where said second upper part (42) of the compressing fin (40) is even more raised with respect to said first lower part (41) of the compressing fin (40) and is suitable for being engaged on the oblique surface of the tip (10) of the cosmetic pencil (1) to safeguard the tip (10) of the cosmetic pencil (1). 45





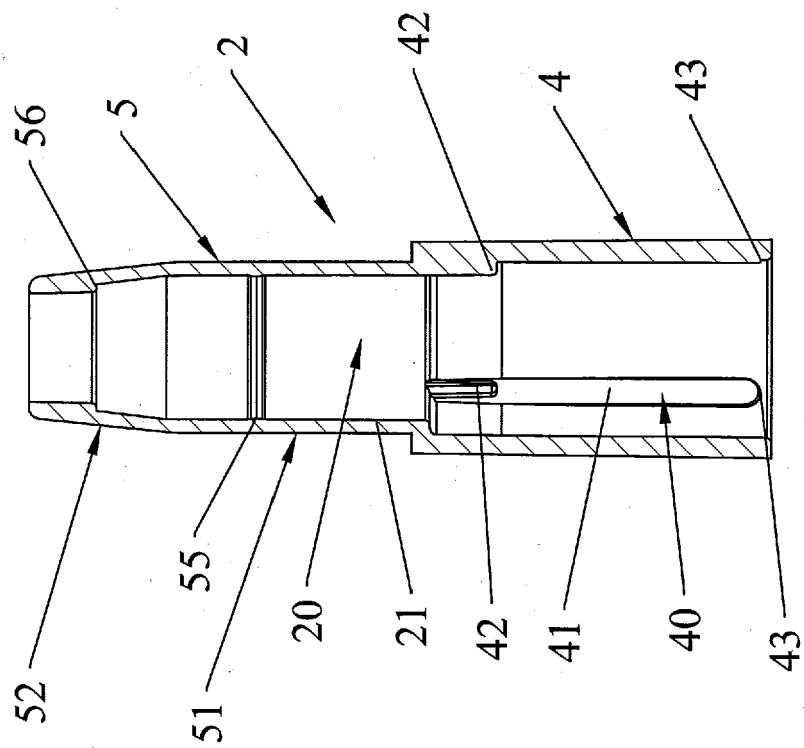


FIG. 5

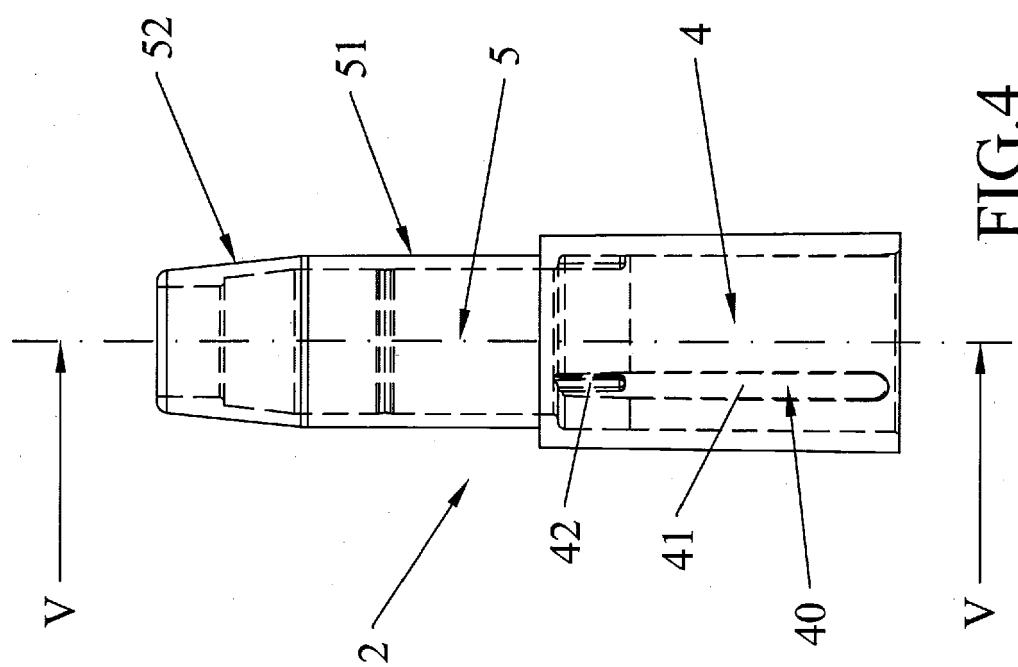
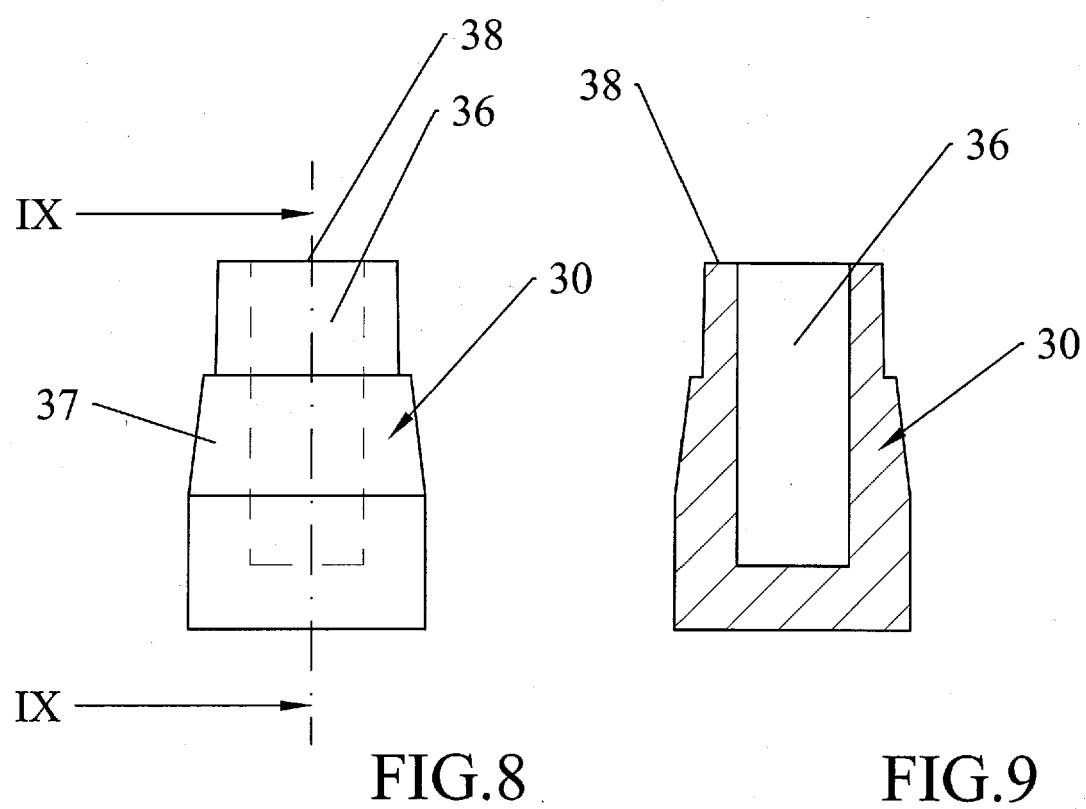
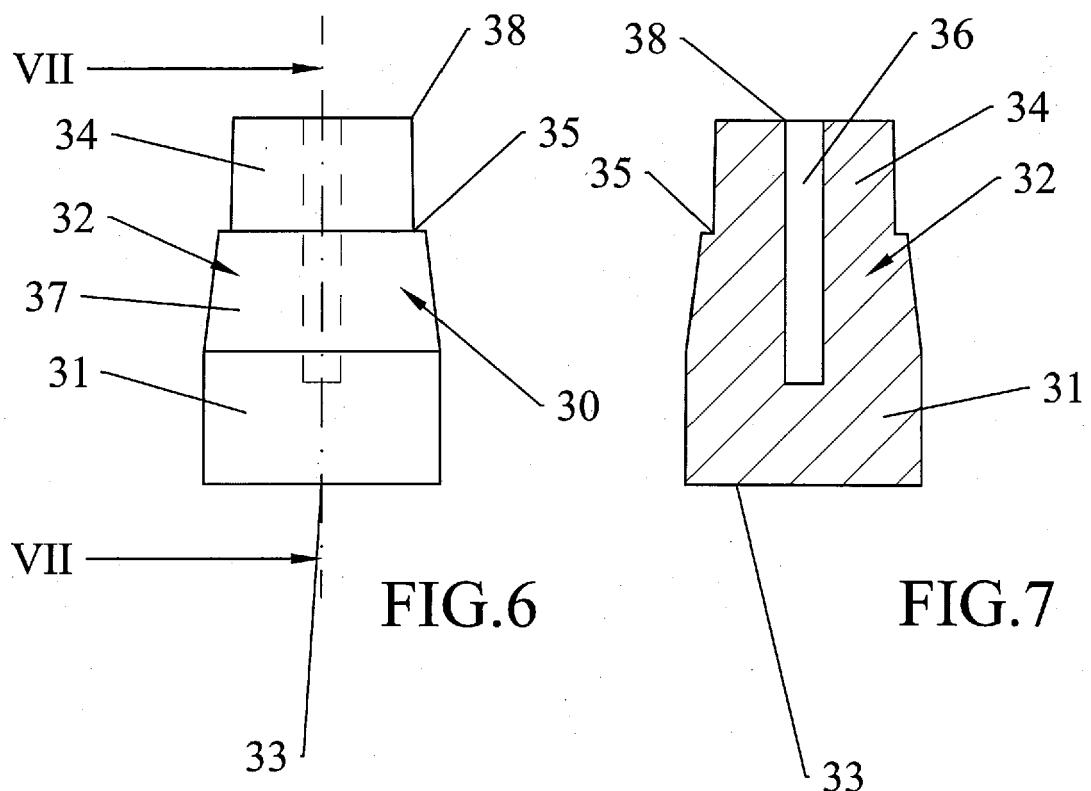


FIG. 4





## EUROPEAN SEARCH REPORT

Application Number

EP 14 15 7161

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1	Place of search The Hague	Date of completion of the search 21 May 2014	Examiner Frank, Lucia
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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