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(54) **METHOD FOR MAKING A MASCARA PACKAGING**

(57) The invention concerns a method for making a mascara container (60), the container (60) being adapted to house an applicator (20) provided with a brush (40), wherein the method comprises the following steps of:
- heating a mascara composition inside a vessel (35) up to a temperature comprised between 70 °C and 80 °C;

- dipping the brush (30) into said vessel (35) containing the aforesaid mascara composition at a temperature comprised between 70 °C and 80 °C;
- extracting the brush (30), having the above the mascara composition gripped thereto, out of the vessel (35).

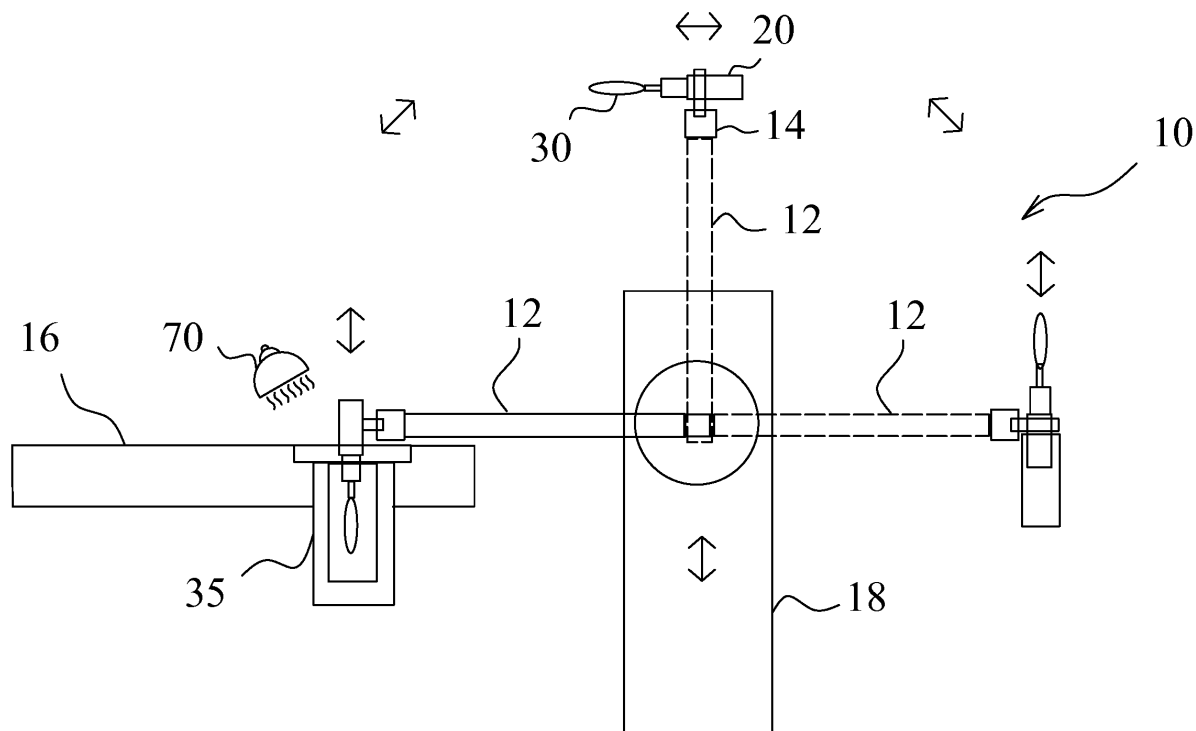


FIG. 1

Description**FIELD OF INVENTION**

[0001] The present invention relates to a method for making a mascara container and a mascara container made by the described method.

KNOWN BACKGROUND ART

[0002] Containers for an individual use of mascara, have long been available on the market. For example, the document EP 2 045 502 describes a container for individual use of mascara, of the traditional type.

[0003] This container has a mascara applicator provided with a stem carrying a brush for applying the mascara to eyelashes.

[0004] The applicator provided with brush is inserted, in its turn, inside a hollow cylindrical body acting as a cap.

[0005] Inside the hollow cylindrical body there is an amount of mascara arranged according to a tubular shape so that the brush, once inserted into the hollow cylindrical body, would be inside the hollow body composed of mascara and would be able to pick up, from the tubular body itself, the amount of mascara required for an application of the product.

[0006] In this kind of embodiments, mascara is thus held inside a portion of the container which is separated from the brush, i.e. the tubular body of mascara, and which acts as a reservoir for the mascara itself.

[0007] Therefore, this kind of containers have to be properly sized in order to provide enough room to hold the amount of mascara which allows a plurality of applications by the user, i.e. multi-dose.

[0008] It should be noted that, in order to allow the user to properly smother the brush, on the one hand the brush must be provided with a specific more or less hard bristle shape allowing the right amount of mascara to be removed from the respective "reservoir" of the container, on the other hand the mascara viscosity can be not so high, since it only has to be temporarily transferred by the brush from the container to the user eyelashes.

[0009] Furthermore it should be considered that, in known mascara containers, an adapter plug must be fit to the vessel neck in order to clean the stick and ensure that the right amount of mascara for each application remains on the brush.

[0010] It is an object of the present invention to provide a mascara container and a respective method for making it, not requiring an internal reservoir of mascara.

[0011] It is a further object of the present invention to make a particularly compact mascara container.

[0012] It is another object of the present invention to make a mascara container without the aforesaid adapter plug.

BRIEF SUMMARY OF THE INVENTION

[0013] These and other objects are achieved by a method for making a mascara container, the container being adapted to house an applicator provided with a brush, wherein the method comprises the following steps of:

- heating a mascara composition inside a vessel up to a temperature comprised between 70 °C and 80 °C;
- dipping the brush inside said vessel containing the aforesaid mascara composition at a temperature comprised between 70 °C and 80 °C;
- extracting the brush having the mascara composition anchored thereto, i.e. having the mascara "gripped" thereto, out of the vessel.

[0014] As an advantage of the present embodiment, said method allows to produce a mascara container in which the brush itself acts as a reservoir of mascara, this product being anchored, or gripped, to the same brush.

[0015] This allows de facto to produce a container which, being small, takes up a little space on the shelves for displaying to the public or in the handbag, pochette bag or other personal transporting vessel of a user.

[0016] It should be noted that herein the definitions "mascara composition" and "mascara" substantially have the same meaning.

[0017] Another advantage of the above stated method according to the present invention lies in the fact that the so obtained container, while allowing the mascara to be optimally dosed when applied, has not the aforesaid adapter plug (wiper).

[0018] Furthermore, the applicator provided with the brush having the mascara anchored/gripped thereto can be packaged in a container similar to the ones used for lip rouges or lipsticks, i.e. a container in which the applicator has screw means for adjusting the brush travel, which container is known in the art as "appliance".

[0019] A further advantage of the invention is given by the mascara composition which is preferably anhydrous, i.e. without water, and its viscosity is preferably calculated so as to allow the mascara to adhere, or anchor, to the brush while allowing it to be easily delivered on the user eyelashes.

[0020] Moreover, an additional object of the invention is a mascara container comprising an applicator provided with a brush and an amount of mascara for multi-dose applications, where the entire amount of mascara is anchored, or gripped, to the brush.

[0021] Further characteristics of the invention can be deduced from the dependent claims.

BRIEF DESCRIPTION OF THE FIGURES

[0022] Further characteristics and advantages of the invention will become apparent from the following de-

scription given by way of non-limiting example, with the aid of the figures illustrated in the attached drawings, in which:

- Figure 1 is a view of an apparatus implementing the method according to the invention; and
- Figures 2-5 schematically show several steps of the method of the invention.

DETAILED DESCRIPTION OF SOME EMBODIMENTS OF THE PRESENT INVENTION

[0023] Referring first to figure 1, an apparatus globally referred to with the numeral 10 is shown, for carrying out at least part of the method according to a preferred aspect of the invention.

[0024] The apparatus 10 has a support 18 sustaining a rotating arm 12, the latter being provided with a gripper 14 to grab at least part of a mascara applicator 20 provided with a stem 25 carrying an exposed mascara brush 30, for example of a known type. Such a brush 30 substantially is a kind of brush provided with bristles or thin protrusions jutting from the stem 25, which can be made of a plastic material or fiber material.

[0025] Next to the support 18 there is a rotating platform 16 provided with a plurality of mascara containers 35 which has, for example, a truncated-conical shape and sometimes called "ogives", adapted to have the brush 30 of the applicator 20 dipped therein.

[0026] Each time the rotating platform 16 rotates, the rotating arm 12, by means of the gripper 14, picks up an applicator 20 and the respective brush 30 and carries them at the vessel 35 in order to dip the brush 30 therein.

[0027] In particular, the applicator 20 can be similar to that used in lip rouge containers or generally lipstick containers, i.e. it can be shaped to be constrained to screw or sliding cursor means adapted to adjust the travel of the brush 30 itself with respect to a hollow cylindrical body holding and protecting, together with the respective plug, the brush itself. It should be noted that the vessel is known in the art also as "appliance".

[0028] In the exemplary case shown herein, the applicator 20 can be constituted by a support, which can be concave and is called "cup", carrying the aforesaid stem 25 with the respective brush 30 which is assembled or includes special means so as to be constrained to a worm or a sliding cursor connected to a rotating or translating handle constrained to the hollow cylindrical body of a container.

[0029] In the method according to the invention, also different types of applicator can be used as long as at their end they carry a stem provided with a brush 30 allowing the mascara to be anchored or gripped thereto.

[0030] As evident to the person skilled in the art, it should then be noted that the method according to the invention can be also applied only to brushes 30 with respective stems 25 that can be initially not necessarily constrained to other components of a container and, thus

a final step for fastening/constraining the brush to a convenient container and/or applicator can be provided.

[0031] Before dipping the brush 30 into the vessel 35 holding the mascara (figure 2), the mascara itself is heated up inside the vessel 35 so that the brush 30 (figure 3) is dipped within a volume of mascara at a predetermined temperature, preferably comprised between 70°C and 80°C, in order to allow the mascara (figure 3) to grip or anchor to the brush 30.

[0032] It should be observed that, according to a peculiar aspect of the method according to the present invention, the mascara in which the brush 30 is inserted, or has to be inserted, can also be heated up, for example, by heating up directly the vessel 35 or the mascara held therein, and this can be done immediately before, or contemporaneously with, the insertion of the brush 30 itself inside the vessel 35 holding the mascara.

[0033] Advantageously, as afore mentioned, the heating can take place at a temperature comprised between 70 °C and 80 °C and the whole cycle comprising heating the mascara, inserting the brush 30 in the mascara vessel 35 and subsequently extracting it, can be carried out in a space of 15 to 40 seconds.

[0034] The brush 30 stays inside the vessel 35 of the mascara heated to 70-80°C for a period comprised between 2 and 6 seconds.

[0035] The aforesaid heating not only can take place when the brush 30 is held inside the vessel 35, but also can be continued once it is extracted from the latter.

[0036] The heating step of the mascara intended to grip to the brush 30 inside the vessel 35 can take place through the action of one or more infrared lamps 70 or through heating resistors 80, or other means known in the art not illustrated herein. Preferably - but not exclusively - the used mascara composition is anhydrous and can have a viscosity comprised between 28 and 40 Pa*s.

[0037] After a predefined dipping time in the heated mascara in the vessel 35, the brush 30 having the mascara gripped or anchored thereto, is extracted from the vessel 35 (Figure 4).

[0038] As the Applicant noticed, the method described herein preferably with the above stated processing values, guarantees the mascara to be optimally fixed on the brush 30 also allowing to effectively keep the mascara itself on this brush 30 over time, so as to allow it to be applied many times without having to arrange the mascara on the brush 30 at each application.

[0039] Practically, thanks to the above stated method, an amount of the so-heated mascara allowing multiple applications (multi-dose), "grips" to the brush 30, thereby allowing the mascara itself to be effectively released over a long time during several applications done by the user.

[0040] Additionally, in order to automate the above described method, the refilling of the vessels 35 holding the mascara composition can be controlled by means of a photocell actuating a dosing device of the mascara in order to keep constant the level in the vessels 35.

[0041] Finally the brush 30, having the mascara an-

chored thereto, is definitely inserted in a substantially tight container 60. For example, in the case where the brush 30 is fitted on an applicator 20, it can be inserted in a hollow cylindrical body, preferably provided with screw or sliding cursor means, of a type similar to the one used for lipsticks, which is then made impenetrable with respect to the external environment by applying a substantially tight cap 50 on the afore said hollow cylindrical body 60 (Figure 5).

[0042] It should be noted that the term "container" means any vessel comprising at least one hollow body in which at least the brush 30 can be inserted as possibly fitted on a respective applicator 20, and provided with means for sealing/isolating from the environment, for example a cap.

[0043] It should also be noted that hereinafter the term "substantially tight" means that the container 60 is shaped so as to substantially prevent the ambient air from entering the container itself when properly sealed, or at least make it difficult, for example due to a plug provided with gaskets or sealing rings that is applied on a complementary portion of a respective body for holding the applicator 20 or at least the brush 30. Clearly, the object of this solution is to preserve over time the optimal user applicability of the mascara inside the container 60 itself.

[0044] As an alternative to the above described method it is possible to use a gripper, or another gripping device, allowing a plurality of applicators, each one provided with a brush, to be gripped and inserted in a properly sized vessel holding the mascara composition.

[0045] In addition, although a widely automated method has been described, it is possible to carry it out manually or to automate only some steps.

[0046] Thanks to the method herein described, it is therefore made a mascara container comprising an applicator 20 provided with a brush 30 to which an amount of mascara can be anchored or gripped that is enough to allow for multi-dose applications, where the whole amount of mascara for such multi-dose applications is precisely anchored to the brush 30.

[0047] Namely, by the method of the present invention it is possible to grip, or anchor, to the brush 30 an amount of mascara that is enough to allow for multiple and repeated applications of this mascara on a user's eyes, the container not having to be provided with a "reservoir" for the mascara itself to allow the brush 30 to draw therefrom. Advantageously, this mascara container is provided with a tight cap so that the mascara on the brush 30, preferably further having an anhydrous composition, can preserve its optimal applicability for a long time.

[0048] So, basically, the container 60 can comprise a body for holding/supporting at least the brush 30 or the applicator 20 and which is provided with a removable tight cap 50.

[0049] Also, as mentioned, the mascara container 60 can be of the type generally used for lipsticks, i.e. can be a tubular or cylindrical container preferably provided with

screw or sliding cursor means for extracting and retracting the brush 30 with respect to a respective hollow cylindrical body that, when in the retracted position, protects the brush 30 itself and provides coupling means having a corresponding removable cap 50 preferably adapted to ensure the airtightness of the entire container 60.

[0050] More generally, thanks to the above described method, the mascara container according to the present invention can be of the type comprising a hollow, tubular or cylindrical body 55 in which the afore said applicator 20 and the respective brush 30 are inserted, so that the latter is movable between an position extracted with respect to the hollow cylindrical body 55, in which the mascara is allowed to be applied, and a position retracted into the same hollow cylindrical body 55. Additionally, this container can comprise means, for example of the worm or sliding cursor type, in order to manually drive the reversible displacement of this applicator 20, and thus of the brush 30, between said extracted and retracted positions, the means can be actuated, for example, by a knob 75.

[0051] It should be noted that the so-obtained product is comparable to a mascara "stick" allowing a plurality of applications without having to provide the respective container with a mascara "reservoir" from which the brush draws.

[0052] Preferably, but not necessarily, in the above described method the use of a mascara composition having a weight percent of isododecane comprised between 60% and 65%, a weight percent of trimethylsiloxysilicate comprised between 5% and 10%, a weight percent of titanium dioxide comprised between 5% and 10% and a weight percent of tribehenin comprised between 5% and 10%, is provided.

[0053] In addition to these components, the composition can include proper amounts of alumina, synthetic wax, Disteardimonium Hectorite, Silica Dimethyl Silylate, Propylene Carbonate in order to control the product viscosity, and suitable dyes. Obviously, modifications or improvements suggested by incidental or particular reasons can be made to the previously described invention without thereby departing from the scope of the invention as claimed below.

Claims

1. Method for making a mascara container (60), the container (60) being suitable to house an applicator (20) provided with a brush (30), wherein the method comprises the following steps of:

- heating a mascara composition inside a vessel (35) up to a temperature comprised between 70 °C and 80 °C;
- dipping the brush (30) into said vessel (35) containing the aforesaid mascara composition at a temperature comprised between 70 °C and 80

°C;

- extracting the brush (30), having the aforesaid mascara composition gripped thereto, out of the vessel (35).

2. Method according to claim 1, wherein the aforesaid heating, dipping and extracting steps are carried out in a time lapse comprised between 15 and 40 seconds and/or said dipping step of the brush (30) into the vessel (35) is carried out in a time lapse comprised between 2 and 6 seconds. 5
3. Method according to claim 1 or 2, wherein the heating step of the mascara composition is carried out through the action of one or more infrared lamps or through heating resistors. 10 15
4. Method according to any one of the preceding claims, wherein said mascara composition is anhydrous. 20
5. Method according to any one of the preceding claims, wherein said mascara composition has a viscosity comprised between 28 and 40 Pa*s. 25
6. Method according to any one of the preceding claims, wherein a step of inserting the brush (30), having the aforesaid mascara composition gripped thereto, into a substantially tight container (60) is provided. 30
7. Method according to claim 6, wherein such a container (60) comprises a body for holding/supporting at least the brush (30), the latter being provided with a removable tight cap (50). 35
8. Method according to anyone of the preceding claims, wherein the use of a mascara composition having a weight percent of isododecane comprised between 60% and 65%, a weight percent of trimethylsiloxysilicate comprised between 5% and 10%, a weight percent of titanium dioxide comprised between 5% and 10% and a weight percent of tribehenin comprised between 5% and 10%, is provided. 40 45
9. Mascara container (60) comprising an applicator (20) provided with a brush (30) and an amount of mascara for multi-dose applications, where the entire amount of mascara for multi-dose applications is gripped to the brush (30). 50
10. Mascara container (60) according to claim 9, wherein said container is substantially tight.
11. Mascara container according to claim 9 or 10, **characterized in that** it comprises a hollow cylindrical body in which said applicator (20) is inserted with the respective brush (30), so as to be movable be-

tween an extracted position for applying the mascara, and a retracted position, and means to manually control the reversible displacement of such an applicator between said extracted and retracted positions.

12. Mascara container according to claim 11, wherein said means to manually control the reversible displacement of such an applicator (20) between said extracted and retracted position are of the screw or sliding cursor type.

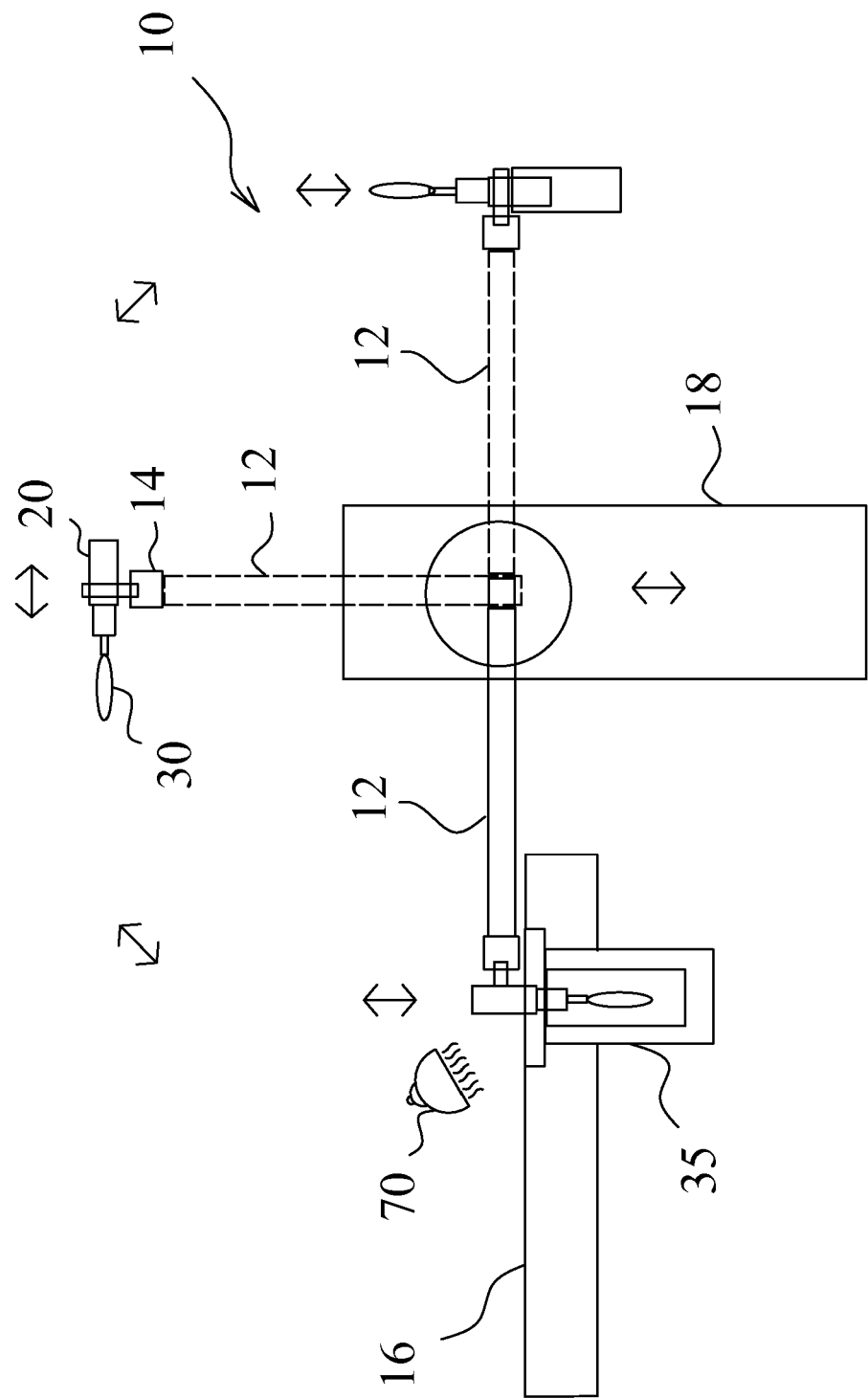


FIG.1

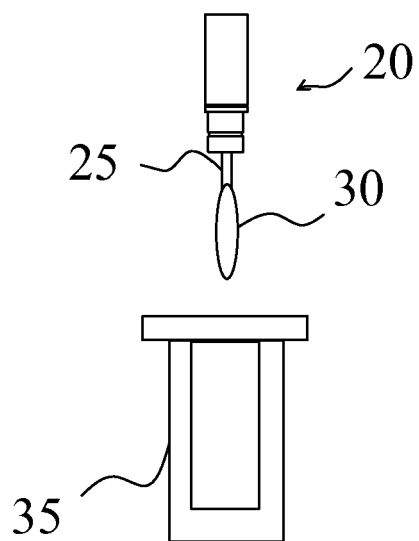


FIG. 2

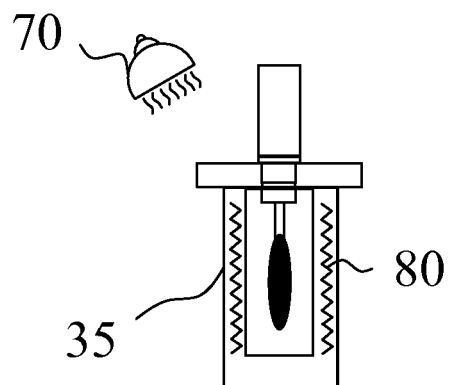


FIG. 3

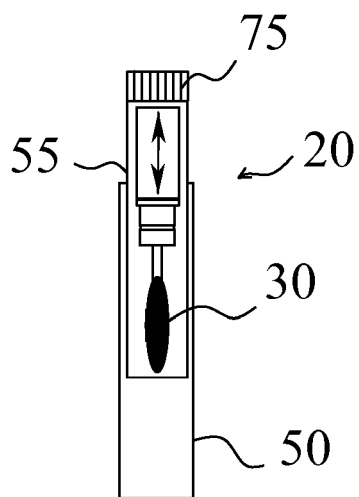


FIG. 4

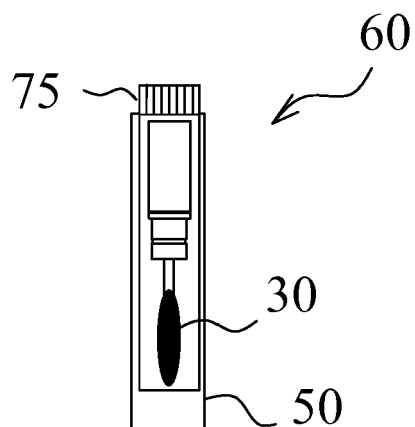


FIG. 5



EUROPEAN SEARCH REPORT

 Application Number
EP 15 16 7445

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			TECHNICAL FIELDS SEARCHED (IPC)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 23 October 2015	Examiner Dinescu, Daniela
CATEGORY OF CITED DOCUMENTS 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 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			

EPO FORM 1503 03/02 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 15 16 7445

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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