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(54) Closure for bottles in general and particularly for nails polish bottles

(57) A closure (1) for bottles in general and particularly for nail polish bottles, comprising a plug-like body (2), which can be applied to the neck (6) of a bottle and the like and can be accommodated within a cap (3) for

connection to the bottle, the plug-like body (6) forming a sealing gasket (10), which protrudes axially from the external portion (11) of the plug-like body (2) and can engage the internal surface of the neck (6).

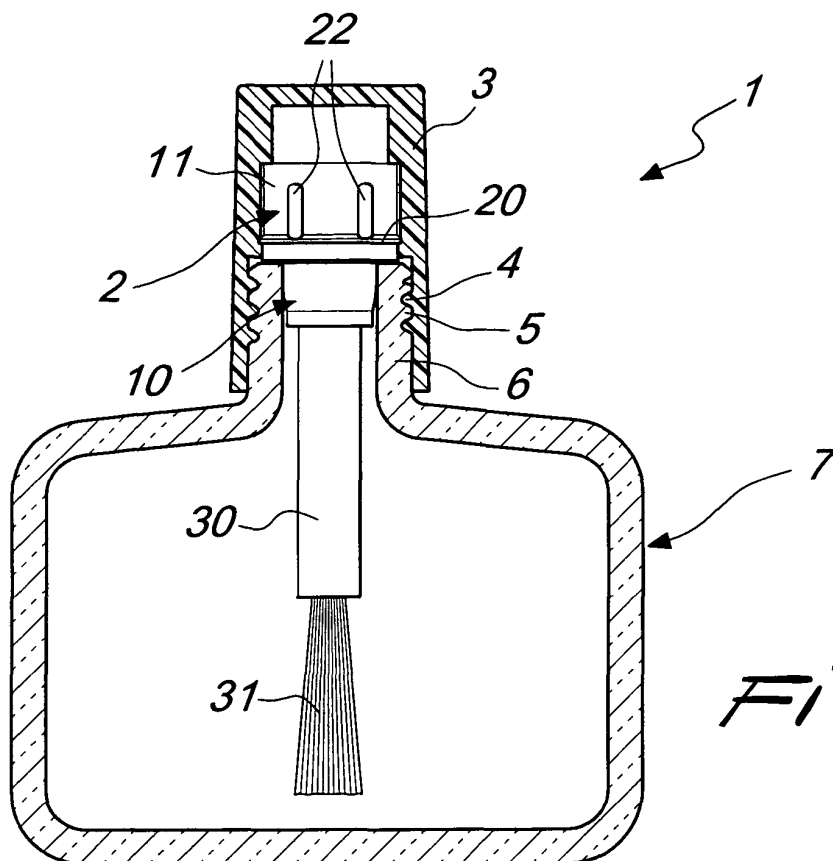


Fig. 1

Description

[0001] The present invention relates to a closure for bottles in general and particularly for nail polish bottles.

[0002] As is known, closures for bottles in general, which are connected to a brush, generally have a cap-like body to which the brush is connected by means of a circular element, which is associated with the end of the shaft of the brush and is also designed to act as a sealing gasket at the front end of the mouth arranged at the end of the neck of the bottle.

[0003] This type of embodiment suffers various drawbacks, the first one consisting in that the seal is not always optimum and accordingly there is the risk of loss of volatile components, which is particularly severe in the case of nail polishes and the like.

[0004] Another problem further consist in that the coupling between the brush and the cap in some cases is precarious, and therefore there is the risk that when the cap is removed the brush remains anchored to the bottle.

[0005] The aim of the invention is to solve the problems described above by providing a closure for bottles in general and particularly for nail polish bottles which allows to obtain an optimum seal which ensures assured closure of the bottle, absolutely preventing the loss of volatile components and thus contributing to a better preservation of the quality requirements of the contained product.

[0006] Within this aim, an object of the invention is to provide a closure in which the connection between the brush and the cap is rendered particularly stable, thus preventing the possibility of accidental separation during opening.

[0007] Another object of the present invention is to provide a closure in which the shape of the brush allows to improve the use of the product, particularly nail polishes, by allowing more uniform and homogeneous application.

[0008] Another object of the present invention is to provide a closure for bottles in general which, thanks to its particular constructive characteristics, is capable of giving the greatest assurances of reliability and safety in use.

[0009] This aim and these and other objects, which will become better apparent hereinafter, are achieved by a closure for bottles in general and particularly for nail polish bottles, according to the invention, comprising a plug-like body, which can be applied to the neck of a bottle and the like and can be accommodated within a cap for connection to said bottle, characterized in that said plug-like body forms a sealing gasket, which protrudes axially from the external portion of said plug-like body and can engage the internal surface of said neck.

[0010] Further characteristics and advantages will become better apparent from the detailed description of a closure for bottles in general and particularly for nail polish bottles, illustrated by way of non-limiting example in the accompanying drawings, wherein:

Figure 1 is a schematic sectional view of the closure applied to a bottle;

Figure 2 is a schematic perspective view of the plug-like body;

Figure 3 is a plan view of the plug-like body;

Figure 4 is a sectional view, taken along the line IV-IV of Figure 3;

Figure 5 is a sectional view, taken along the line V-V of Figure 3.

[0011] With reference to the figures, the closure for bottles in general and particularly for nail polish bottles, according to the invention, generally designated by the reference numeral 1, comprises a plug-like body 2, which can be connected to a cap 3 which has, in a per se known manner, an internal thread 4 for engaging an external thread 5 formed on the neck 6 of a bottle 7, which can contain any product deemed appropriate and in particular nail polish.

[0012] The plug-like body 2 forms a sealing gasket 10, which protrudes axially from the external portion 11 of the plug-like body 2.

[0013] The sealing gasket 10 substantially has a cylindrical body, with a tapering portion 10a at the free end, which facilitates insertion in the neck 6 and allows to provide a seal on the internal surface of said neck.

[0014] At the coupling portion of the gasket 10, a rim 15 is formed axially on the portion 11, and an annular protrusion 16 is provided thereon, acting so as to form a seal on the axial end of the neck 6.

[0015] A tooth 20 is provided on the surface of the external portion 11 and provides engagement with an abutment 21 formed on the internal surface of the cap, which is coupled with a snap action on the plug-like body 2, which in order to improve the coupling characteristics is provided with axial ridges 22 which protrude uniformly and circumferentially.

[0016] A shaft 30 protrudes axially with respect to the gasket 10 and forms a brush 31, which is thus directly connected to the closure.

[0017] A feature of the invention consists in that the shaft 30 has an oval cross-section and accordingly the bristles that form the brush 31 have a flattened arrangement, which improves the use of the product on nails, allowing more uniform and homogeneous application.

[0018] It should be noted that the thicknesses of the brush and in particular of the head of the brush are devised so as to reduce drastically the risks of migration of the colors or solvents contained in nail polish, thus achieving a longer life of the quality requirements of the product.

[0019] It should be added to the above that the gasket is provided so that it can adapt easily to the inside diameters of the necks of bottles, which can be made of glass as well as of plastics.

[0020] From what has been described above, it is therefore evident that the invention achieves the intended aim and objects, and in particular the fact is stressed that the particular structure given to the plug-like body improves its coupling to the cap 3 and optimizes the closure

tightness characteristics of the bottle.

[0021] In practice, the materials used, so long as they are compatible with the specific use, as well as the contingent shapes and dimensions, may be any according to requirements.

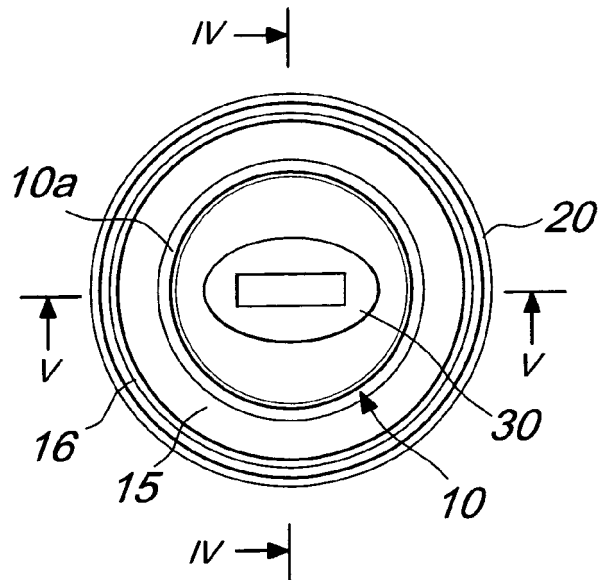
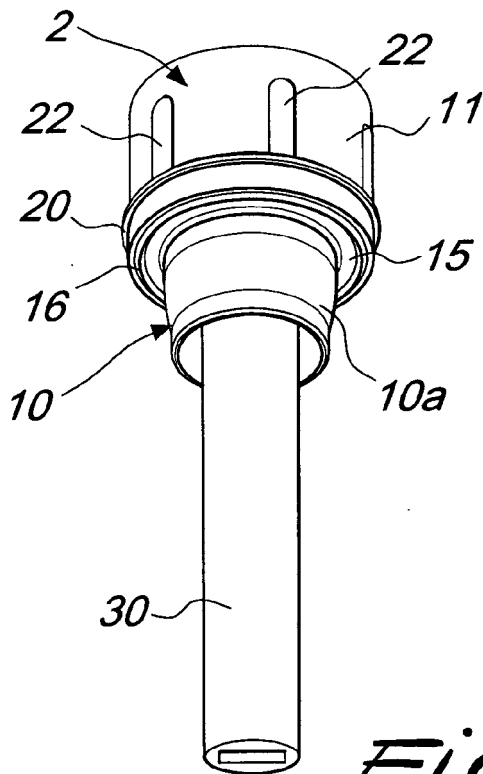
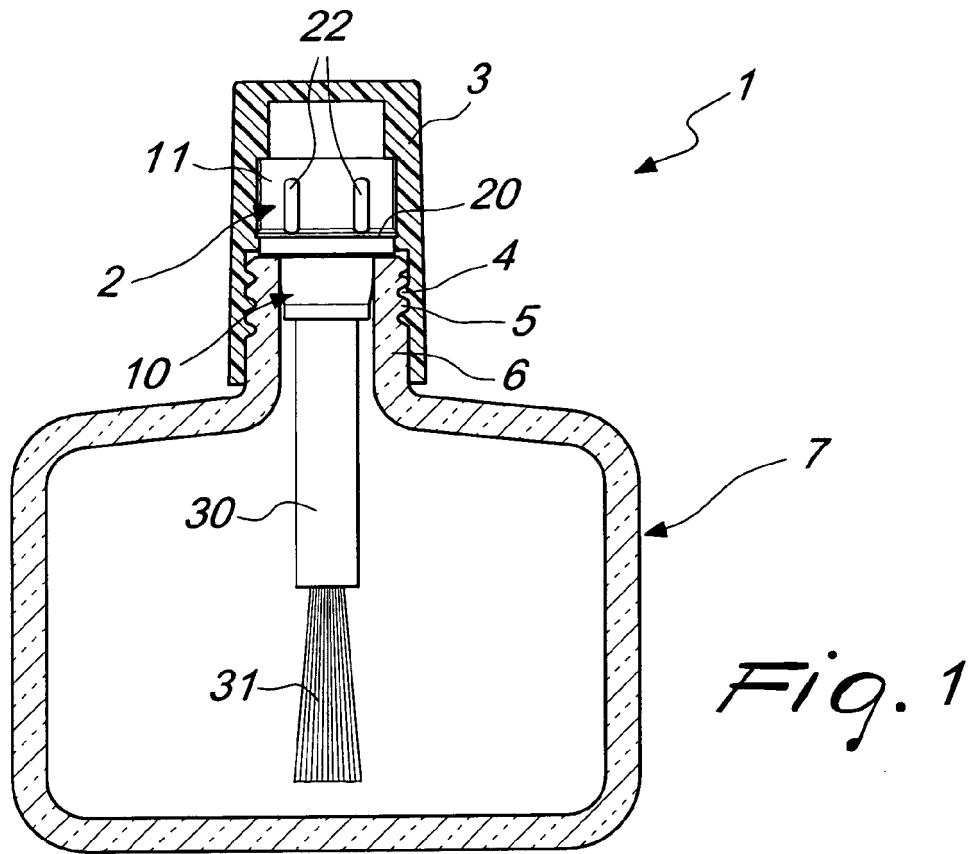
[0022] The disclosures in Italian Utility Model Application No. MI2004U000436 from which this application claims priority are incorporated herein by reference.

[0023] Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly, such reference signs do not have any limiting effect on the interpretation of each element identified by way of example by such reference signs.

tened configuration in order to form a brush (31).

Claims

1. A closure (1) for bottles in general and particularly for nail polish bottles, comprising a plug-like body (2), which can be applied to the neck (6) of a bottle and the like and can be accommodated within a cap (3) for connection to said bottle, **characterized in that** said plug-like body (2) forms a sealing gasket (10), which protrudes axially from the external portion (11) of said plug-like body (2) and can engage the internal surface of said neck (6). 20 25
2. The closure according to claim 1, **characterized in that** said sealing gasket (10) has a substantially cylindrical body with a tapered portion (10a) at the free end thereof. 30
3. The closure according to the preceding claims, **characterized in that** a rim (15) is formed axially on said plug-like body (2) at the coupling portion of said sealing gasket (10) and has an annular protrusion (16) which acts hermetically on the axial end of said neck (6). 35 40
4. The closure according to one or more of the preceding claims, **characterized in that** it comprises, on the surface of said external portion, a tooth which can engage an abutment formed on the internal surface of said cap. 45
5. The closure according to one or more of the preceding claims, **characterized in that** it comprises, on the surface of said external portion (11), axial ridges (22) which are uniformly distributed circumferentially. 50
6. The closure according to one or more of the preceding claims, **characterized in that** it comprises, axially with respect to the sealing gasket (10), a shaft (30) which has an oval cross-section and supports, at its free end, bristles which are arranged in a flat- 55



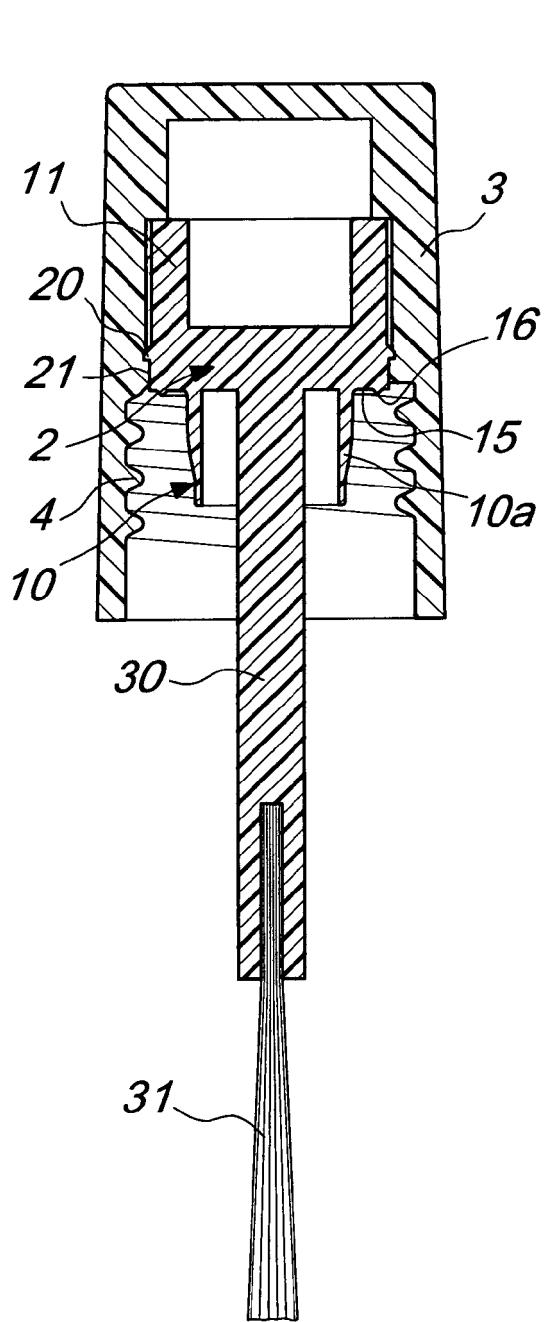


Fig. 4

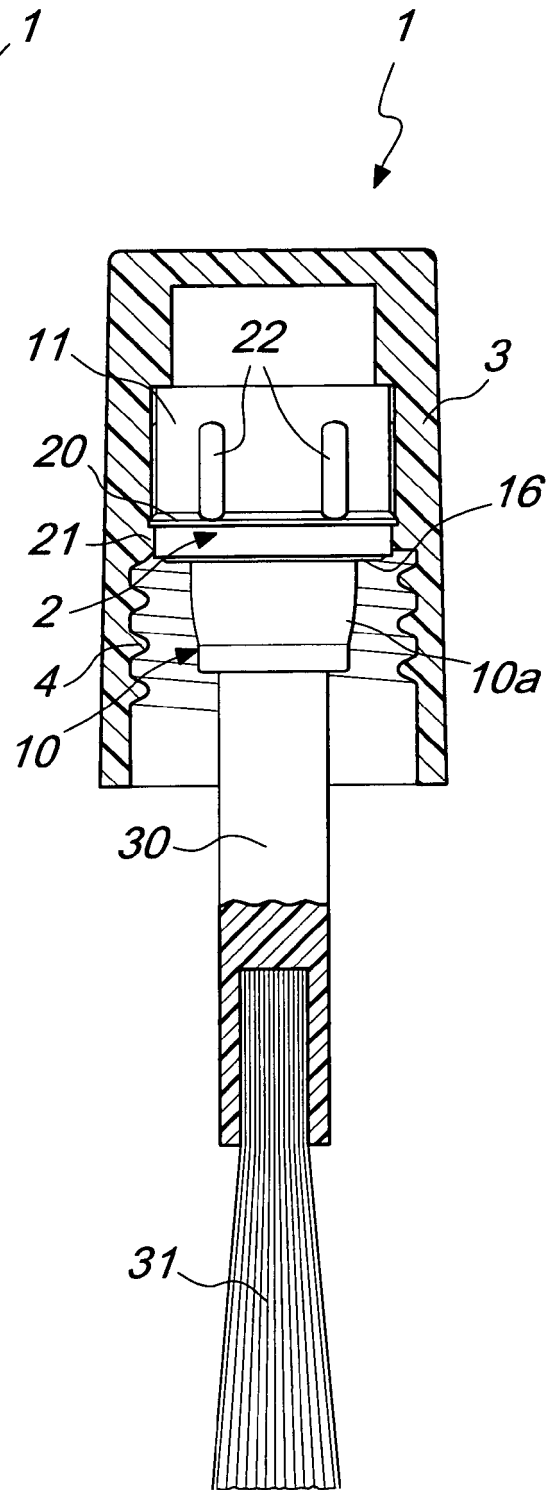


Fig. 5