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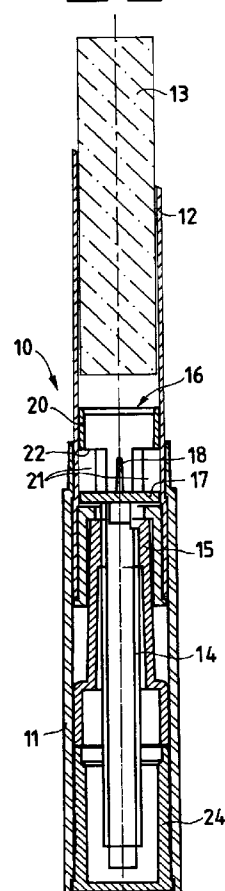
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(54) Improvements to cosmetic pencils

(57) A cosmetic pencil comprises a pastel (13) and a pastel-holder (12) extending from a body (11) which contains a mechanism (14, 15) to pull out and to withdraw said pastel (13) from said pastel-holder (12). According to the invention, said mechanism acts on the fixing system at the rear end of said pastel (13), said fixing system comprising radial expansion means (18, 118, 119) of the doughy material of the pastel (13) rear end which fills the engagement seats (21, 22).

Fig.2



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Description

[0001] The present invention refers to some innovative and advantageous improvements to the cosmetic pencils, as lipsticks and the like.

[0002] Said pencils, in the cosmetic sector, are commonly referred to as "slim sticks".

[0003] As is known to the skilled in the art, the cosmetic pencils are formed by a pastel which is inserted into a tubular pastel-holder which comprises a mechanism to pull out and to withdraw said pastel from its seat.

[0004] The structure of said mechanism is formed by a screw and a nut screw system which drives the pastel-holder bottom portion, which can slide back and forth with respect to an outer tubular container.

[0005] One of the most significant technical problems to be solved in order to provide a cosmetic slim stick is related to the steady fixing of the pastel rear end to the pastel-holder bottom which is slidable along its seat (pastel-holder).

[0006] In fact the pastel, since it is formed by doughy material and, due to the continuous pulling out and withdrawal from its seat, could come off from the engagement with the pastel-holder bottom driven by the control mechanism.

[0007] As a consequence, after having pulled out the pastel, it is no longer possible - by driving the screw and nut screw system - to withdraw the pastel inside the pastel-holder with all the disadvantages deriving therefrom, since said withdrawal shall be done by pushing back manually the pastel inside its seat.

[0008] Another disadvantage of the known cosmetic pencils is that the sliding of the pastel pullout mechanism with respect to the pastel-holder is not always easy because of the surface friction between the components with mutual movement.

[0009] A purpose of the present invention is to overcome the disadvantages of the known art by providing a cosmetic pencil provided with a system to fix the pastel inside its seat, said system working even after having pulled out the pastel several times.

[0010] Said purpose is achieved by a cosmetic pencil having the features disclosed in the accompanying claims.

[0011] The structural and functional features of the invention and its advantages in comparison with the known art will be better apparent from the following description, which refers to the accompanying drawings showing two embodiments of the invention. In said drawings:

Figure 1 is an exploded sectional view of a cosmetic pencil according to the invention;

Figure 2 is a view similar to the one of Figure 1, but it shows the pastel while it is inserted into the corresponding pastel-holder;

Figure 3 is a view similar to the one of Figure 2, but

it shows the pastel fixed to the corresponding pull-out mechanism;

Figure 4 is a bottom plan view of the pastel-holder; Figure 5 is a top plan view of the pastel-holder;

Figure 6 is a sectional view taken along the plane VI-VI of Figure 5;

Figure 7 is a sectional view taken along the plane VII-VII of Figure 5; and

Figure 8, 9 and 10 are views as in Figures 1, 2 and 3, but said figures show another possible embodiment of the invention.

[0012] With reference to Figures 1-3 of the drawings, the cosmetic pencil of the present invention is indicated, as a whole, by numeral 10 and its structure is formed by a tubular body 11, wherefrom a tubular pastel-holder 12 extends, which holds a cosmetic pastel 13. The bottom portion of said tubular body 11 is closed by a cap 24.

[0013] The body 11 has a traditional mechanism with a screw 14 and a nut screw 15, said mechanism driving a cup 16 - which is slidable back and forth - wherein the rear end of the pastel 13 is inserted and fixed. The cup 16 is integral with the screw 14.

[0014] According to the present invention, a diametric projection 18 extends from the centre of the bottom 17 of said cup 16, whilst the wall 20 of the cup 16 has openings 21 and each one of said openings defines an undercut 22. The projection 18 has a slightly tapered section.

[0015] As can be clearly seen from Figure 6 of the drawings, the projection 18 has an engagement opening 23, the purpose of which will be explained hereinafter.

[0016] From the above description, it is clear that, when the pastel 13 is forced inside the cup 16, as shown in the Figure 1-3 sequence, and the rear end of the pastel 13 meets the tapered projection 18, said rear end will expand outwardly in the radial direction and it will fill the openings 21 of the cup wall 20 (as shown in Figure 3), said pastel rear end will be steadily fixed to the cup 16, thanks to the undercuts 22. The fixing is even more stable since the doughy material penetrates into the opening 23 of the projection 18.

[0017] In this way, the pastel 13 pulling out and withdrawal operations from the pastel-holder 12 can easily be done till the consumption of said pastel, without any concern about the detachment of the pastel rear end from the sliding cup 16.

[0018] Further, the doughy material forming the pastel rear end which expands through the openings 21 has, besides a fixing function, a lubricant function for the surfaces of the components which have a relative movement.

[0019] In the other possible embodiment shown in Figures 8-10, the radial projection 18 is substituted by a plurality of projections 118, positioned along the circumference, with a tapered tip 119.

[0020] The purpose is identical to the one of the pro-

jections 18, i.e. to expand the pastel rear end outwardly, so that some doughy material fills the openings 21 and engages with the corresponding undercuts 22.

[0021] The scope of protection of the present invention is therefore defined by the accompanying claims. 5

Claims

1. Cosmetic pencil which comprises a pastel (13) and a pastel-holder (12) extending from a body (11) 10 which contains a mechanism (14, 15) to pull out and to withdraw said pastel (13) from said pastel-holder (12), characterised in that said mechanism acts on the fixing system at the rear end of said pastel (13), said fixing system comprising radial 15 expansion means (18, 118, 119) of the doughy material of the pastel (13) rear end which fills the engagement seats (21, 22).

2. Cosmetic pencil as claimed in claim 1, characterised in that said fixing system comprises a cup (16), 20 which is slidable back and forth along said pastel-holder (12), and said mechanism (14, 15) to pull out and to withdraw the pastel acts on said cup, the pastel (13) rear end is inserted and fixed in said cup 25 by means of a diametric projection (18), with a tapered section, which extends from the centre of the bottom portion (17) of the cup (16), openings (21) being also provided in the wall (20) of the cup (16) and each opening defining an undercut (22) 30 wherein the pastel (13) rear end, made of doughy material, engages itself and expands due to the presence of said projection.

3. Cosmetic pencil as claimed in claim 2, characterised in that said projection (18) has an opening (23) 35 suitable to be filled by the doughy material to fix the pastel rear end.

4. Cosmetic pencil as claimed in claim 2, characterised in that the doughy material which fills the open- 40 ings (21) comes in contact also with the inner surface of the pastel-holder (12) and does a lubricant function.

5. Cosmetic pencil as claimed in claim 1, characterised in that said radial expansion means are formed 45 by a plurality of projections (118), positioned along the circumference, with a tapered tip (119). 50

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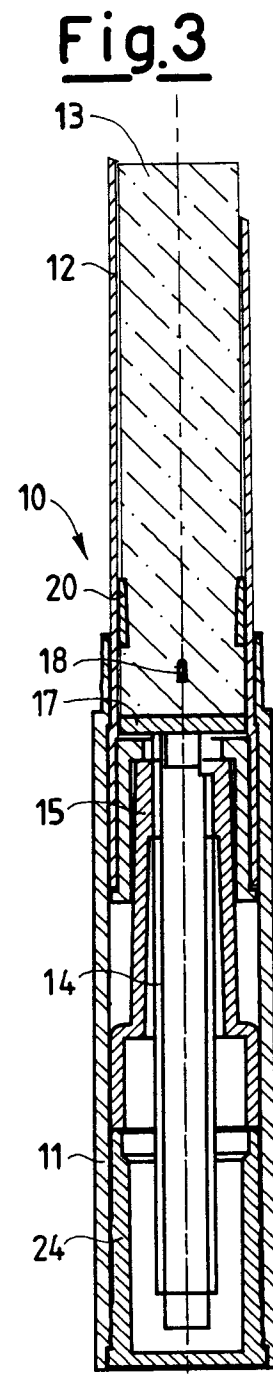
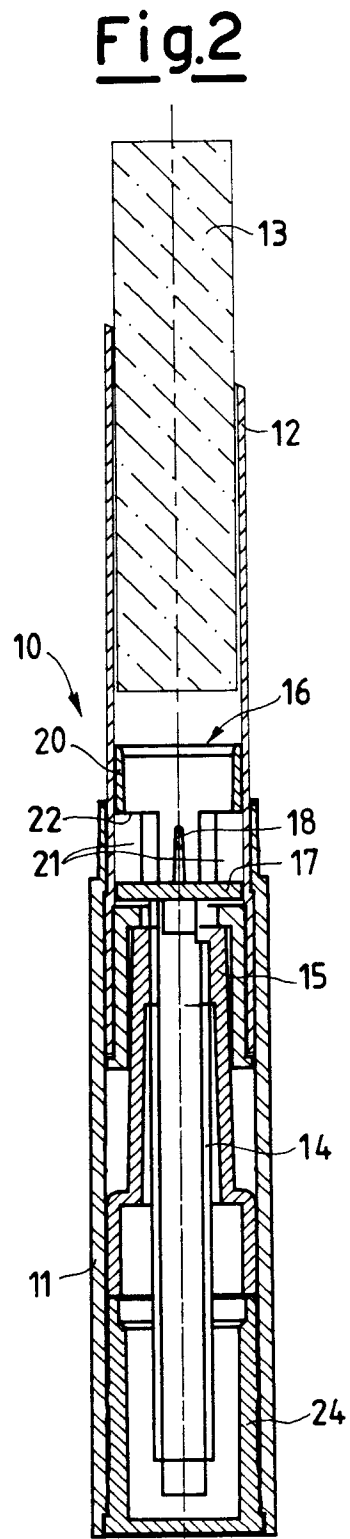
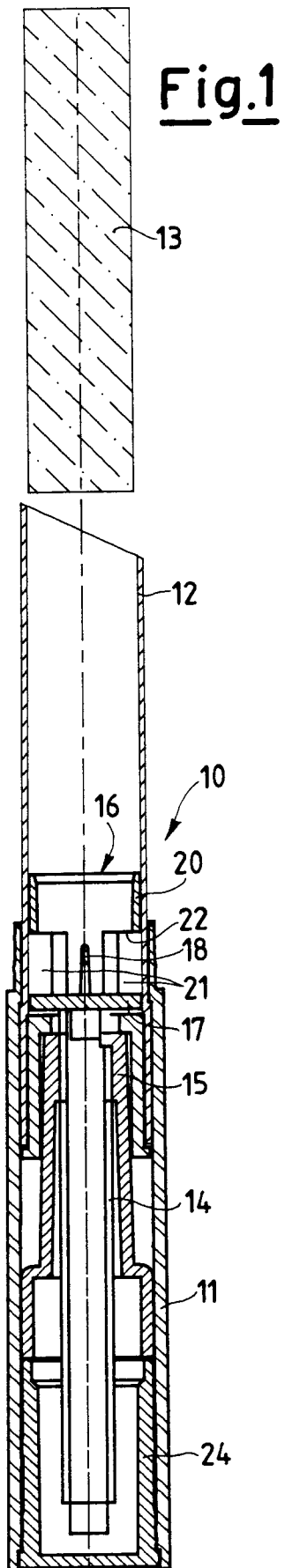


Fig.4

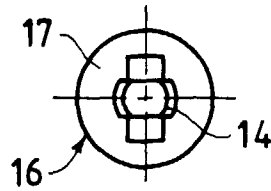


Fig.6

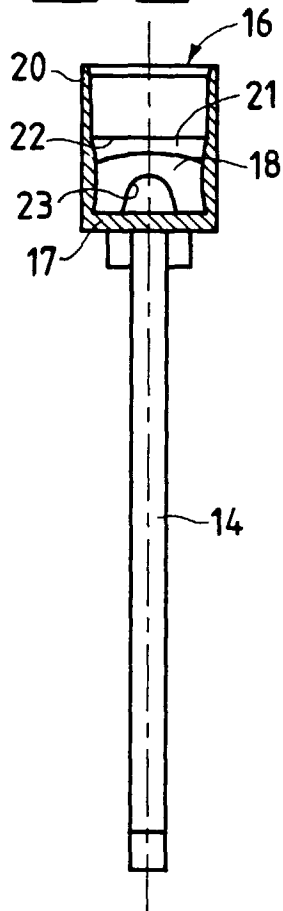


Fig.7

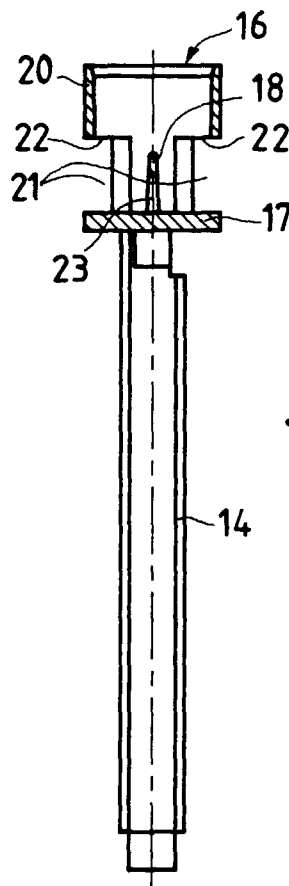


Fig.5

