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(54) **TUBE-SHAPED PEN FOR APPLYING SEMI-PERMANENT NAIL GEL POLISH**

(57) Tube-shaped pen for the application of semi-permanent gel nail polish, including a microperforated silicone tip that allows, through a slight squeeze of the tube, the leakage of the nail polish, so as to allow a

quick and precise coloring of the nails, without color smudges quite common with the brush, and lasting over two weeks.

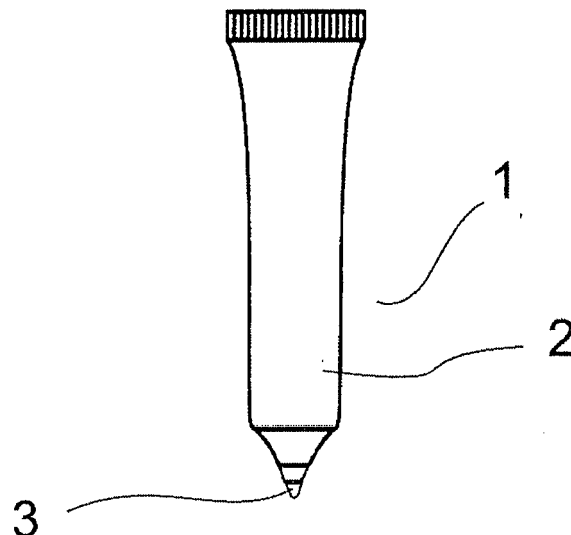


fig.2

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Description

[0001] The present utility model relates to nail polish application systems and, specifically, to UV semi-permanent gel nail polish.

[0002] As known, for centuries, women decorate their nails, applying different nail polish colors. It is also known that traditional nail polishes have the disadvantage of chipping in a few days.

[0003] To obviate to the above disadvantage, semi-permanent gel nail polishes are more and more used due to their long-lasting duration, up to three weeks. This prolonged duration of the nail polish is achieved thanks to the use of particular nail polishes which polymerize when exposed to the action of UV rays.

[0004] Today, UV semi-permanent gel nail polishes are applied through the brushes with which the nail polish bottles are normally equipped.

[0005] However, the use of the brush to apply the polish on the nails presents some disadvantages such as imprecision of the stroke, color dripping, especially when the polish is not applied by cosmetics professionals.

[0006] In particular, the use of brushes involves a considerable waste of time since the average time for the application of the polish on all the hand nails is not less than 40 minutes.

[0007] Moreover, the use of a brush for applying the polish, when used in a beauty salon, can cause fungal infections including yeasts or molds.

[0008] The main objective of the present utility model is to provide a tube-shaped pen for the application of semi-permanent gel nail polish, which obviates the above-mentioned disadvantages, and, in particular, which can also be used by inexperienced users still obtaining an excellent result, with no color smudges.

[0009] A further objective of the present utility model is to reduce the application time of the semi-permanent gel nail polish.

[0010] Another purpose is to provide a pen for the application of semi-permanent gel nail polish which prevents the occurrence of fungal infections such as yeasts or molds, when used in a professional beauty salon.

[0011] To achieve the above and other objects, a tube-shaped pen for the application of semi-permanent gel nail polish, according to the present utility model, is provided with a micro-perforated silicone tip, which releases the semi-permanent gel nail polish and which can be easily cleaned after each use, through suitable devices, such as, for example, antifungal products, without contaminating the product contained within the pen.

[0012] Finally, a further object is to provide a tube-shaped pen for the application of semi-permanent gel nail polish, comprising a cap provided with a small Plexiglas lens, which allows the immediate recognition of the nail polish color contained within the pen itself.

[0013] The tube-shaped pen for the application of semi-permanent gel nail polish is characterized by its micro-perforated silicone tip that allows the release of the

polish through a slight pressure of the fingers, so as to allow a quick and precise coloring of the nails, without color smudges quite common with the brush, and lasting over two weeks.

[0014] These and further purposes are achieved by the tube-shaped pen for the application of semi-permanent gel nail polish, according to the present utility model, which is hereafter described, in a preferred embodiment which however is not limiting further developments falling within the scope of the present utility model, with reference to the accompanying drawings:

Fig. 1 is a front view of a traditional semi-permanent gel nail polish bottle, equipped with a brush for applying the nail polish;

Fig. 2 is a front view of the tube-shaped pen for the application of semi-permanent gel nail polish according to the present utility model;

Fig. 3 is a detailed view of the tip of the tube-shaped pen for the application of semi-permanent gel nail polish according to the present utility model;

Fig. 4 is an axonometric view of the cap of the tube-shaped pen for the application of semi-permanent gel nail polish according to the present utility model;

Fig. 5 is an axonometric view of the cap of the tube-shaped pen for the application of semi-permanent gel nail polish according to the present utility model, with indications for opening and closing the pen;

Fig. 6 is an axonometric view of the Plexiglas lens to be applied to the cap shown in Figure 5;

Fig. 7 is an axonometric view of the Plexiglas lens when applied to the cap.

[0015] With reference to Figure 2, the tube-shaped pen for the application of semi-permanent gel nail polish according to the present utility model, is generally indicated with the number 1.

[0016] The pen 1 comprises a tube 2 preferably made of COEX or other similar material, and a micro-perforated tip 3 made of soft silicone.

[0017] In order to avoid leakage of the nail polish due to accidental squeezes of the tube 2, and to make the color of the nail polish contained within the same pen 1 immediately recognizable, the pen 1 is provided with a cap 4, on which a small transparent lens 5 of Plexiglas, or other similar material, is applied, said lens 5 being engaged by means of wings 51 to the head of the cap 4 opportunely provided with slots 41.

[0018] The transparent lens 5 has a cavity to allow it to be filled with the nail polish of the same color as that contained in the tube 2. This makes possible to show multiple pens 1 on display units by color shading so obtaining a faithful color chart which cannot be obtained through the normal printing processes.

[0019] The application of the semi-permanent gel nail polish is obtained through a slight pressure of the tube 2 and the consequent leakage in small doses of the nail polish, through the micro-perforated tip 3 in soft silicone.

Claims

1. Tube-shaped pen for the application of semi-permanent gel nail polish, comprising a tube (2) filled with nail polish and a cap (4), **characterized in that** the tube (2) is provided with a micro-perforated tip made of soft silicone (3). 5
2. Tube-shaped pen for the application of semi-permanent gel nail polish, according to claim 1, **characterized in that** the cap (4) is provided, at the top, with a small transparent lens (5) in its turn provided with a cavity to contain nail polish of the same color as that contained in the tube (2). 10
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3. Tube-shaped pen for the application of semi-permanent gel nail polish, according to claim 2, **characterized in that** the small transparent lens (5) comprises means (51) to be engaged with the cap (5). 20
4. Tube-shaped pen for the application of semi-permanent gel nail polish, according to previous claims, **characterized in that** the nail polish contained in the tube (2) is a semi-permanent UV color gel nail polish. 25
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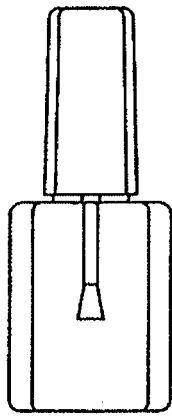


fig.1

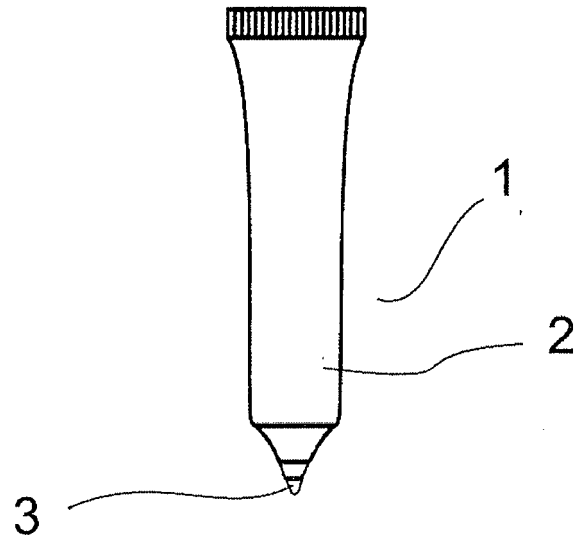


fig.2

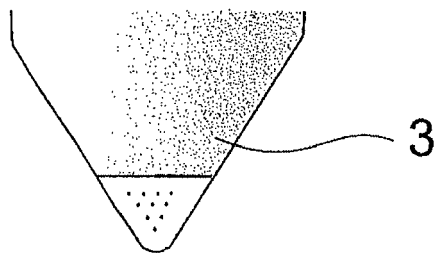
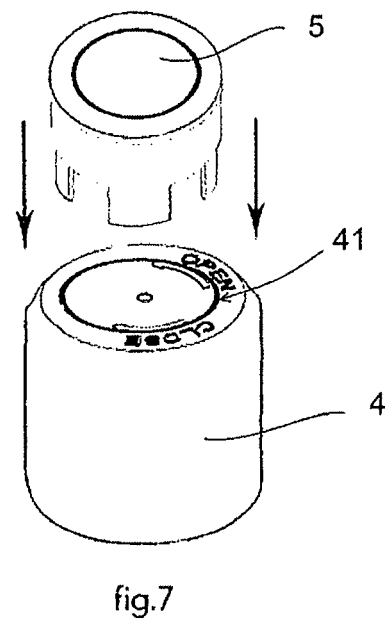
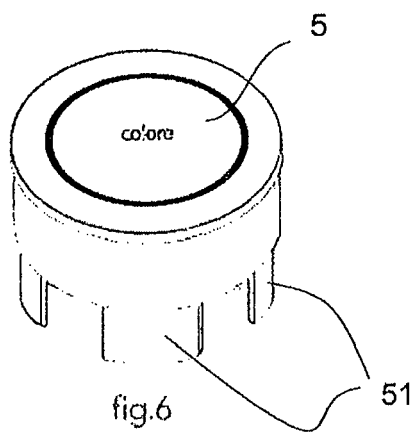
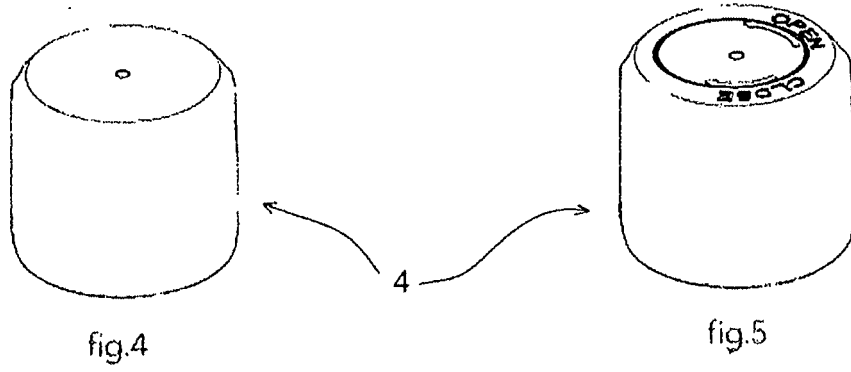


fig.3





EUROPEAN SEARCH REPORT

 Application Number
 EP 19 00 0109

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EPO FORM 1503 03.82 (P04C01)

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP S61 255609 A (MASUYAMA KOGYO KK) 13 November 1986 (1986-11-13)	1	INV. A45D29/00 A45D34/04 A45D40/20
Y	* the whole document *	2-4	
Y	EP 2 954 800 A1 (COLORDISPLAY S L [ES]) 16 December 2015 (2015-12-16) * paragraphs [0005], [0017] - [0022]; figures *	2-4	
X	US 2017/209894 A1 (SPORRER KEVIN [US]) 27 July 2017 (2017-07-27) * paragraphs [0050], [0082]; figures *	1	
A	WO 2012/050632 A1 (LAALY NOUSHIN A [US]) 19 April 2012 (2012-04-19) * page 3 - page 4; figures *	1-4	
A	FR 3 020 931 A1 (CHARLIER JEAN PHILIPPE [FR]) 20 November 2015 (2015-11-20) * page 5 - page 6; figures *	1-4	
			TECHNICAL FIELDS SEARCHED (IPC)
			A45D
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 12 July 2019	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	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP S61255609 A	13-11-1986	NONE	
EP 2954800 A1	16-12-2015	EP 2954800 A1 ES 1115856 U US 2015359313 A1	16-12-2015 11-07-2014 17-12-2015
US 2017209894 A1	27-07-2017	EP 3408107 A1 JP 2019511952 A US 2017209894 A1 WO 2017132221 A1	05-12-2018 09-05-2019 27-07-2017 03-08-2017
WO 2012050632 A1	19-04-2012	NONE	
FR 3020931 A1	20-11-2015	NONE	