(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
27 February 2003 (27.02.2003)

PCT

(10) International Publication Number
WO 03/015568 A1

(51) International Patent Classification[7]: A45D 34/04

(21) International Application Number: PCT/KR01/02001

(22) International Filing Date:
21 November 2001 (21.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2001/49313 16 August 2001 (16.08.2001) KR

(71) Applicant and
(72) Inventor: AN, Suck-Doo [KR/KR]; 158-63 Annyoung-Ri, Taean-Eup, Hwasung-Gun, 445-976 Kyounggi-Do (KR).

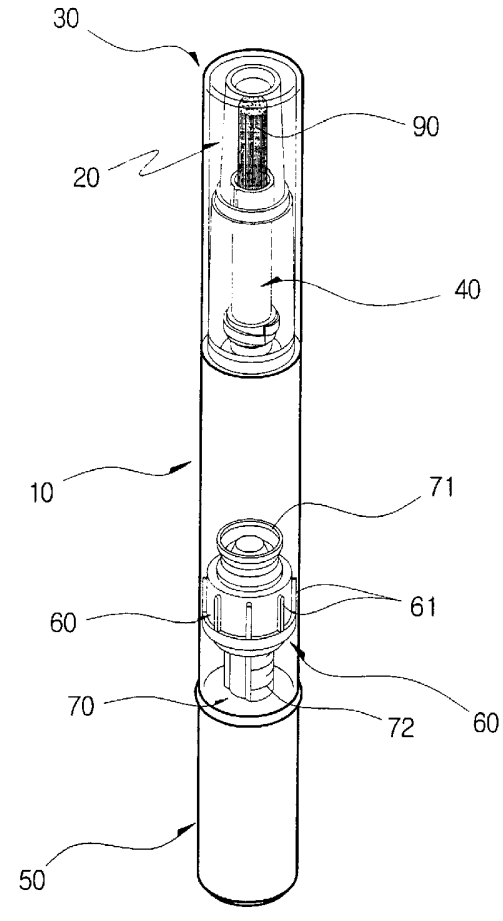
(74) Agent: SOHN, Eun-Jin; EUN JIN SOHN PATENT & LAW OFFICE, 1F., Yeoksam P-Bldg., 824-17, Yeoksam-Dong, Kangnam-Ku, 135-080 SEOUL (KR).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent

[Continued on next page]

(54) Title: LIQUID LIPSTICK CASE



(57) Abstract: A liquid lipstick case comprises a body having a space or container for containing a liquid lipstick therein, an output part coupled to the one end of the body for supplying the liquid lipstick to the outside, and an adjustment part coupled to the other end of the body for adjusting an amount of the liquid lipstick outputted through the output part.

WO 03/015568 A1

(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

LIQUID LIPSTICK CASE

Technical Field

The present invention concerns a lipstick, and more particularly, a liquid lipstick case that is capable of maintaining the properties of a liquid lipstick without any change and preventing a brush that supplies the liquid lipstick to the outside from being hard, so that a user can paint his or her lips in a more convenient manner.

Background Art

Generally, most lipsticks have a hard lipstick core, a core support bar for supporting the lipstick core such that the lipstick core is exposed to the outside, and a screw for moving the core support bar upward and downward. The core support bar moves through the use of the screw and the lipstick core is thus exposed to the outside.

Such the type of lipstick has the lipstick core that mostly contacts the air, such that there occur some problems that the peculiar properties of the lipstick may be easily varied and the real use time of the lipstick may be thus shortened.

To solve the above problems, there have been proposed a liquid lipstick and a container for containing the liquid lipstick therein. According to one prior art liquid lipstick, there are provided a liquid lipstick, a container in which the liquid lipstick is contained, and a brush for painting the liquid lipstick on user's lips.

However, the one prior art liquid lipstick has a problem that if the brush with the liquid lipstick thereon is exposed in the air for a predetermined time of period, it may be readily tough.

To solve the above problem as mentioned in the one prior art liquid lipstick, another prior art liquid lipstick as disclosed in Korean Utility Model Registration No. 20-0200606 suggests a dispenser case that is provided with an absorbing member for

supplying the liquid lipstick to the outside. However, another prior art liquid lipstick still has a problem that if the absorbing member is exposed in the air for a predetermined time of period, it may be readily tough. That is to say, the absorbing member contains the remaining liquid lipstick thereon after painting and, even though it is closed with a cover, it is exposed to the air existing between the cover and the absorbing member, with a result that it gets hard.

Disclosure of Invention

It is an object of the present invention to provide a liquid lipstick case that is capable of maintaining the properties of a liquid lipstick without any change.

It is another object of the present invention to provide a liquid lipstick case that is capable of maintaining the properties of a liquid lipstick without any change and preventing a brush that supplies the liquid lipstick to the outside from being hard, so that a user can paint his or her lips in a more convenient manner.

Still other objects and advantages of the invention will become clear upon review of the following detailed description in conjunction with the appended drawings.

To accomplish these and other objects of the present invention, there is provided a liquid lipstick case which includes: a body having a space or container for containing a liquid lipstick therein; an output part coupled to the one end of the body for supplying the liquid lipstick to the outside; and an adjustment part coupled to the other end of the body for adjusting an amount of the liquid lipstick outputted through the output part.

Brief Description of the Drawings

Further objects and advantages of the invention can be more fully understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective view of a liquid lipstick case according to the present invention;

FIG. 2 is a separated perspective view of the liquid lipstick case of FIG. 1;

FIG. 3 is a sectional view of the liquid lipstick case of FIG. 1;

FIG. 4 is a perspective view at the time when the liquid lipstick case of FIG. 1 is used; and

FIG. 5 is a sectional view of the liquid lipstick case of FIG. 4.

Best Mode for Carrying Out the Invention

The following detailed description is of the best mode or modes of the invention presently contemplated. Such description is not intended to be understood in a limiting sense, but to be an example of the invention presented solely for illustration thereof, and by reference to which in connection with the following description and the accompanying drawings one skilled in the art may be advised of the advantages and construction of the invention.

FIG. 1 is a perspective view of a liquid lipstick case according to the present invention and FIG. 2 is a separated perspective view of the liquid lipstick case of FIG.

As shown in FIG. 1, there is provided a liquid lipstick case according to the present invention, which includes: a body 10 having a space or container for containing a liquid lipstick therein; an output part coupled to the one end of the body 10 for supplying the liquid lipstick to the outside and an adjustment part coupled to the other end of the body 10 for adjusting an amount of the liquid lipstick outputted through the output part.

In that case, the body 10 is provided with, as shown in FIG. 2, a container 10B in which the liquid lipstick is charged, an output part coupling part 10A connected to the one end of the container 10B, for coupling with the output part and an adjustment part coupling part 10C connected to the other end of the container 10B, for coupling with the

adjustment part.

The output part is provided with a head 20 rotatably coupled with the output part coupling part 10A of the body 10, a brush 90 for sucking the liquid lipstick, a brush support bar 40 for fixing the brush 90 and moving the brush 90 according to the rotation of the head 20 and a tube 80 disposed in the interior of the brush support bar 40 for supplying the liquid lipstick from the container 10B to the brush 90.

The adjustment part is provided with a handle grip 50 rotatably coupled with the adjustment part coupling part 10C of the body 10, a piston 71 for controlling the liquid lipstick in the container 10B thus to prevent the liquid lipstick from leaking toward the adjustment part coupling part 10C, a screw bar 70 for supporting the piston 71 and an inside screw 60 disposed between the container 10B and the one end of the handle grip 50 for moving the screw bar 70 according to the rotation of the handle grip 50.

On the other hand, the liquid lipstick case according to the present invention further includes a cover 30 for closing the output part coupling part 10A of the body 10 and the output part and a stopper 57 for closing the inlet opened of the adjustment part.

Now, the parts that make up the liquid lipstick case and their assembling method will be in detail described.

FIG. 3 is a sectional view of the liquid lipstick case of FIG. 1.

The output part coupling part 10A of the body 10 is provided with a stepped opening 11 near the container 10B, a screw 12 on the inside wall toward the outside from the stepped opening 11, an inner wall edge jaw 13 outside the screw 12 and an outer edge coupling groove 16 for coupling to the cover 30.

In addition, the adjustment part coupling part 10C of the body 10 is provided with a spline groove 14 disposed on the inner wall thereof for coupling to the adjustment part and an inner wall edge groove 15 on the inner wall thereof toward the outside from the spline groove 14.

The head 20 on the output part is provided with key seats 21 disposed on the inner walls facing each other, an outer edge groove 23 disposed on the outside edge

thereof for coupling to the inner wall edge jaw 13 of the output part coupling part 10A and a jaw 22 disposed on the outside edge thereof for insertion by a predetermined length into the output part coupling part 10A. In that case, the head 20 is coupled in manner to be rotated relative to the output part coupling part 10A.

The brush support bar 40 is provided with an intermediate portion 40B of a hollow type, into which the lipstick liquid flows, a brush fixing portion 40A disposed on the one end of the intermediate portion 40B for fixing the brush 90 and a screw portion 40C disposed on the other end of the intermediate portion 40B for coupling to the screw 42 on the inner wall of the output part coupling part 10A. In that case, the brush fixing portion 40A is provided with an edge jaw 42 of a stick type disposed on the inner wall thereof for fixing the brush 90 and keys 41 disposed on the outside thereof for coupling to the key seats 21 of the head 20.

The cover 30 is provided with an inner wall edge locking projection 33 for coupling to the outer edge coupling groove 16 of the output part coupling part 10A, a jaw 32 for insertion into the inside of the inlet of the head 20 and a silicon rubber 31 disposed on the interior of the jaw 32 for stopping the inlet of the head 20 and for protecting the brush 90.

On the other hand, the handle grip 50 is provided with an internal thread 51 of a hollow type disposed at a predetermined position thereof, into which the screw bar 70 is moved, for coupling to the screw bar 70, an edge locking projection 55 disposed on the external surface thereof for rotatably coupling to the inner wall edge groove 15 of the adjustment part coupling part 10C of the body 10, a plurality of external jaws 54 disposed on the outer edge periphery on the one end thereof for coupling to the inside screw 60, and a coupling groove 56 disposed to correspond with the stopper on the other end thereof, for coupling to the stopper.

The inside screw 60 of the adjustment part is provided with a spline 61 disposed on the outer periphery for coupling to the spline groove 14 of the adjustment part coupling part 10C, an internal thread 62 disposed in the interior thereof for coupling to

the screw bar 70 and a plurality of internal jaws 64 disposed on the inner wall thereof for coupling to the plurality of external jaws 54 of the handle grip 50. If the handle grip 50 rotates, friction between the external jaws 54 of the handle grip 50 and the internal jaws 64 of the screw 60 is caused to thus generate an operation noise.

The screw bar 70 is provided with a body 72 with an external thread 72 thereon and a coupling portion 73 disposed on the end of the body 72 for coupling to the piston 71.

The piston 71 is coupled with the coupling portion 73 of the screw bar 70 and as the screw bar 70 moves, comes in contact with the inner wall of the container 10B, thereby moving in the interior thereof.

Now, explanations of the operation way of the liquid lipstick case according to the present invention, at the time when used for painting and the shape of the liquid lipstick case will be described.

FIG. 4 is a perspective view at the time when the liquid lipstick case of FIG. 1 is used, and FIG. 5 is a sectional view of the liquid lipstick case of FIG. 4.

If the cover 30 is separated from the liquid lipstick case and the head 20 thus rotates against the body 10, at the time of painting, the brush 90 and the brush support bar 40 move to the end of the output part coupling part 10A. To suck the liquid lipstick onto the brush 90, the handle grip 50 rotates, such that the liquid lipstick case as shown in FIG. 1 at the state of being kept is changed into that as shown in FIG. 4 at the state of being used.

In more detail, if the head 20 rotatably coupled to the output part coupling part 10A rotates relative to the body 10 and the output part coupling part 10A of the liquid lipstick case, the brush support bar 40 moves to the end of the head 20. Next, the keys 41 of the brush fixing portion 40A are inserted into the key seats 21 of the head 20 and slid to move along the key seats 21. Therefore, if the head 20 rotates, the brush support bar 40 rotates with the rotation of the head 20. And, the key seats 21 guide the movement of the keys 41, and the screw portion 40C of the brush support bar 40 is

pitched and moved along the inner wall screw 12 of the output part coupling part 10A. As a result, the brush support bar 40 and the brush 90, which is fixed in the brush fixing portion 40A of the brush support bar 40, move to the end of the head 20, as shown in FIGS. 4 and 5.

In that case, since the brush 90 and the tube 80 fixed are made of an elastic material, they expand as the brush 90 moves to the had 20 such that the container 10B and the brush 90 can be connected to each other.

On the other hand, in the state where the output part operates if the adjustment part operates to provide the liquid lipstick to the brush 90, a predetermined amount of liquid lipstick is sucked to the brush 90.

In more detail, if the handle grip 50 that is rotatably coupled to the adjustment part coupling part 10C of the liquid lipstick case rotates relative to the body 10 and the adjustment part coupling part 10C, the screw bar 70 moves according to the relative movement to the internal thread 51 of the handle grip 50. Subsequently to this, the piston 71 fixed on the end of the screw bar 70 moves toward the output part along the wall of the container. The movement of the piston 71 allows the formation of a predetermined pressure in the interior of the container, such that the liquid lipstick in the container is supplied to the brush 90 through the tube 80.

In that case, the outer edge jaw 55 of the handle grip 50 is rotatably coupled to the edge groove 15 of the adjustment part coupling part 10C, and when the handle grip 50 rotates, the plurality of external jaws 54 are slid on the plurality of internal jaws 64 of the inside screw 60, thereby generating click sounds.

After painting the lips in the above state, operations opposite to the above operations are needed for keeping the liquid lipstick case.

On the other hand, the moving distance of the piston 71 according to the movement of the handle grip 50 in the liquid lipstick case of the present invention is varied upon the pitches of the threads formed on the handle grip 50, the screw bar 70 and the inside screw 60.

Industrial Applicability

As set forth in the foregoing, a liquid lipstick case according to the present invention is capable of preventing the liquid lipstick from being in contact with the external air, thereby enabling the brush to which the liquid lipstick is sucked not to be hard, rotating its handle grip to allow the variation of the pressure of the liquid lipstick in its container, thereby enabling the output of the liquid lipstick from the brush, whereby the painting on the lips can be carried out in more easy manner and the amount of the liquid lipstick retained in the container can be all consumed.

While the preferred embodiment of the present invention has been described with reference to a specific liquid lipstick case, the embodiment may be applied to, for example, foundation cases or containers for cosmetic, coordinate, paint and so on.

CLAIMS

1. A liquid lipstick case, comprising:

a body having a space or container for containing a liquid lipstick therein;

an output part coupled to the one end of said body for supplying said liquid lipstick to the outside; and

an adjustment part coupled to the other end of said body for adjusting an amount of said liquid lipstick outputted through said output part.

2. The liquid lipstick case as defined in claim 1, wherein said body comprises said container in which said liquid lipstick is charged, an output part coupling part coupled to the one end of said container for coupling with said output part and an adjustment part coupling part coupled to the other end of said container for coupling with said adjustment part.

3. The liquid lipstick case as defined in claim 2, wherein said output part comprises a head rotatably coupled with said output part coupling part of said body, a brush for sucking said liquid lipstick, a brush support bar for fixing said brush and moving said brush according to the rotation of said head and a tube disposed in the interior of said brush support bar for supplying said liquid lipstick from said container to said brush.

4. The liquid lipstick case as defined in claim 3, wherein said head comprises key seats disposed on the inner walls facing each other, an outer edge groove disposed on the outside edge thereof for coupling to the inner wall of said output part coupling part and a jaw disposed on the outside edge thereof for insertion by a predetermined length into said output part coupling part.

5. The liquid lipstick case as defined in claim 4, wherein said inner wall of said output part coupling part comprises an inner wall edge jaw for coupling to said outer edge groove of said head.

6. The liquid lipstick case as defined in claim 4, wherein said output part coupling part further comprises a stepped opening near said container for fixing said tube.

7. The liquid lipstick case as defined in claim 3, wherein said brush support bar comprises an intermediate portion of a hollow type, into which said lipstick liquid flows, a brush fixing portion disposed on the one end of said intermediate portion for fixing said brush and a screw portion disposed on the other end of said intermediate portion for coupling to said output part coupling part.

8. The liquid lipstick case as defined in claim 7, wherein said inner wall of said output part coupling part comprises a screw for coupling to said screw portion of said intermediate portion.

9. The liquid lipstick case as defined in claim 7, wherein said brush fixing portion comprises an edge jaw disposed on the inner wall thereof for fixing said brush and keys disposed on the outer wall thereof for coupling to said head.

10. The liquid lipstick case as defined in claim 9, wherein said head further comprises key seats disposed for coupling with said keys of said brush fixing portion and for guiding the movement of said keys.

11. The liquid lipstick case as defined in claim 3, further comprising a cover for covering said output part coupling part and said output part.

12. The liquid lipstick case as defined in claim 11, wherein said output part coupling part further comprises an outer edge coupling groove disposed on the outer periphery for coupling to said cover.

13. The liquid lipstick case as defined in claim 12, wherein said cover comprises: an inner wall edge locking projection for coupling to said outer edge coupling groove of said output part coupling part and a jaw for insertion into the inside of the inlet of said head.

14. The liquid lipstick case as defined in claim 13, wherein said jaw comprises a silicon rubber disposed on the interior thereof for stopping the inlet of said head and for protecting said brush.

15. The liquid lipstick case as defined in claim 2, wherein said adjustment part comprises a handle grip rotatably coupled with said adjustment part coupling part of said body, a piston for controlling said liquid lipstick in said container thus to prevent said liquid lipstick from leaking toward said adjustment part coupling part, a screw bar for supporting said piston and an inside screw disposed between said container and the one end of said handle grip for moving said screw bar according to the rotation of said handle grip.

16. The liquid lipstick case as defined in claim 15, wherein said adjustment part coupling part comprises a spline groove disposed on the inner wall thereof for coupling to said adjustment part and an inner wall edge groove disposed on the inner wall on the outer periphery thereof from said spline groove.

17. The liquid lipstick case as defined in claim 15, wherein said handle grip of

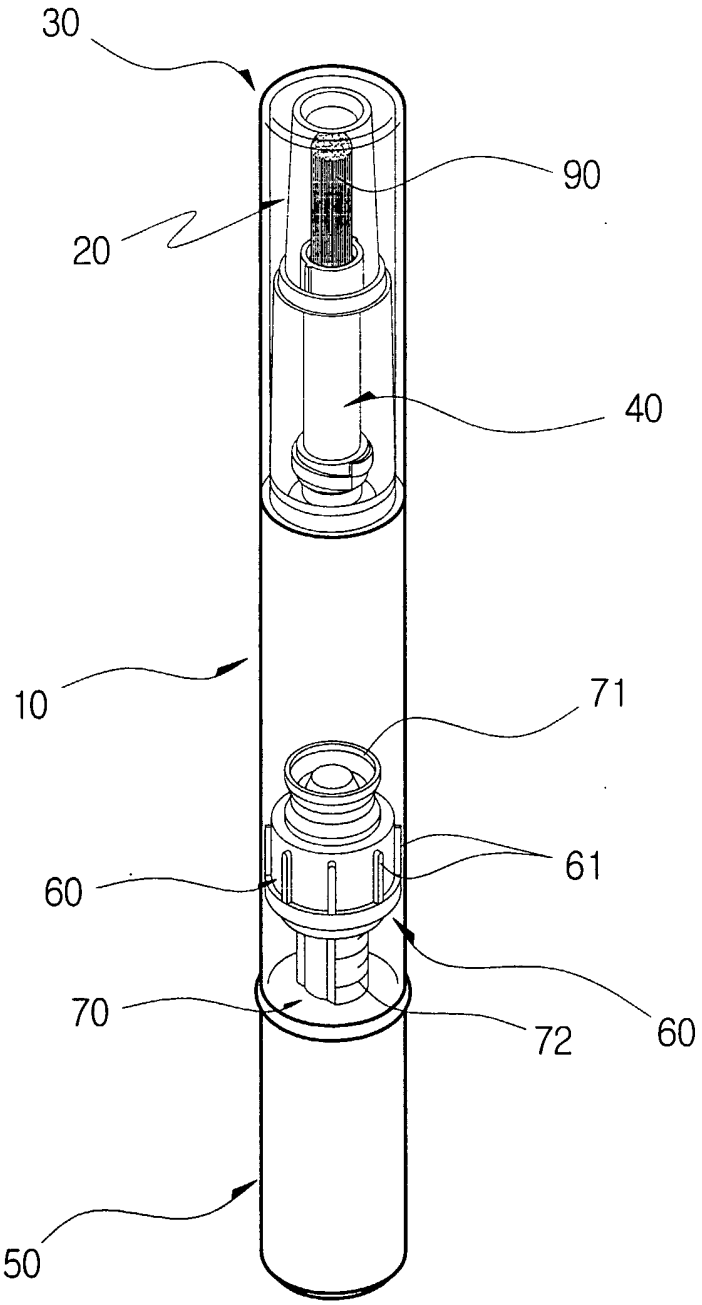
said adjustment part comprises an internal thread of a hollow type, into which said screw bar is moved, for coupling to said screw bar, an edge locking projection disposed on the external surface thereof for rotatably coupling to said inner wall edge groove of said adjustment part coupling part of said body, and a plurality of external jaws disposed on the outer edge periphery on the one end thereof for coupling to said inside screw.

18. The liquid lipstick case as defined in claim 17, further comprising a stopper for closing the inlet opened of the other end of said handle grip.

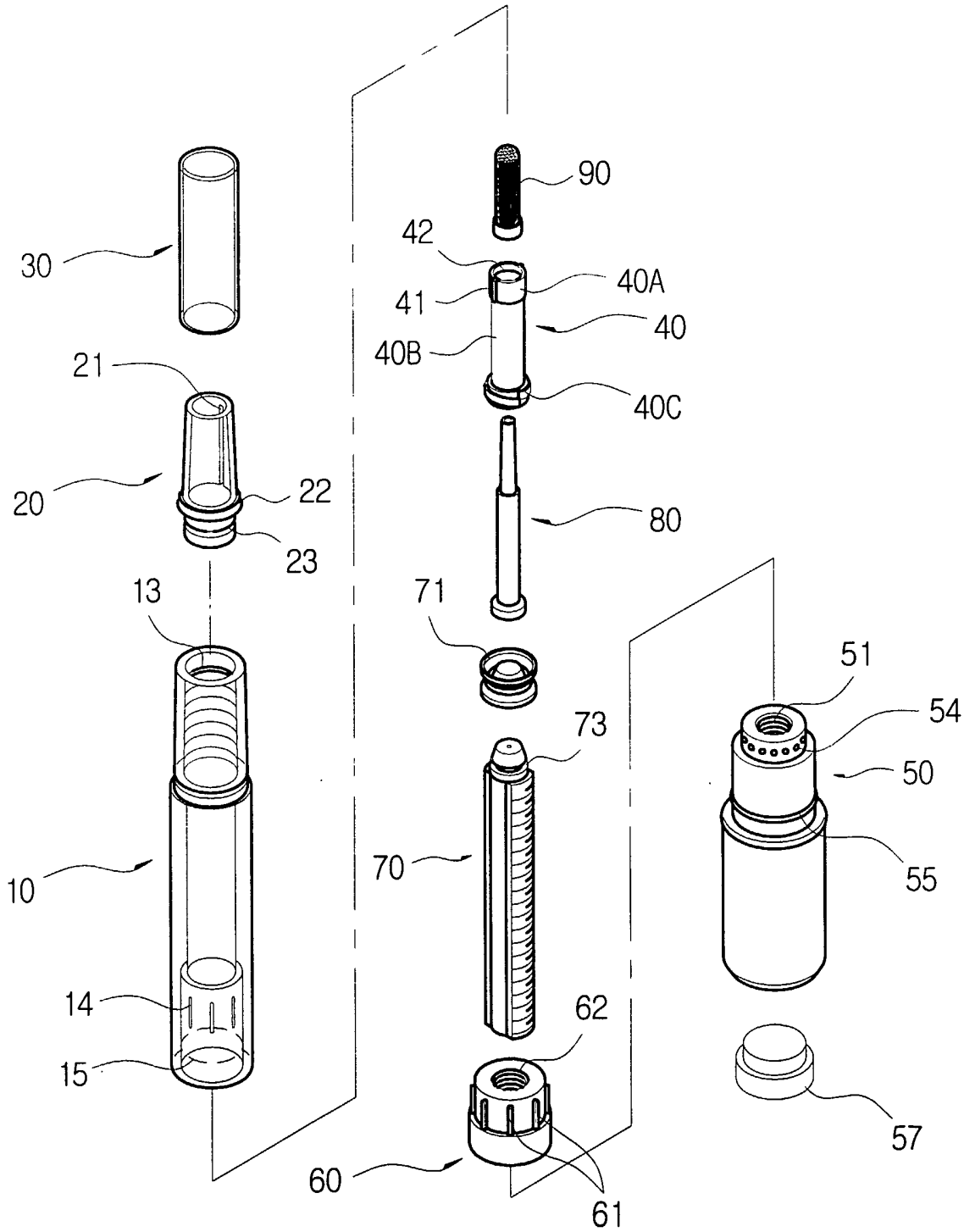
19. The liquid lipstick case as defined in claim 15, wherein said inside screw comprises a spline on the outer periphery thereof for coupling to said spline groove of said adjustment part coupling part, an internal thread in the interior thereof for coupling to said screw bar and a plurality of internal jaws disposed on the inner wall thereof for coupling to said plurality of external jaws of said handle grip.

20. The liquid lipstick case as defined in claim 15, wherein said screw bar comprises a body with an external thread thereon and a coupling portion disposed on the end of said body for coupling to said piston.

FIG.1



2/5
FIG.2


90
42
40A
41
40
40B
40C
30
21
20
22
23
80
13
71
51
54
73
50
70
55
10
14
62
15
57
60
61

3/5

FIG.3

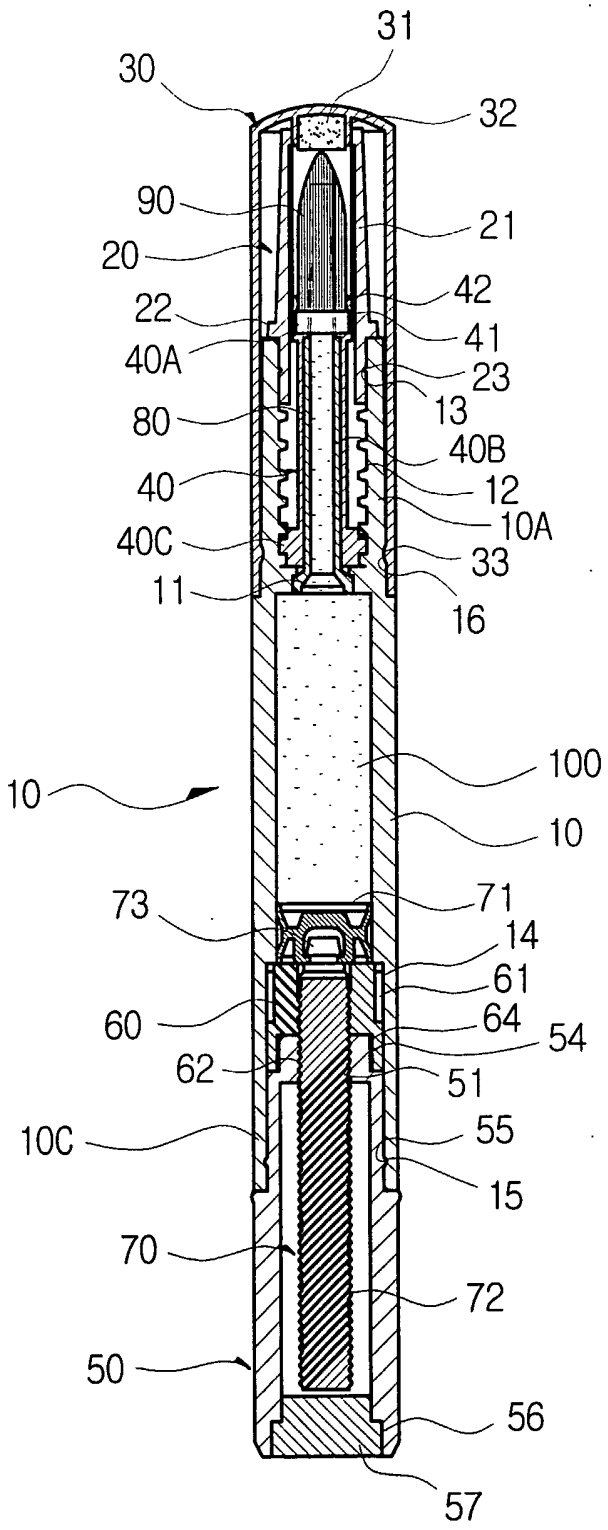
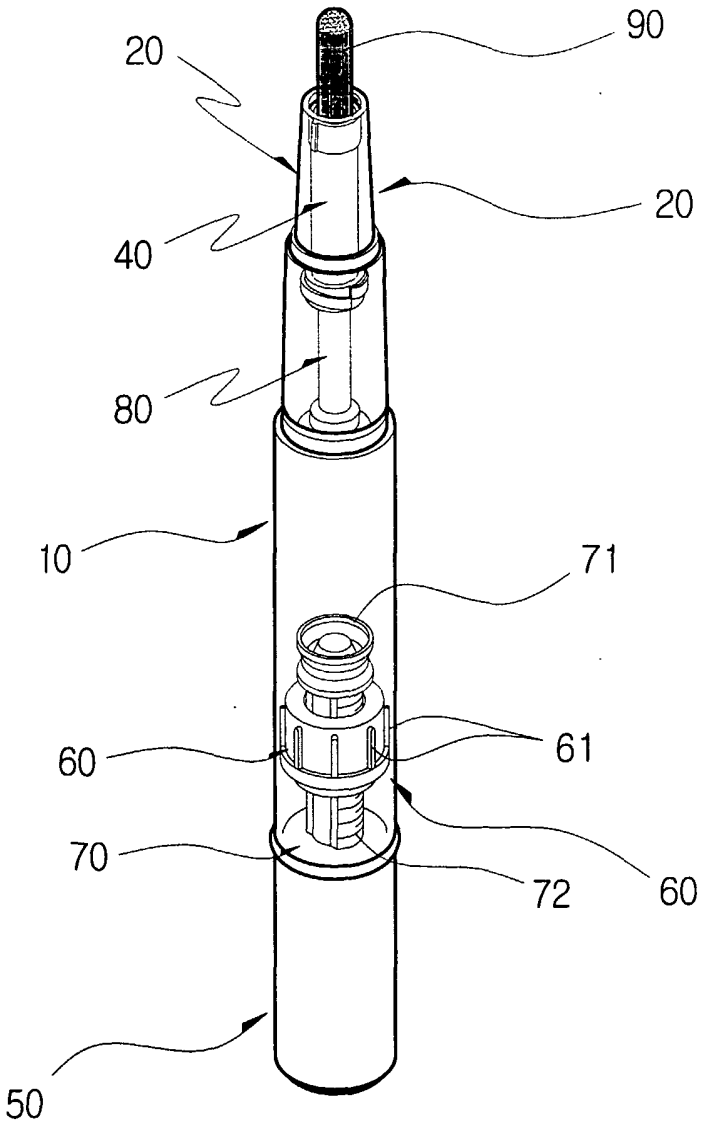
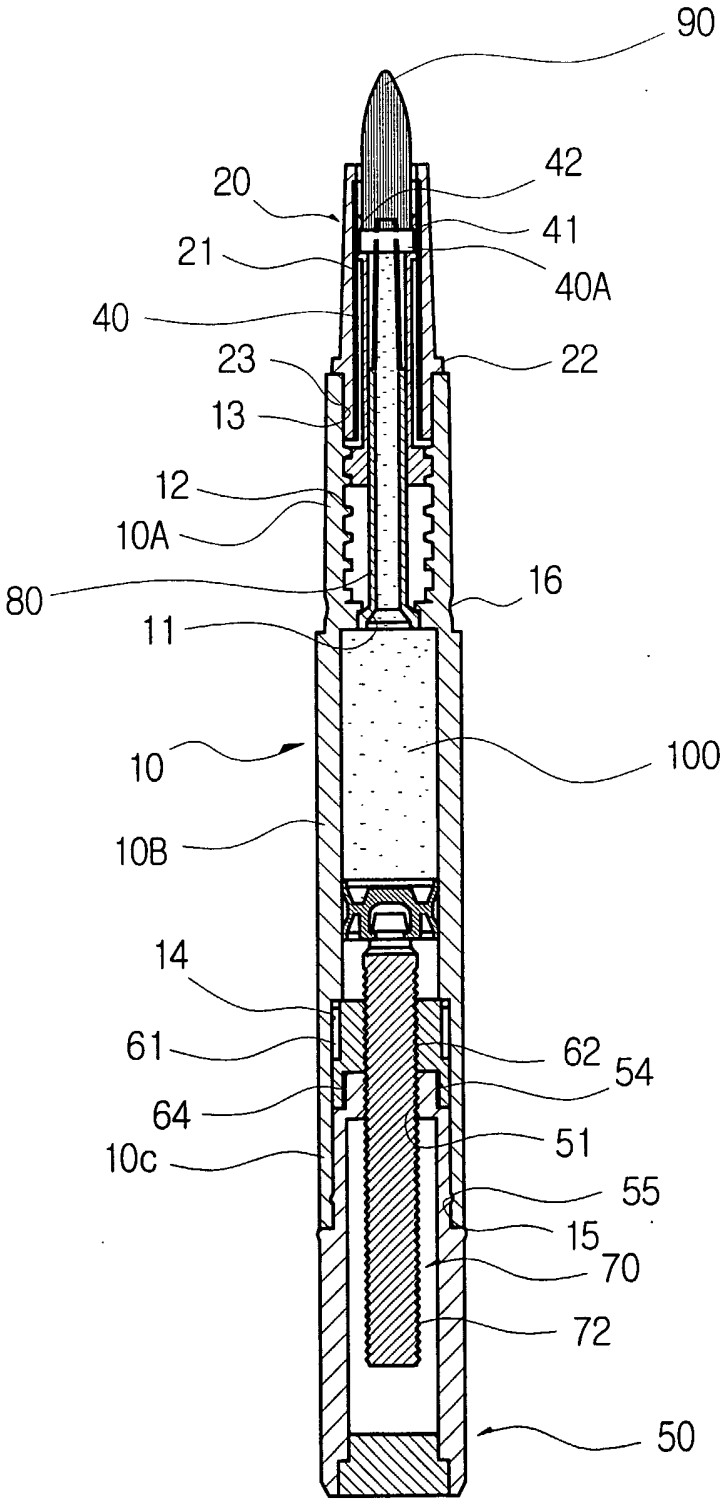

31
30
32
90
21
20
42
22
41
40A
23
13
80
40B
40
12
10A
40C
33
11
16
100
10
10
73
71
14
61
60
64
54
62
51
10C
55
15
70
72
50
56
57

FIG.4



5/5

FIG.5


90
20
42
41
21
40A
40
23
22
13
12
10A
80
16
11
10
100
10B
14
61
62
54
64
51
10c
55
15
70
72
50

INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR 01/02001

CLASSIFICATION OF SUBJECT MATTER

IPC[7]: A45D 34/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC[7]: A45D 34/04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2588733 A1 (L'OREAL) 24 April 1987 (24.04.87) *the whole document.*	1,2,15,20
A		3-14,16-19

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

* Special categories of cited documents:
„A" document defining the general state of the art which is not considered to be of particular relevance
„E" earlier application or patent but published on or after the international filing date
„L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
„O" document referring to an oral disclosure, use, exhibition or other means
„P" document published prior to the international filing date but later than the priority date claimed
„T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
„X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
„Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
„&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
20 February 2002 (20.02.2002)	18 April 2002 (18.04.2002)
Name and mailing adress of the ISA/AT Austrian Patent Office Kohlmarkt 8-10; A-1014 Vienna Facsimile No. 1/53424/535	Authorized officer NARDAI Telephone No. 1/53424/347

Form PCT/ISA/210 (second sheet) (July 1998)

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.
PCT/KR 01/02001

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR A1 2588733	24-04-1987	none	
FR B1 2588733	19-10-1990		