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(54) COSMETICS CONTAINER

(57) A cosmetics container comprises an end lid (1), a cover (2), a spring (3), and a base (4). The base (4) comprises an outer tube (401) and an inner tube (402) for accommodating cosmetics. A gap (403) is formed between the outer tube (401) and the inner tube (402). The spring (3) is sleeved over the inner tube (402) and positioned inside the gap (403). The cover (2) is sleeved over the inner tube (402). The bottom end of the cover (2) is connected to the top end of the spring (3) and able to move up and down along the gap. The end lid (1) is fastened to the base (4). When in use, the present cosmetics container structure only requires the end lid (1) to be lifted from the base (4) and a finger used to press down the cover (2), such that the cover (2) moves down inside the gap (403) relative to the inner tube (402), and the cosmetics accommodated in the inner tube (402) are exposed for use; after use, the finger pressing down on the cover (2) is released, and the cover (2) returns to position under the action of the spring (3); the structure is simple and use is convenient, and the installed cover (2) can further protect the cosmetics accommodated in the inner tube (402).

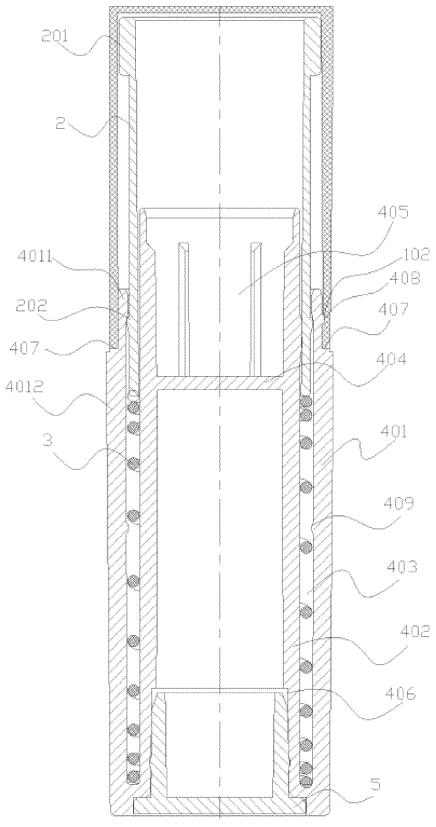

Fig. 1

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Description

Technical Field

[0001] The present invention belongs to the field of cosmetic packaging, and in particular relates to a cosmetics container.

Background

[0002] At present, makeup has become an indispensable part of people's daily life, and the form of cosmetics is also varied, such as powder, liquid, paste and so on. In order to facilitate the use of cosmetics, people generally make different cosmetics into different shapes and fit them in appropriate containers. Powdery cosmetics, such as lipstick, lip cream, concealer, skin whitening bar and sunscreen stick, are generally designed and manufactured in a tube. At present, this type of tubular cosmetics container is generally made of a lid body and a base, and the lid body is detachably buckled on the base. To use it, the lid body is firstly lifted from the base, and then the cosmetic is rotated out through relative rotation for use. However, this type of tubular cosmetics container generally requires the user to operate with both hands, which is very inconvenient. At the same time, in the existing container, the amount of the cosmetics in the interior cannot be generally directly observed.

Summary

[0003] In order to solve one or more of the above problems, the present invention provides a cosmetics container.

[0004] According to an aspect of the present invention, there is provided a cosmetics container, comprising an end lid, a cover, a spring, and a base. The base comprises an outer tube and an inner tube for accommodating cosmetics. A gap is formed between the outer tube and the inner tube. The spring is sleeved over the inner tube and being positioned inside the gap. The cover is sleeved over the inner tube. The bottom end of the cover is connected to the top end of the spring and able to move up and down along the gap. The end lid is fastened to the base.

[0005] When in use, the present cosmetics container structure only requires the end lid to be lifted from the base and a finger used to press down the cover, such that the cover moves down inside the gap relative to the inner tube, and the cosmetics accommodated in the inner tube are exposed for use; after use, the finger pressing down on the cover is released, and the cover returns to position under the action of the spring; the structure is simple and use is convenient, and the installed cover can further protect the cosmetics accommodated in the inner tube.

[0006] In some embodiments, the outer wall of the outer tube is further provided with a protrusion. The inner wall of the end lid near the bottom end is provided with an annular neck. The protrusion and the annular neck can be snap-fitted with each other. The beneficial effects are that this facilitates more stable fastening of the end lid to the outer tube.

[0007] In some embodiments, the outer tube includes a front end portion and a main body portion. The outer diameter of the front end portion is smaller than that of the main body portion. The protrusion is located on the outer wall of the front end portion. A boss is formed between the outer wall of the front end portion and the outer wall of the main body portion. The boss is located below the protrusion. The bottom end of the end lid can be abutted against the boss. The beneficial effects are that it is more convenient for the end lid to be snapped into the outer tube to be more stable, and at the same time, the arrangement of the boss acts as a limit. In some embodiments, a first annular inner rim is formed on the inner wall of the end lid near the bottom end. The first annular inner rim is located above the annular neck. A first annular outer rim is provided on the outer wall of the front end of the cover. The top end of the first annular outer rim can be abutted against the bottom of the first annular inner rim. The bottom end of the first annular outer rim can be abutted against the top end of the front end portion. The spring is in a compressed state. The beneficial effects are that the end lid and the cover of this structure cooperate, when the end lip and the base are in a snapped state, the first annular inner rim of the inner wall of the end lid contacts the first annular outer rim of the cover along the bottom to compress the spring, the entire cover moves downwards, and the bottom end of the first annular outer rim is right abutted against the front end of the end lid, so as to further fix and limit the cover.

[0008] In some embodiments, the number of protrusions is at least three. The beneficial effects are that it is more stable when the end lid is snapped into the outer tube. In some embodiments, a second annular outer rim is provided on the outer wall of the cover near the bottom end. A second annular inner rim is provided on the inner wall of the outer tube. The second annular outer rim and the second annular inner rim can be snapped with each other. The beneficial effects are that: with the spring, a downward pressure is exerted on the cover, under the action of the spring, the entire cover will move in the gap and move downwards for a certain displacement until the second annular outer rim and the second annular inner rim are engaged, which further functions to fix and limit. The structure is simple and the operation is easy.

[0009] In some embodiments, an inner portion of the inner tube near the top end is provided with a barrier sheet, and the barrier sheet and the tube wall of the inner tube form an accommodating cavity for accommodating cosmetics. The beneficial effects are that the inner tube of this structure is more convenient for accommodating cosmetics, and at the same time it does not cause a waste of cosmetics.

[0010] In some embodiments, a bottom lid is also in-

cluded. The bottom of the base is provided with a countersink opening, and the bottom lid is embedded in the opening. The beneficial effects are that the cosmetics container with such a structure is convenient to disassemble and install and is easy to use.

[0011] In some embodiments, the cover is of a transparent material structure. The beneficial effects are that a cover with a transparent material structure can be observed by the user without removing the cover and can be conveniently used.

[0012] In some embodiments, both the end lid and the base are of a dark-colored material structure. The beneficial effects are that the end lid and the base of a dark-colored material structure can further protect the cosmetics and prevent their deterioration due to light irradiation.

Brief Description of The Drawings

[0013]

FIG. 1 is a schematic structural view of a cosmetics container according to an embodiment of the present invention;

FIG. 2 is a schematic view of a cosmetics container according to the present invention when the end lid is not snapped;

FIG. 3 is a schematic structural view of a cosmetics container according to another embodiment of the present invention;

FIG. 4 is an enlarged view of part A of FIG. 3;

FIG. 5 is an enlarged view of part B of FIG. 3;

FIG. 6 is a schematic view of a split structure of a cosmetics container according to an embodiment of the present invention;

FIG. 7 is a schematic structural view of a cosmetics container according to the present invention with its end lid removed and spring in a compressed state; and

FIG. 8 is a schematic structural view of a cosmetics container according to the present invention with its end lid removed and spring in a bounced-off state.

Detailed Description

[0014] The present invention will be further described below with reference to Figs. 1 to 8 A cosmetics container, as shown in FIG. 1, includes an end lip 1, a cover 2, a spring 3, and a base 4. The base 4 includes an outer tube 401 and an inner tube 402 for accommodating cosmetics 6. A gap 403 is formed between the outer tube 401 and the inner tube 402. The outer tube 401 and the inner tube 402 are integrally formed. The spring 3 is disposed outside the inner tube 402 and is located in the gap 403. The cover 2 is sleeved over the inner tube 402. The bottom end of the cover 2 is connected to the top end of the spring 3 and can move up and down along the gap 403. The end lid 1 is snapped on the base 4.

[0015] The inner tube 402 is provided with a barrier sheet 404 near the top of the inner tube 402. The barrier sheet 404 and the tube wall of the inner tube 402 form an accommodating cavity 405 for accommodating the cosmetics 6. The cosmetics container of this structure only needs to pull the end lid 1 away from the base 4 when in use, as shown in FIG. 2, and press the cover 2 downwards by hand, and the cover 2 moves downward relative to the inner tube 402 in the gap 403. As shown in FIG. 7, the cosmetics 6 contained in the inner tube 402 are exposed for use by the user. After use, the hand pressing the cover 2 is released, and the cover 2 can be returned under the action of the spring 3. As shown in FIG. 8, the structure is simple and easy to use. At the same time, the added cover 2 can further protect the cosmetics 6 contained in the inner tube 402. The cosmetics 6 are in the form of power strip.

[0016] In order to make the end lid 1 more stable when being snapped into the outer tube 401, the outer tube 401 is further provided with a protrusion 408 on the outer wall thereof. The inner wall of the end lid 1 near the bottom end is provided with an annular neck 102. The protrusion 408 and the annular neck 102 can be snap-fitted with each other. The number of protrusions 408 is at least three. When the end lid 1 is snapped down on the outer tube 401, the protrusion 408 is right inserted into the annular neck 102. When the end lid 1 is pulled out forcefully, the protrusion 408 can be disengaged from the annular neck 102.

[0017] In order to facilitate the fastening of the end lid 1 when being snapped to the outer tube 401 and limit the movement distance thereof, the outer tube 401 comprises a front end portion 4011 and a main body portion 4012. The front end portion 4011 has a smaller outer diameter than the main body portion 4012. The protrusion 408 is located on the outer wall of the front end portion 4011. A boss 407 is formed between the outer wall of the front end portion 4011 and the outer wall of the main body portion 4012. The boss 407 is located below the protrusion 408. The bottom end of the end lid 1 can be abutted against the boss 407. Therefore, the arrangement of the boss 407 acts as a limit. ,

[0018] In order that the spring 3 is in a compressed state and the cover 2 moves downward relative to the inner tube 402 when the end lid 1 is snapped, a first annular inner rim 101 may be opened on the inner wall of the end lid 1 near the bottom end. The first annular inner rim 101 is located above the annular neck 102.

[0019] The outer wall of the front end of the cover 2 is provided with a first annular outer rim 201. The top end of the first annular outer rim 201 can be abutted against the bottom of the first annular inner rim 101. The bottom end of the first annular outer rim 201 can be abutted against the top end of the front end portion 4011. The spring 3 is in a compressed state. In order to further function to fix and limit the cover 2, a second annular outer rim 202 may be provided on the outer wall of the cover 2 near the bottom end. A second annular inner rim 409 may be provided on the inner wall of the outer tube 401.

The second annular outer rim 202 and the second annular inner rim 409 can be snap-fitted with each other.

[0020] The end lid 1 and the cover 2 of this structure cooperate. As shown in FIG. 3, when the end lip 1 and the base 4 are in a snapped state, the bottom of the first annular inner rim 101 of the inner wall of the end lid 1 is abutted against the top end of the first annular outer rim 201 of the cover 2 to compress the spring 3. The entire cover 2 moves downwards relative to the inner tube 402. The bottom end of the first annular outer rim 201 is abutted against the front end 4011 of the end lid 1. The second annular outer rim 202 and the second annular inner rim 409 are engaged with each other, so that the cover 2 can be further fixed and limited.

[0021] Thus the structure is simple and easy to operate. The method of using the cosmetics container of this structure can be briefly described as: the end lid 1 is pulled upwards forcefully, under the spring force of the spring 3, the second annular outer rim 202 is disengaged from the second annular inner rim 409, so that the entire cover 2 moves upward relative to the inner tube 402, and then the cover 2 is pressed downward again, so that the cosmetics 6 in the inner tube 402 can be used by being exposed.

[0022] In addition, a bottom lid 5 may also be included. A countersink opening 406 is provided at the bottom of the base 4. The bottom lid 5 is embedded in the opening 406. The cosmetics container of this structure is easy to disassemble and install, and is easy to use.

[0023] For ease of viewing, the cover 2 is of a transparent material structure. The cover 2 of this transparent material structure allows the user to observe the concealed cosmetics 6 without removing it, and is easy to use.

[0024] In order to protect the cosmetics 6, both the end lid 1 and the base 4 have a dark-colored material structure. The end lid 1 and the base 4 of the dark-colored material structure can further protect the cosmetics 6 and prevent their deterioration due to light irradiation.

[0025] The above description is merely some embodiments of the present invention, and it should be pointed out that those skilled in the art can make other variations and improvements without departing from the inventive concept of the present invention, which all fall into the protection scope of the present invention.

Claims

1. A cosmetics container, comprising an end lid (1), a cover (2), a spring (3) and a base (4), **characterized in that** the base (4) comprises an outer tube (401) and an inner tube (402) for accommodating cosmetics, a gap (403) is formed between the outer tube (401) and the inner tube (402), the spring (3) is sleeved over the inner tube (402) and positioned inside the gap (403), the cover (2) is sleeved over the inner tube (402), the bottom end of the cover (2) is connected to the top end of the spring (3) and is able to move up and down along the gap, and the end lid (1) is fastened to the base (4).

2. The cosmetics container according to claim 1, **characterized in that** a protrusion (408) is further provided on the outer wall of the outer tube (401), an annular neck is arranged on the inner wall of the end lid (1) near the bottom end, and the protrusion (408) and the annular neck (102) can be snap-fitted with each other.

3. The cosmetics container according to claim 2, **characterized in that** the outer tube (401) comprises a front end portion (4011) and a main body portion (4012), the outer diameter of the front end portion (4011) is smaller than that of the main body portion (4012), the protrusion (408) is located on the outer wall of the front end portion (4011), a boss (407) is formed between the outer wall of the front end portion (4011) and the outer wall of the main body portion (4012), the boss (407) is located below the protrusion (408), and the bottom end of the end lid (1) can be abutted against the boss (407).

4. The cosmetics container according to claim 3, **characterized in that** a first annular inner rim (101) is formed on the inner wall of the end lid (1) near the bottom end, the first annular inner rim (101) is located above the annular neck (102), a first annular outer rim (201) is provided on the outer wall of the front end of the cover (2), the top end of the first annular outer rim (201) can be abutted against the bottom of the first annular inner rim (101), the bottom end of the first annular outer rim (201) can be abutted against the top end of the front end portion (4011), and the spring (3) is in a compressed state.

5. The cosmetics container according to claim 2, **characterized in that** the number of the projections (408) is at least three.

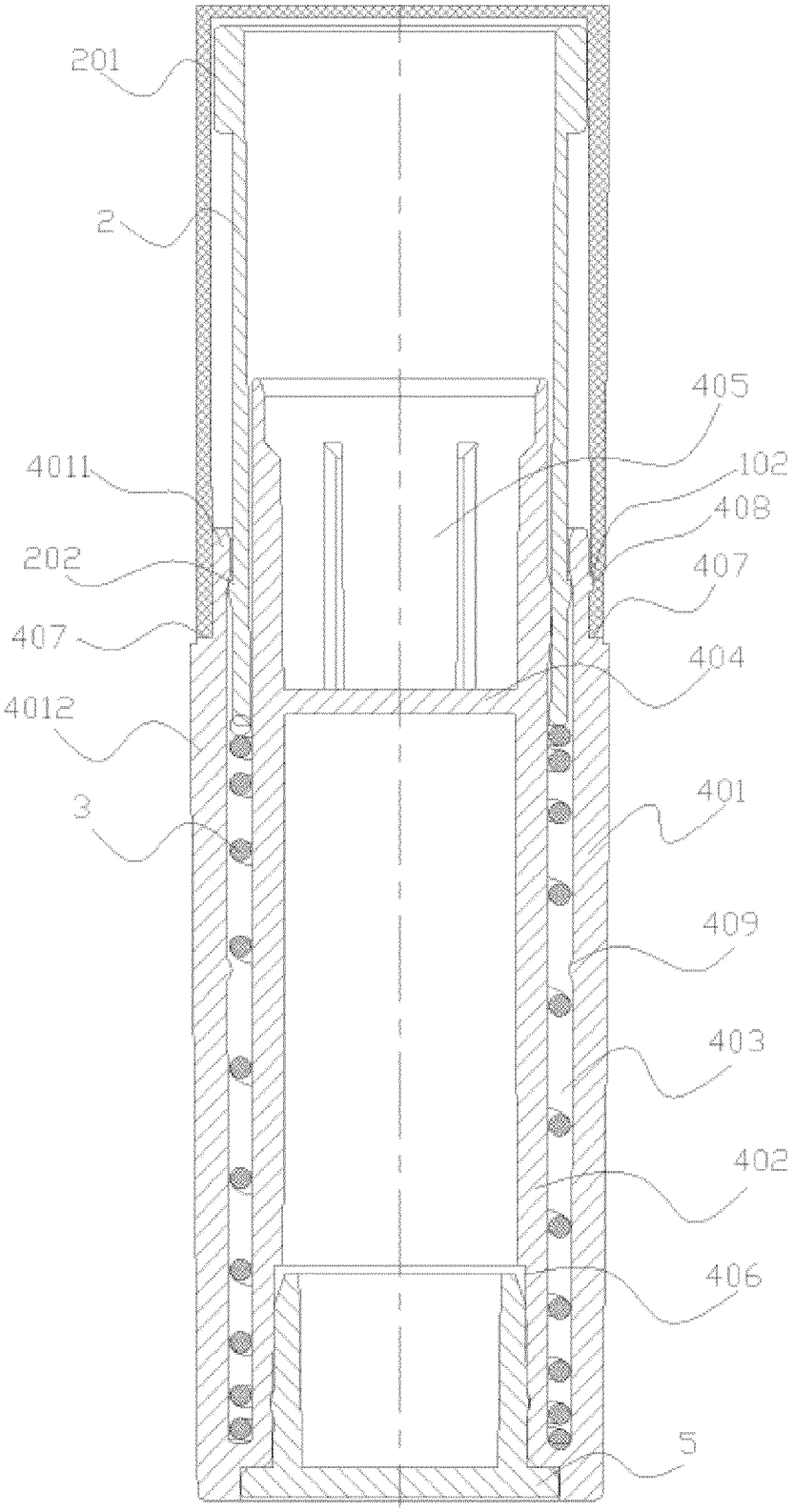
6. The cosmetics container according to claim 1, **characterized in that** a second annular outer rim (202) is provided on the outer wall of the cover (2) near the bottom end, the inner wall of the outer tube (401) is provided with a second annular inner rim (409), and the second annular outer rim (202) and the second annular inner rim (409) can be snap-fitted with each other.

7. The cosmetics container according to claim 1, **characterized in that** an inner portion of the inner tube (402) near the top end is provided with a barrier sheet (404), and the barrier sheet (404) and the tube wall of the inner tube (402) forms a cavity (405) for accommodating the cosmetics (6).

8. The cosmetics container according to claim 1, further comprising a bottom lid (5), wherein a countersink opening (406) is provided at the bottom of the base (4), and the bottom lid (5) is embedded within the opening (406).

9. The cosmetics container according to any one of claims 1 to 8, **characterized in that** the cover (2) is of a transparent material structure.

10. The cosmetics container according to any one of claims 1 to 8, **characterized in that** both the end lid (1) and the base (4) are of a dark-colored material structure.


201
2
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5

Fig. 1

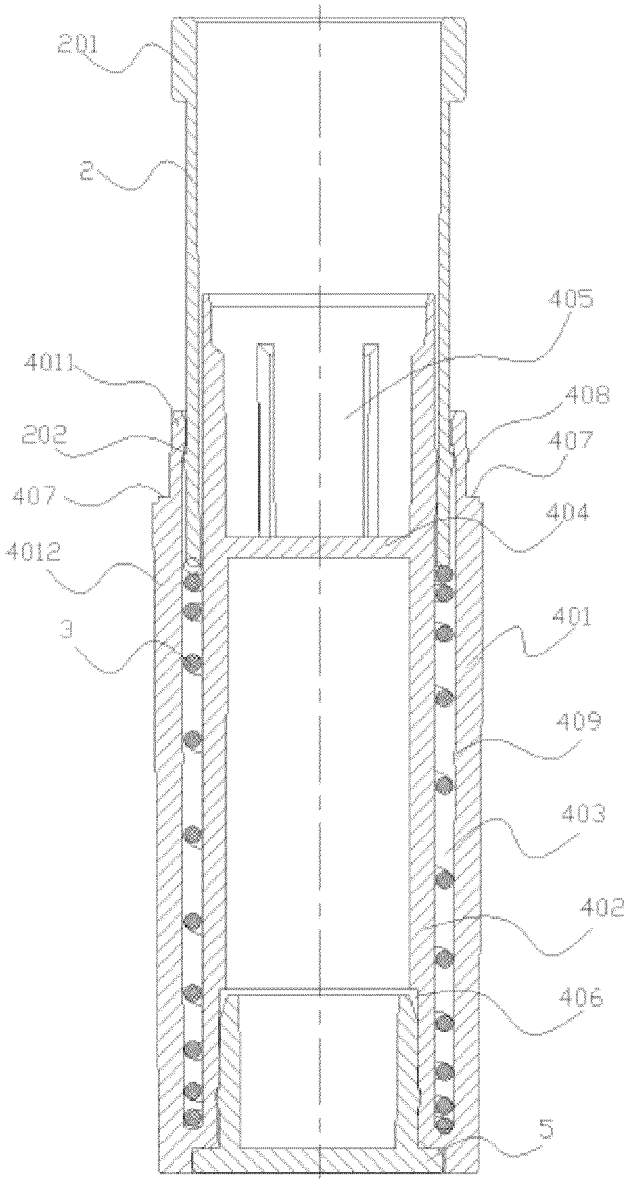
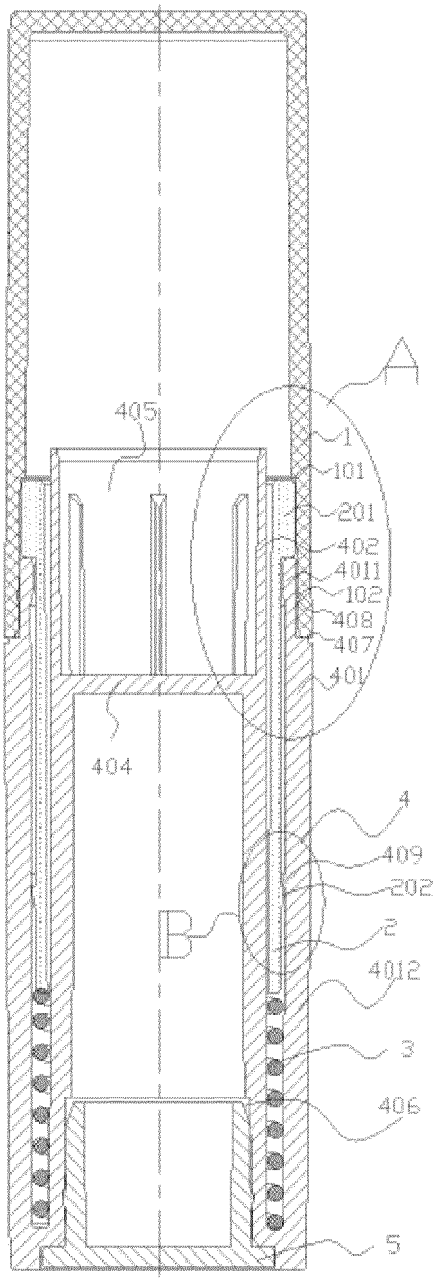


Fig. 2


A
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1
101
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Fig. 3

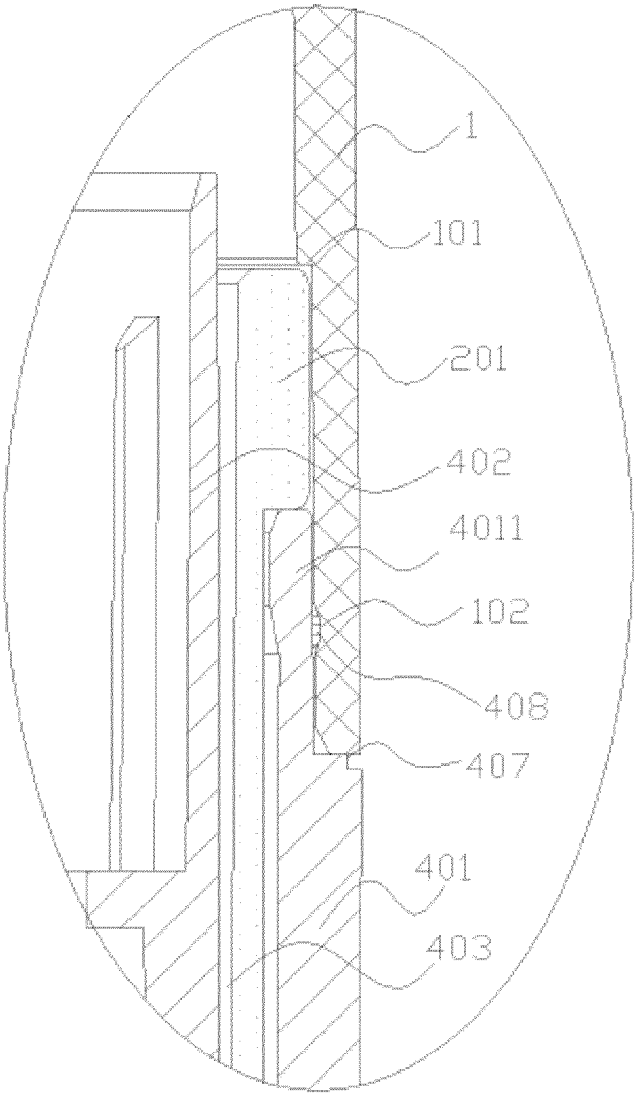

Fig. 4

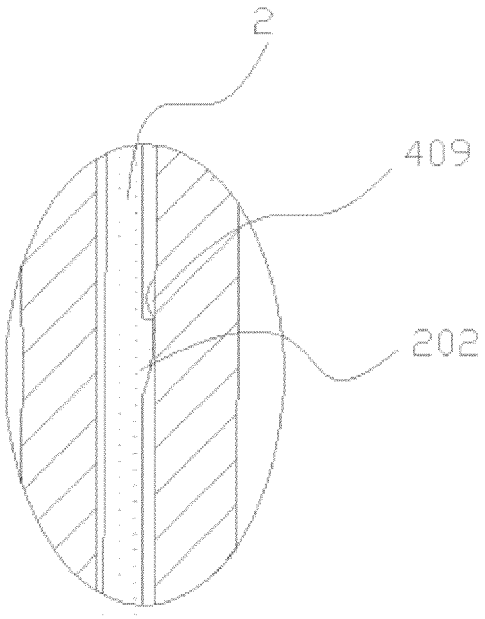

Fig. 5

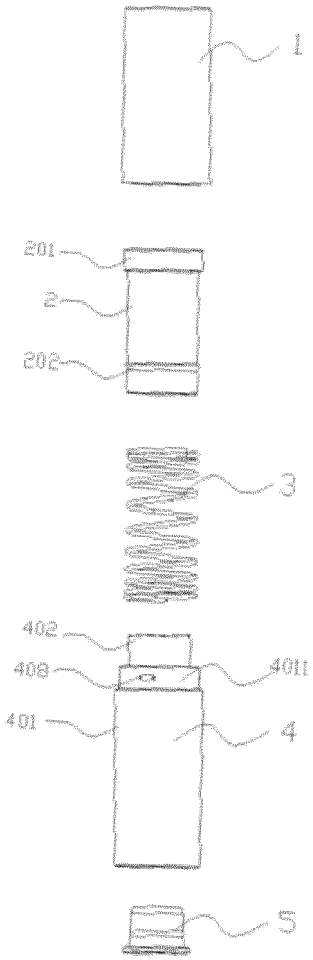

Fig. 6

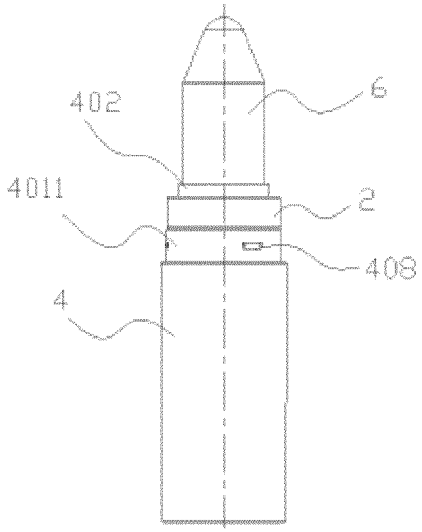

Fig. 7

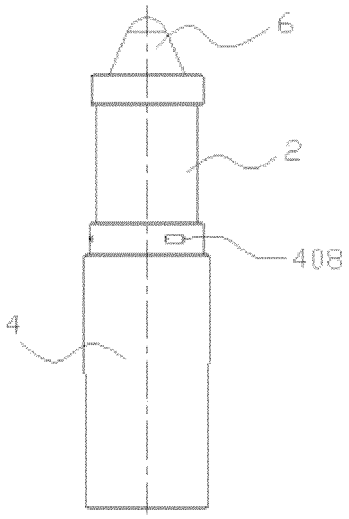

Fig. 8

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2015/094024

A. CLASSIFICATION OF SUBJECT MATTER

A45D 40/10 (2006.01) i

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)

A45D; A46B

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)

CNPAT, WPI, EPODOC, CNKI: cosmetic, lip gloss, concealer, sunscreen stick, skin whitening stick, shell, lipstick, rouge, container, tube, spring, cover, lid

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 4-68712 U (YOSHINO KOGYOSHO CO., LTD.), 18 June 1992 (18.06.1992), description, pages 3-9, and figures 1-2	1-3, 5, 9-10
A	CN 1274555 A (RECKSEM COSMETICS PACKING CO., LTD.), 29 November 2000 (29.11.2000), the whole document	1-10
A	CN 2399986 Y (GUO, Zhenhui), 11 October 2000 (11.10.2000), the whole document	1-10
A	CN 201243726 Y (CHEN, Qiuhuo et al.), 27 May 2009 (27.05.2009), the whole document	1-10
A	CN 201005236 Y (CHENGZHEN COSMETIC UTENSIL (TIANJIN) CO., LTD.), 16 January 2008 (16.01.2008), the whole document	1-10
A	EP 0943262 A2 (TECHPACK ESPAN S.L.), 22 September 1999 (22.09.1999), the whole document	1-10

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

* Special categories of cited documents:

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"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
25 May 2016 (25.05.2016)	**23 June 2016 (23.06.2016)**
Name and mailing address of the ISA/CN: State Intellectual Property Office of the P. R. China No. 6, Xitucheng Road, Jimenqiao Haidian District, Beijing 100088, China Facsimile No.: (86-10) 62019451	Authorized officer **QIAO, Mingxia** Telephone No.: (86-10) **62414477**

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2015/094024

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
JP 4-68712 U	18 June 1992	None	
CN 1274555 A	29 November 2000	SG 77237 A1	19 December 2000
		BR 9902098 A	09 January 2001
CN 2399986 Y	11 October 2000	None	
CN 201243726 Y	27 May 2009	None	
CN 201005236 Y	16 January 2008	None	
EP 0943262 A2	22 September 1999	DE 69900766 D1	28 February 2002
		US 6139208 A	31 October 2000

Form PCT/ISA/210 (patent family annex) (July 2009)