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(54)**CREAM TYPE COSMETIC CONTAINER**

Provided is a cream-type cosmetic container, which can easily discharge a highly viscous content without a separate pumping member by allowing a button part to downwardly move and then return to an original location and thus changing the internal pressure of the container body when a user pressurizes the button part, and thus can save the assembling time and the manufacturing cost.

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BACKGROUND OF THE INVENTION

[0001] The present invention disclosed herein relates to a cream-type cosmetic container, and more particularly, to a cream-type cosmetic container, which can easily discharge a highly viscous content without a separate pumping member by allowing a button part to downwardly move and then return to an original location and thus changing the internal pressure of the container body when a user pressurizes the button part, and thus can save the assembling time and the manufacturing cost.

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[0002] Generally, cream-type cosmetic containers storing highly viscous cream are configured to interrupt a contact between air and the content contained in the cosmetic containers. An exemplary vacuum-type cosmetic container is disclosed in Korean Utility Model No. 20-0311503 filed and owned by the present applicant.

[0003] This utility model discloses a dispenser container including a container part 10 storing contents, a dispenser 100 coupled to an upper end of the container part 10. The dispenser 100 includes a cylinder 20 coupled to the upper end of the container part 10, a valve body 30 disposed at an intake hole 22 of the cylinder 20, a button 40 disposed at the cylinder 20 so as to perform repetitive pumping and including a tray part 42 extended so as to cover an upper part of the container part 10 at an upper end thereof, and a piston 50 disposed between an inner wall surface of the cylinder 20 and a lower end portion of the button 40. Here, the button has a slide hole 44 formed at a central portion thereof in a vertical direction, and the valve body 30 has an upper end thereof upwardly extending and slidably inserted into the slide hole 44 of the button. Also, a cover member 60 is coupled to the upper end of the valve body 30 to cover the slide hole 44 of the button 40. Thus, when the button 40 is pushed, the button 40 descends along an outer circumferential surface of the valve body 30, generating a gap between the cover member 60 and the button 40. Contents are discharged through the gap and collect in the tray part 42 of the button 40.

[0004] However, in this utility model, the dispenser 100 including the cylinder 20 having the intake hole 22 at the lower end thereof is coupled to the upper portion of the container part 10 to discharge contents stored in the container part 10. Accordingly, since this utility model has a structure in which pumping is performed through the dispenser 100 having a complicated structure, there is a limitation in that the assembling time and the manufacturing cost for installing the dispenser 100 increase.

SUMMARY OF THE INVENTION

[0005] The present invention provides a cream-type cosmetic container, which can easily discharge a highly viscous content without a separate pumping member by allowing a button part to downwardly move and then re-

turn to an original location and thus changing the internal pressure of the container body when a user pressurizes the button part, and thus can save the assembling time and the manufacturing cost.

[0006] The present invention also provides a creamtype cosmetic container, which can discharge a uniform amount of contents every pumping operation by suctioning and storing a uniform amount of contents in a space defined by a pumping guide cap and a content suctioning part through the content suctioning part.

[0007] Embodiments of the present invention provide cream-type cosmetic containers including: a container body containing contents and having a volume reduced according to a use of contents; a pumping guide cap coupled to an upper portion of the container body, elastically deformed according a pressurization by a user, and discharging contents contained in the container body by a pumping operation; and a content suctioning part disposed inside the container body, coupled to a lower portion of the pumping guide cap to form a space for storing contents, and suctioning a uniform amount of contents contained in the container body by an elastic deformation of the pumping guide cap.

[0008] In some embodiments, the pumping guide cap may include a button part disposed at one side of an upper end of the pumping guide cap, downwardly moved and then restored to an original location according to the pressurization of a user, guiding the pumping operation by changing a pressure of the space defined by the pumping guide cap and the content suctioning part, and formed of an elastic material.

[0009] In other embodiments, the pumping guide cap may further include: a coupling part coupled to the upper portion of the container body to fix the pumping guide cap to the container body; and a content outlet hole located at the other side of the upper end of the pumping guide cap and discharging contents according to an operation of the button part.

[0010] In still other embodiments, the cream-type cosmetic container may include a first valve member disposed in the content outlet hole to open/close the content outlet hole according to the pressurization of a user.

[0011] In even other embodiments, the content suctioning part may have a content inlet hole for allowing contents stored in the container body to flow therethrough, and may include a second valve member disposed in the content inlet hole to open/close the content inlet hole according to the pressurization of the button part.

[0012] In yet other embodiments, the cream-type cosmetic container may further include a closing cap coupled to the upper portion of the container body while covering the pumping guide cap.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] As described above, the present invention can easily discharge a highly viscous content without a sep-

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arate pumping member by allowing a button part to downwardly move and then return to an original location and thus changing the internal pressure of the container body when a user pressurizes the button part, and thus can save the assembling time and the manufacturing cost. [0014] Also, the present invention can discharge a uniform amount of contents every pumping operation by suctioning and storing a uniform amount of contents in a space defined by a pumping guide cap and a content suctioning part through the content suctioning part.

FIG. 1 is an exploded perspective view illustrating a configuration of a cream-type cosmetic container according to an exemplary embodiment of the present invention;

FIG. 2 is an assembled perspective view illustrating a configuration of a cream-type cosmetic container according to an exemplary embodiment of the present invention;

FIG. 3 is an assembled cross-sectional view illustrating a configuration of a cream-type cosmetic container according to an exemplary embodiment of the present invention; and

FIG. 4 is a view illustrating an operational state of a cream-type cosmetic container according to an exemplary embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBOD-IMENTS

[0015] Hereinafter, exemplary embodiments of the present invention will be described in detail with reference to the accompanying drawings. The same reference numerals provided in the drawings indicate the same members.

[0016] FIG. 1 is an exploded perspective view illustrating a configuration of a cream-type cosmetic container according to an exemplary embodiment of the present invention. FIG. 2 is an assembled perspective view illustrating a configuration of a cream-type cosmetic container according to an exemplary embodiment of the present invention. FIG. 3 is an assembled cross-sectional view illustrating a configuration of a cream-type cosmetic container according to an exemplary embodiment of the present invention.

[0017] Referring to FIGS. 1 to 3, a cream-type cosmetic container according to an exemplary embodiment of the present invention may include a container body 100, a pumping guide cap 200, a content suctioning part 300, and a closing cap 400.

[0018] The container body 100 may contain contents, and may include a piston 110 rising according to the use of contents stored in the container body 100.

[0019] An air inflow hole 120 may be formed at a lower end portion of the container body 100 to allow air to flow into the container body 100 when the piston 110 rises by a pumping operation through an operation of the pumping guide cap 200.

[0020] The pumping guide cap 200 may be coupled to an upper portion of the container body 100 to close an upper opening of the container body 100. The pumping guide cap 200 may include a coupling part 210 coupled to the upper portion of the container body 100 so as to fix the pumping guide cap 200 to the upper portion of the container body 100.

[0021] In an embodiment, the pumping guide cap 200 may include a button part 220 at one side of the upper end thereof. The button part 220 may be elastically deformed according to a pressurization of a user, and may change a pressure of a space defined by the pumping guide cap 200 and the content suctioning part 300 described later to discharge contents out of the content suctioning part 300. When a user pressurizes the upper end portion of the button part 220, the whole of the top surface of the button part 220 may downwardly move. Then, when the pressurization of a user is released, the whole of the top surface of the button part 220 may be restored to the original location, changing the pressure of the space defined by the content suctioning part 300 and the pumping guide cap 200 and thus guiding a pumping operation. Accordingly, the button part 220 may be formed of an elastic material so as to enable the elastic deformation according to the pressurization of a user.

[0022] The pumping guide cap 200 may have a content outlet hole 230 at the other side of the upper end of the pumping guide cap 220 so as to discharge contents by the pumping operation according to the manipulation of the button part 220. Also, a first valve member 231 may be disposed in the content outlet hole 230 to open/close the content outlet hole 230 according to whether or not the button part 220 is pressurized.

[0023] The content suctioning part 300 may be coupled to a lower portion of the pumping guide cap 200 inside the container body 100, and may suction a uniform amount of contents stored in the container body 100 due to the elastic deformation of the button part 220 of the pumping guide cap 200. The content suctioning part 300 may be spaced from the pumping guide cap 200 thereover by a certain interval so as to suction and store contents stored in the container body 100.

[0024] Also, the content suctioning part 300 may have a content inlet hole 310 such that contents stored in the container body 100 flow into the content suctioning part 300. Also, a second valve member 311 may be disposed in the content inlet hole 310 to open/close the content inlet hole 310 according to whether or not the button part 220 is pressurized.

[0025] The content suctioning part 300 may suction and store a uniform amount of contents contained in the container body 100, and may be guided so as to discharge a uniform amount of contents upon pumping operation according to the manipulation of the button part 220.

[0026] The closing cap 400 may be coupled to the upper portion of the container body 100 while covering the pumping guide cap 200. The closing cap 400 may prevent

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a malfunction of the button part 220, and may protect the first valve member 231 from an external shock.

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[0027] The closing cap may have a pressurization protrusion 410 formed on an upper end inside the closing cap 400 and pressurizing the upper end of the pumping guide cap 200 to prevent the pumping guide cap 200 from being separated from the container body 100.

[0028] Hereinafter, an operational state of a creamtype cosmetic container according to an exemplary embodiment of the present invention will be described with reference to FIG. 4. FIG. 4 is a view illustrating an operational state of a cream-type cosmetic container according to an exemplary embodiment of the present invention. [0029] Referring to FIG. 4, in an cream-type cosmetic container according to an exemplary embodiment of the present invention, when a user pressurize the button part 220 formed at one side of the pumping guide cap 200, the button part 220 formed of an elastic material may downwardly move, and thus, contents stored in the space defined by the pumping guide cap 200 and the content suctioning part 300 may be discharged to the upper surface of the pumping guide cap 200 through the content outlet hole 230 formed at the other side of the pumping guide cap 200 due to a pressure generated in the space defined by the pumping guide cap 200 and the content suctioning part 300. In this case, the first valve member 231 closing the content outlet hole 230 may open the content outlet hole by the pressure of contents, and the second valve member 311 may close the content inlet hole so as to allowing contents suctioned into the content suctioning part 300 to be discharged through the content outlet hole 230.

[0030] When a user depressurizes the button part 220, the button part 220 may be restored and upwardly moved by a self-elastic force. Thus, contents contained in the container body 100 may flow into the content suctioning part 300 by the pressure generated in the space defined by the pumping guide cap 200 and the content suctioning part 300. In this case, the first valve member 231 may close the content outlet hole 230, and the second valve member 311 may open the content inlet hole 310, allowing a uniform amount of contents dischargeable upon next pumping operation to flow into the content suctioning part 300 through the content inflow hole 310.

 $\textbf{[0031]} \quad \text{As described above, since the present invention}$ is configured to store a uniform amount of contents in the space defined by the pumping guide cap 200 and the content suctioning part 300, it is possible to discharge a uniform amount of contents upon pumping operation according to the manipulation of the button part 220.

[0032] As described above, optimal embodiments have been disclosed in the drawings and the specification. Although specific terms have been used herein, these are only intended to describe the present invention and are not intended to limit the meanings of the terms or to restrict the scope of the present invention as disclosed in the accompanying claims. Therefore, those skilled in the art will appreciate that various modifications

and other equivalent embodiments are possible from the above embodiments. Therefore, the scope of the present invention should be defined by the technical spirit of the accompanying claims.

Claims

1. A cream-type cosmetic container comprising:

a container body containing contents and having a volume reduced according to a use of con-

a pumping guide cap coupled to an upper portion of the container body, elastically deformed according a pressurization by a user, and discharging contents contained in the container body by a pumping operation; and

a content suctioning part disposed inside the container body, coupled to a lower portion of the pumping guide cap to form a space for storing contents, and suctioning a uniform amount of contents contained in the container body by an elastic deformation of the pumping guide cap.

- The cream-type cosmetic container of claim 1, wherein the pumping guide cap comprises a button part disposed at one side of an upper end of the pumping guide cap, downwardly moved and then restored to an original location according to the pressurization of a user, guiding the pumping operation by changing a pressure of the space defined by the pumping guide cap and the content suctioning part, and formed of an elastic material.
- 3. The cream-type cosmetic container of claim 2, wherein the pumping guide cap further comprises:

a coupling part coupled to the upper portion of the container body to fix the pumping guide cap to the container body; and

a content outlet hole located at the other side of the upper end of the pumping guide cap and discharging contents according to an operation of the button part.

- The cream-type cosmetic container of claim 3, comprising a first valve member disposed in the content outlet hole to open/close the content outlet hole according to the pressurization of a user.
- 5. The cream-type cosmetic container of claim 2, wherein the content suctioning part has a content inlet hole for allowing contents stored in the container body to flow therethrough, and comprises a second valve member disposed in the content inlet hole to open/close the content inlet hole according to the pressurization of the button part.

6. The cream-type cosmetic container of claim 1, further comprising a closing cap coupled to the upper portion of the container body while covering the pumping guide cap.

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INTERNATIONAL SEARCH REPORT International application No. PCT/KR2013/012090 5 CLASSIFICATION OF SUBJECT MATTER A45D 40/00(2006.01)i, B65D 47/34(2006.01)i According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) 10 A45D 40/00; A45D 34/00; B65D 47/34 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility models: IPC as above Japanese Utility models and applications for Utility models: IPC as above 15 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS (KIPO internal) & Keywords: cosmetics, container, pressurizing, pneumatic pressure, elasticity, pumping, button, valve C. DOCUMENTS CONSIDERED TO BE RELEVANT 20 Citation of document, with indication, where appropriate, of the relevant passages Category* Relevant to claim No. Х KR 10-1028988 B1 (TOLY KOREA INC. et al.) 12 April 2011 1,6 See abstract, claim 1, paragraphs <22> to <47> and figures 1 to 3. 2-5 A 25 KR 10-2013-0013135 A (MINJIN CO., LTD.) 06 February 2013 1-6 Α See abstract, claims 1 to 4 and figures 1 to 3. KR 10-2012-0138690 A (YONWOO CO., LTD.) 26 December 2012 1-6 See abstract, claims 1 to 11 and figures 1 to 12. WO 2010-050772 A2 (YOON, Suk Kwan et al.) 06 May 2010 1-6 30 Α See abstract, claims 1 to 10 and figures 1 to 4. 35 40 Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents 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 document defining the general state of the art which is not considered to be of particular relevance earlier application or patent but published on or after the international filing date 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 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) "L' 45 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 "O" document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than "&" document member of the same patent family the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT Information on patent family members

International application No. PCT/KR2013/012090

5		***************************************		***************************************
	Patent document cited in search report	Publication date	Patent family member	Publication date
10	KR 10-1028988 B1	12/04/2011	US 2012-0006853 A1 WO 2010-114200 A1	12/01/2012 07/10/2010
	KR 10-2013-0013135 A	06/02/2013	NONE	
15	KR 10-2012-0138690 A	26/12/2012	CN 103533861 A EP 2721947 A2 US 2014-0103071 A1 WO 2012-173399 A2 WO 2012-173399 A3	22/01/2014 23/04/2014 17/04/2014 20/12/2012 04/04/2013
20	WO 2010-050772 A2	06/05/2010	JP 2012-507452 A KR 10-1061998 B1 KR 20100048927 A WO 2010-050772 A3	29/03/2012 05/09/2011 11/05/2010 19/08/2010
25				
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Form PCT/ISA/210 (patent family annex) (July 2009)

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

• KR 200311503 [0002]