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(54) **ONE-TOUCH CAP**

(57) The present invention relates to a one-touch cap which enables a cover part to encompass a whole part cap body when the cover part is closed, so as to fundamentally prevent a phenomenon in which a gap between an upper end of the cap body and a lower end of the cover part is widened due to the continuous opening and closing of the cover part for the use of contents, thereby to prevent the leakage of contents and the inflow of foreign substances.

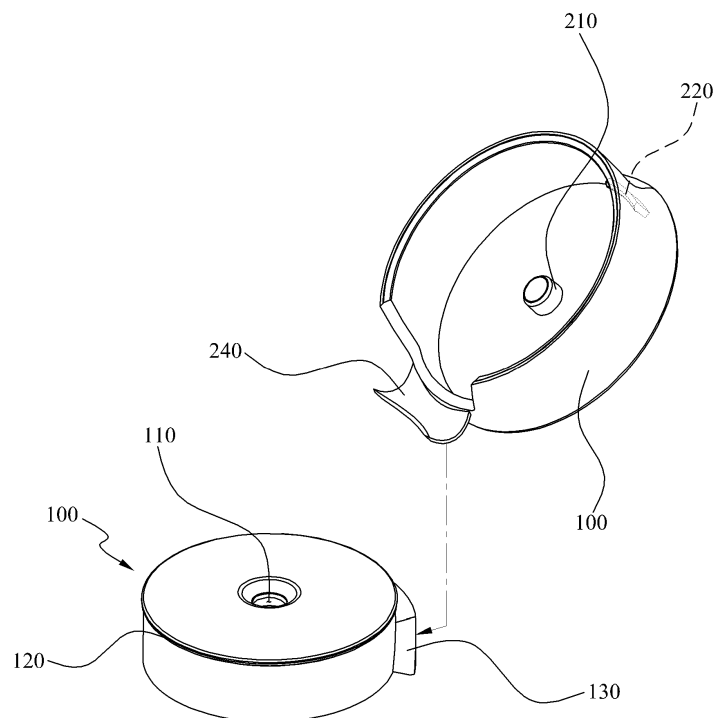


Fig. 1

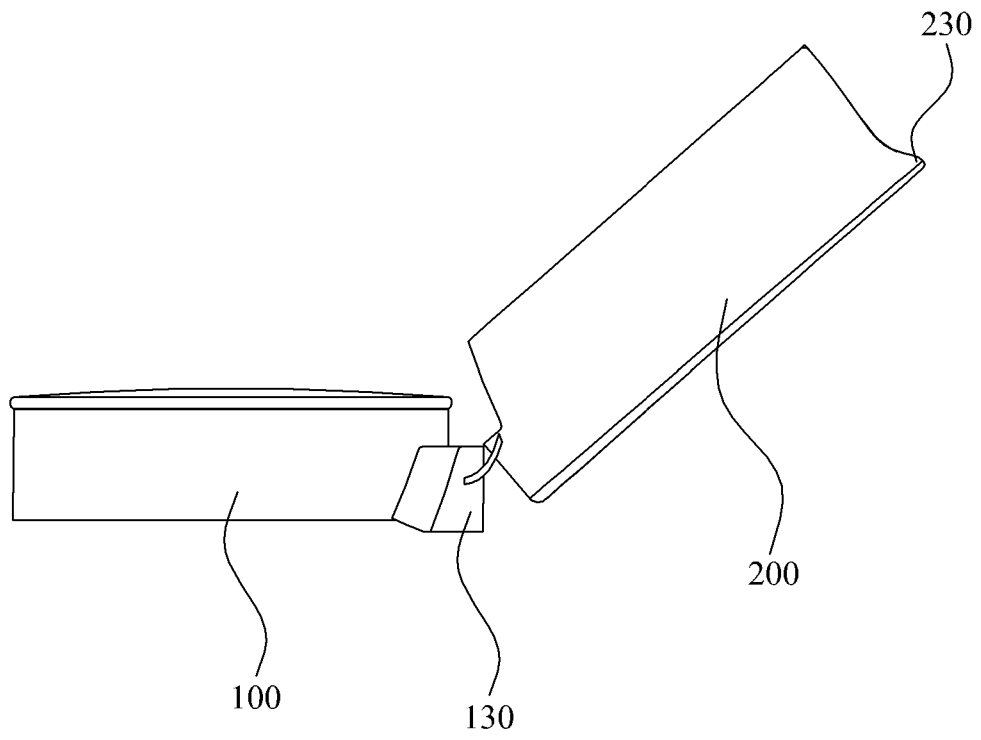


Fig. 2

Description

BACKGROUND OF THE INVENTION

[0001] The present invention relates to a one-touch cap, in particular, a one-touch cap which enables a cover part to encompass a whole part cap body when the cover part is closed, so as to fundamentally prevent a phenomenon in which a gap between an upper end of the cap body and a lower end of the cover part is widened due to the continuous opening and closing of the cover part for the use of contents, thereby to prevent the leakage of contents and the inflow of foreign substances.

[0002] Generally, one-touch caps are configured to include a cap body which is coupled to an upper portion of a container body and having a discharge hole for discharging contents, and a cover part which is hinge-coupled to one side of the cap body, such that the discharge hole provided at the cap body can be opened and closed through an upward/downward rotation of the cover part. This type of 'one-touch cap' is disclosed in the registered utility model No. 20-0438528 (Hereafter it is called as 'the registered utility model').

[0003] The registered utility model in the above relates to a one-touch cap of cosmetic container including a body part (10) coupled to a cosmetic container and a cover part (20) coupled by means of a snap hinge at one side of the body part (10),

[0004] characterized in that interference prevention cutting parts (2)(2') are formed at both sides of a snap hinge (1) which connects a top end of the body part (10) and a lower end of the cover part (20).

[0005] However, the one-touch cap as in the above is configured in a way that a lower end of the cover part (20) is seated on an upper end of the body part (10) when the cover part (20) is closed. However, a gap between an upper end of the body part (10) and a lower end of the cover part becomes widened because the upper end of the body part (10) and the lower end of the cover part (20) are continuously being contacted, such that there will arise problems that contents can be leaked and that the one-touch cap can be contaminated due to influx of foreign substances through the gap.

SUMMARY OF THE INVENTION

[0006] The present invention is disclosed to solve the problems described in the above, the present invention is to provide a one-touch cap, enabling a cover part to encompass a whole part of a cap body when a cover part is closed, such that it is possible to fundamentally prevent a phenomenon in which a gap between an upper end of the cap body and a lower end of the cover part is widened due to the continuous opening and closing of the cover part for the use of contents, thereby to prevent the leakage of the contents as well as the inflow of foreign substances.

[0007] To solve the problems in the above, a one-touch

cap according to the present invention includes: a cap body coupled to an upper portion of the container body where contents are stored, and provided with a discharge hole for discharging contents stored in the container body, and a cover part hinge-coupled to one side of the cap body, and opening and closing the discharge hole by an upward and downward rotation,

[0008] characterized in a way that a hinge-coupling part is protrusively formed at a rear portion of the cap body such that the cover part can be hinge-coupled, wherein the cover part has a part of the rear portion which meets the hinge-coupling part cut open so as to prevent an interference with the hinge coupling part when the cover part is rotated upward and downward,

[0009] wherein the cover part encompasses a whole part of the cap body such that the cap body will not be exposed to the outside in a state of rotating to a downward direction and closing the discharge hole.

[0010] Furthermore, it is characterized in a way that a fixing protrusion is provided at an inner side of a front portion of the cover part such that the cover part can be fixedly coupled to the cap body in a state of rotating to a downward direction and closing the discharge hole, and at the cap body is provided a limitation protrusion which supports the fixing protrusion at a part that is met by the fixing protrusion and thereby limits rotation of the cap body to an upward direction.

[0011] Furthermore, it is characterized in a way that a handle part is provided at an outer side of a front portion of the cover part for making it easy for a user to grasp the cover part and to rotate to upward and downward directions.

[0012] As described in the above, according to the present invention, by configuring that the cover part can cover a whole part of the cap body when the cover part is closed, it is possible to prevent a phenomenon in which a gap between an upper end of the cap body and a lower end of the cover part is widened due to the continuous opening and closing of the cover part for the use of contents, thereby to prevent the leakage of the contents and the inflow of foreign substances.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013]

FIG. 1 is an exploded perspective view illustrating a configuration of a one-touch cap according to an exemplary embodiment of the present invention.

FIG. 2 is a side view illustrating a state of a cover part of the one-touch cap being opened according to an exemplary embodiment of the present invention.

FIG. 3 is a side view illustrating a state of a cover part of the one-touch cap being closed according to an exemplary embodiment of the present invention.

FIGS. 4 a rear view illustrating a state of a cover part of the one-touch cap being closed according to an

exemplary embodiment of the present invention.

FIGS. 5 is a cross-sectional view illustrating a state of the one-touch cap being coupled to a container body according to an exemplary embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

[0014] Hereinafter, the present invention will be described in detail with reference to accompanying drawings. The same reference numerals provided in the drawings indicate the same members.

[0015] FIG. 1 is an exploded perspective view illustrating a configuration of a one-touch cap according to an exemplary embodiment of the present invention. FIG. 2 is a side view illustrating a state that a cover part of the one-touch cap is opened according to an exemplary embodiment of the present invention.

[0016] FIG. 3 is a side view illustrating a state that a cover part of the one-touch cap is opened according to an exemplary embodiment of the present invention.

[0017] FIGS. 4 a rear view illustrating a state that a cover part of the one-touch cap is opened according to an exemplary embodiment of the present invention. FIGS. 5 is a cross-sectional view illustrating a state of the one-touch cap being coupled to a container body according to an exemplary embodiment of the present invention.

[0018] Referring to FIGS. 1 to 3, a one-touch cap according to the preferred embodiments of the present invention includes a cap body 100 and a cover part 200.

[0019] The cap body 100, coupled to an upper portion of the container body 10 where contents are stored, has a discharge hole 110 formed at a center portion thereof for discharging contents stored in the container body 10.

[0020] Furthermore, at the cap body 100 is provided a limitation protrusion 120 which supports a fixing protrusion 220 of a cover part 200, to be described later, in a state that the cover part 200 closes the discharge hole 110. The limitation protrusion 120 is possible to be formed simply at an upper portion of a front portion of the cap body 100 which meets the fixing protrusion 220, and also possible to be formed to encompass an upper outer circumferential portion of the cap body 100.

[0021] In the present invention, it is characterized in that a hinge coupling part 130 is protrusively provided at a rear portion of the cap body 100 such that a cover part 200 can be hinge-coupled thereto. By equipping the hinge coupling part 130 protruded from an outer circumferential portion of the cap body 100 and placing a hinge 240 separated from the cap body 100, it is possible that the cover part 200 can cover a whole part of the cap body 100 and thereby close the cap body 100 when the cover part 200 is rotated to a downward direction and closed. At this moment, the perimeter of the cover part 200 is configured to be bigger than the perimeter of the cap body 100 so as to encompass the whole part of the cap

body 100.

[0022] Furthermore, the hinge coupling part 130 is preferred to have a predetermined height from a bottom dead point of the rear portion of the cap body 100 so as to prevent a gap with a cut open part of the cover part 200 from being formed in a state the cover part 200 covers the whole part of the cap body 100.

[0023] The cover part 200, hinge-coupled to one side of the cap body 100 and opening and closing the discharge hole 110 by an upward and downward rotation, is provided with an opening and closing protrusion 210 which opens and closes the discharge hole 110 at an inner side thereof.

[0024] Furthermore, a fixing protrusion 220 which is supported by a limitation protrusion 120 is provided at an inner side of a front portion of the cover part 200 such that the cover part 200 can be rotated to a downward direction and be fixedly coupled to the cap body 100 in a state of closing the discharge hole 110. Due to this, the fixing protrusion 220 normally in a storing state is supported by the limitation protrusion 220 and prevents the cover part 200 from rotating to an upward direction and opening, and then is released from the limitation protrusion 120 when a user applies a certain amount of force, and makes it possible for the cover part 200 to rotate to an upward direction.

[0025] In the present invention, it is characterized in that the cover part 200 is configured to rotate in an upward and downward direction in a state of being coupled by means of a hinge 240 to the hinge coupling part 130, and configured to cover the whole part of the cap body 100 such that the cap body 100 will not be exposed to the outside in a state the cover part 200 rotates to a downward direction and closes the discharge hole 110. To attain this end, a height of the cover part 200 is preferred to be high enough to receive the cap body 100.

[0026] Furthermore, the cover part 200 is formed with a part of a rear portion thereof meeting the hinge coupling part 130 cut open, and more preferably, formed with a shape corresponding to the hinge coupling part 130 such that a gap will not be formed between the hinge coupling part 130 and the cover part 200.

[0027] Meanwhile, it is preferred that a handle 230 is equipped at an outer side of a front portion of the cover part 200 such that a user can easily grasp and rotate the cover part 200 to an upward and downward directions.

[0028] The present invention, as described in the above, is characterized to be composed of a new structure of a one-touch cap wherein the cover part 200 encompasses a whole part of the cap body 100 when the cover part 200 is closed. Accordingly, due to this structure wherein an upper end of the cap body 100 and a lower end of the cover part 200 do not meet each other when the cover part 200 is opened and closed, it is possible to fundamentally prevent the phenomenon in which a gap between an upper end of the cap body and a lower end of the cover part is widened by a continuous opening and closing of the cover part 200.

[0029] 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. Accordingly, the scope of the present invention should be defined by the technical spirit of the accompanying claims.

Claims

1. A one-touch cap comprises:

a cap body (100) coupled to an upper portion of the container body (10) where contents are stored, and provided with a discharge hole (110) for discharging contents stored in the container body (10); and

a cover part (200) hinge-coupled to one side of the cap body (100) and opening and closing the discharge hole (110) by an upward and downward rotation,

characterized in that a hinge-coupling part (130) is protrusively formed at a rear portion of the cap body (100) such that the cover part (200) can be hinge-coupled, wherein the cover part (200) has a part of the rear portion which meets the hinge-coupling part (130) cut open so as to prevent an interference with the hinge coupling part (130) when the cover part (200) is rotated upward and downward,

characterized in that the cover part (200) encompasses a whole part of the cap body (100) such that the cap body (100) will not be exposed to the outside in a state of rotating to a downward direction and closing the discharge hole (110).

2. The one-touch cap of claim 1, **characterized in that** a fixing protrusion is provided at an inner side of a front portion of the cover part such that the cover part can be fixedly coupled to the cap body in a state of rotating to a downward direction and closing the discharge hole, and at the cap body is provided a limitation protrusion which supports the fixing protrusion at a part that is met by the fixing protrusion and thereby limits rotation of the cap body to an upward direction.

3. The one-touch cap of claim 2, **characterized in that** a handle part is provided at an outer side of a front portion of the cover part for making it easy for a user to grasp the cover part and to rotate to upward and downward directions.

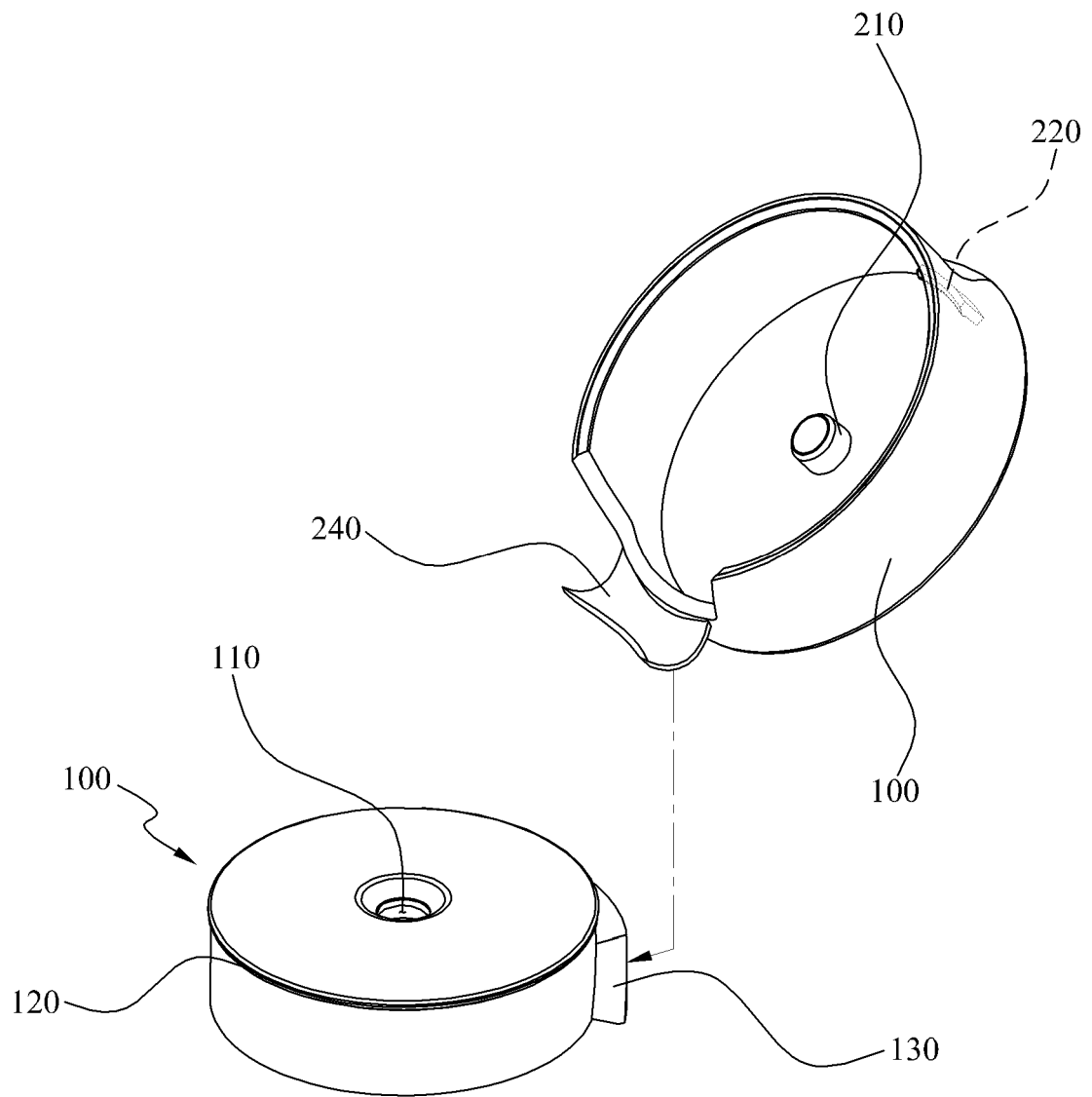


Fig. 1

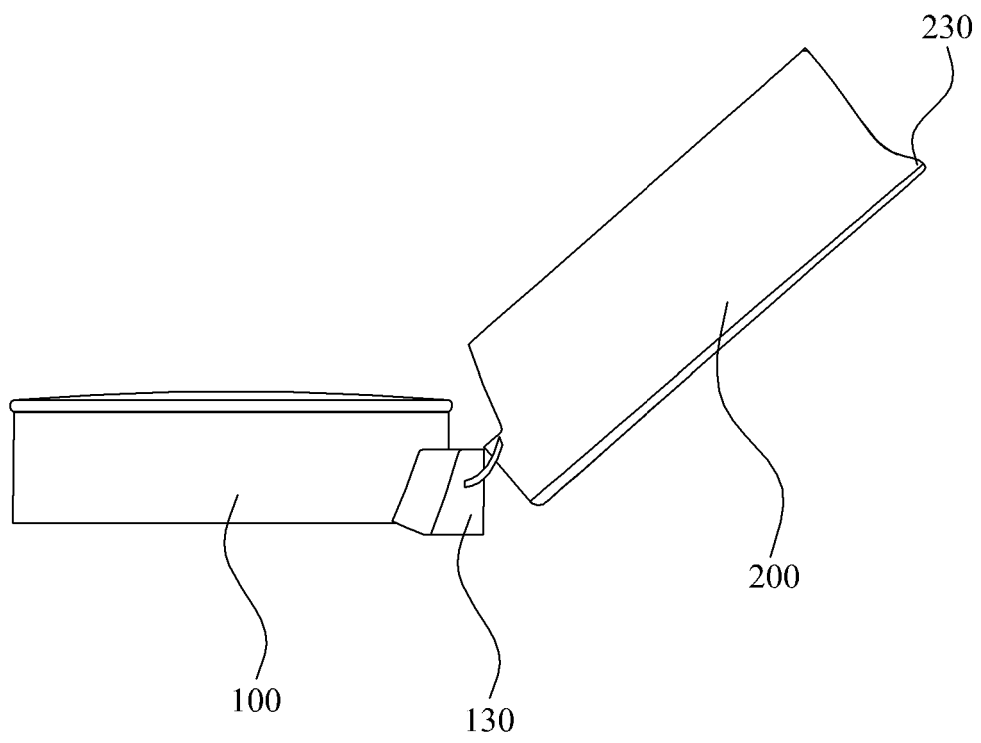


Fig. 2

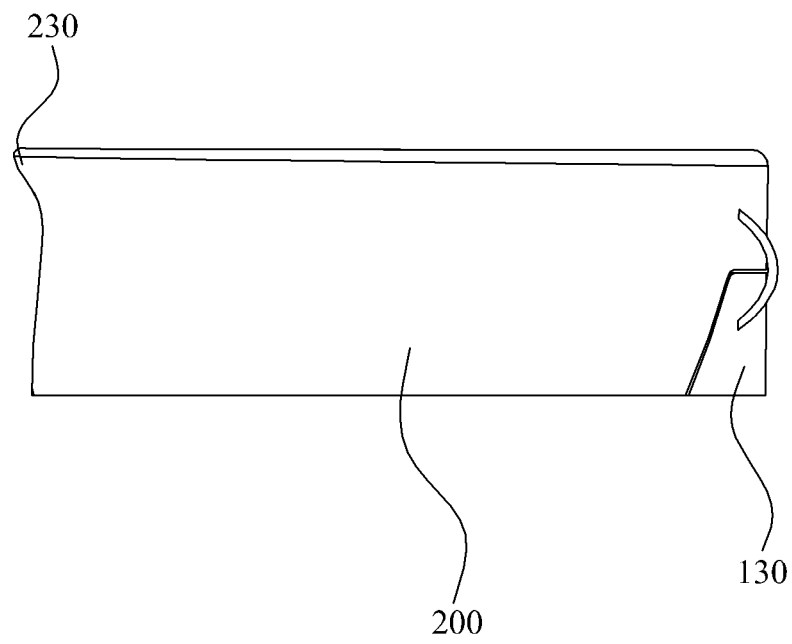


Fig. 3

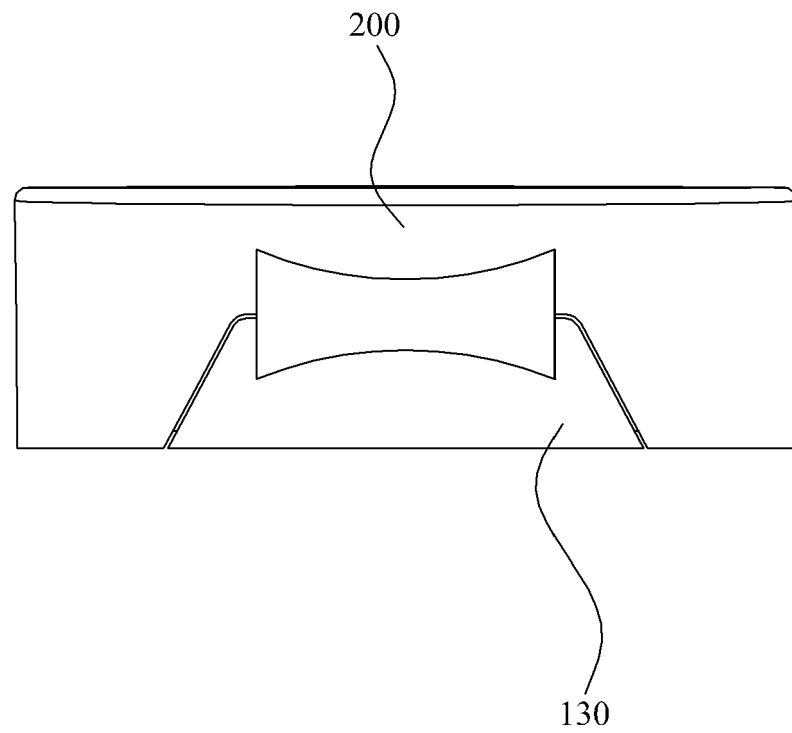


Fig. 4

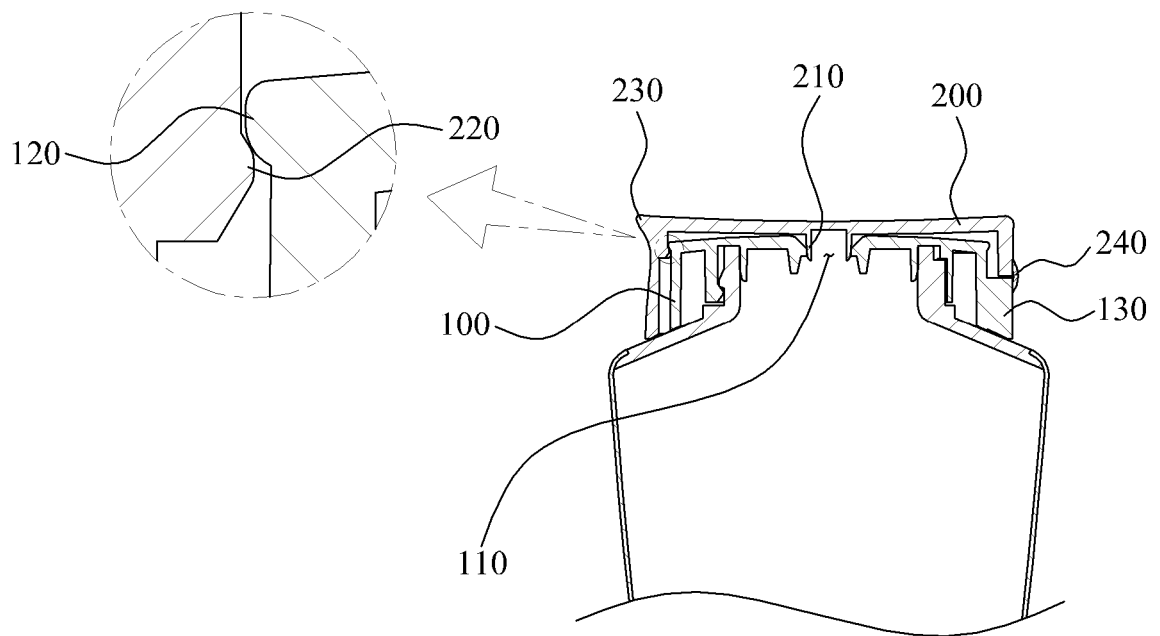


Fig. 5

INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2015/014407

A. CLASSIFICATION OF SUBJECT MATTER

B65D 47/08(2006.01)i, B65D 51/24(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)

B65D 47/08; B65D 43/22; B65D 35/44; B65D 47/26; B65D 41/16; B65D 51/24

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

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

eKOMPASS (KIPO internal) & Keywords: cover, container, discharge, opening and closing, cover, hinge, protrusion, body, protrusion and one-touch

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	KR 10-2012-0109066 A (YONWOO CO., LTD.) 08 October 2012 See paragraphs [0019]-[0020], [0031] and figures 1, 3.	1-3
Y	JP 5429778 B2 (YOSHINO KOGYOSHO CO., LTD.) 26 February 2014 See figure 8.	1-3
A	KR 10-2009-0024761 A (SAM HWA CROWN & CLOSURE CO., LTD.) 09 March 2009 See paragraphs [0025]-[0032] and figures 3, 5.	1-3
A	KR 10-2012-0032739 A (YONWOO CO., LTD.) 06 April 2012 See paragraphs [0017]-[0024] and figures 3-4.	1-3
A	KR 10-2004-0100864 A (NIFCO INC.) 02 December 2004 See page 4, lines 14-24 and figure 1.	1-3

☐ 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

"I" 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

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"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

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Date of the actual completion of the international search

25 APRIL 2016 (25.04.2016)

Date of mailing of the international search report

28 APRIL 2016 (28.04.2016)

Name and mailing address of the ISA/KR


 Korean Intellectual Property Office
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Authorized officer

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/KR2015/014407

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REFERENCES CITED IN THE DESCRIPTION

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- WO 200438528 A [0002]