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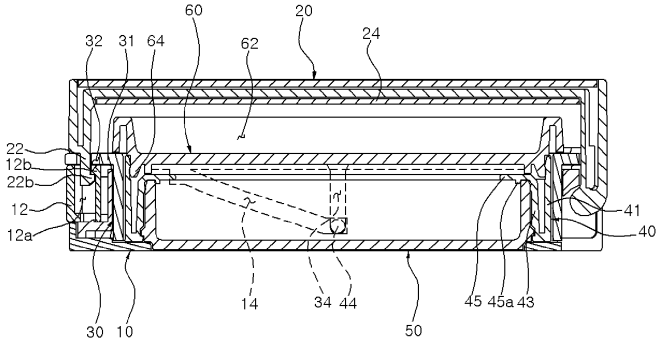
(54) COMPACT CONTAINER HAVING REFILL CONTAINER REPLACEMENT STRUCTURE

(57) A compact container having a refill container replacement structure according to an embodiment of the present invention comprises: a container body having a moving-up/down diagonal groove formed therein; a container lid opening/closing the container body; a container lid opening and closing the container body; an intermediate body which is coupled to the inside of the container body to be rotatable within a certain section and has a moving-up/down vertical hole formed therein; a refill container holder which is coupled into the intermediate body and has a moving-up/down protrusion that is inserted in the moving-up/down diagonal groove through the moving-up/down vertical hole; and a refill container coupled to the refill container holder and accommodating content therein.

Fig. 3



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Description

[Technical field]

[0001] The present invention relates to a compact container having a refill container replacement structure, and more particularly, to a compact container having a refill container replacement structure in which a refill container is moved up/down from a container body by rotating an intermediate body so as to be easily replaced.

[0002] In today's modern society, both men and women of all ages use cosmetics upon needs in accordance with the rapid diversification trend of the times. In particular, women apply makeup using cosmetic products and cosmetic tools with various types and colors.

[0003] In general, makeup is broadly classified into basic makeup, color makeup, hair makeup, and body makeup. Among these, the color makeup can be said to be a practical type of makeup that takes aesthetics, color, and fashion sense into consideration with the goal of making an appearance more beautiful after completion of the basic makeup.

[0004] Various types of color cosmetics are used for the above-described color makeup. The color cosmetics are largely classified into, for example, skin expression cosmetics such as makeup base, foundation and powder, eye cosmetics such as eye shadow, eye liner, eyebrows and mascara, and lip cosmetics such as lipstick, lip gloss and cream and cosmetics for cheek touch, and produced in liquid, gel, solid or powder form depending on its characteristics, stored in various types of cosmetic containers and used.

[0005] Accordingly, there is a need to develop containers for various types of cosmetics depending on the purpose of use and characteristics of the cosmetics. In general, liquid or gel cosmetics are filled into glass containers or tube containers, put or squeezed on a hand by the user and applied onto the skin when used.

[0006] However, according to the conventional cosmetic container, the user is required to put the cosmetic material on a hand whenever using the cosmetics, thereby causing the inconvenience of washing hands and waste of the cosmetic material.

[0007] In order to solve the above-mentioned problems, a compact container with a built-in puff has been developed to prevent the cosmetic material from being put on a hand and to facilitate the portability.

[0008] The above-described conventional compact container is disclosed in, for example, Korean Utility Model Registration No. 20-0157472, and Korean Utility Model Registration No. 20-0458647. The above-described related art includes a cosmetic plate for accommodating a cosmetic material, a lower case for storing the cosmetic dish, an upper case for opening and closing the lower case, and a cosmetic puff stored in the upper and lower cases.

[0009] However, because the above compact container in the art does not have a structure in which the cosmetic plate for accommodating the cosmetic material and the lower case are separated from each other, the cosmetic plate cannot be refilled and used separately when the cosmetic material is entirely exhausted. Accordingly, the compact container is required to be repurchased, thereby wasting resources and adding economic burden to the user.

[0010] Korea Patent Registration No. 10-1584512 discloses a compact container to solve the above-mentioned problems. The above compact container in the art includes an outer container and an outer container lid for opening and closing the outer container, a refill container holder mounted inside the outer container, a refill container holder lid for opening and closing the refill container holder, and a refill container coupled to the refill container holder. The outer container and the refill container holder are undercut and coupled so as to be detachable, so that the refill container holder may be separated from the outer container when a cosmetic material accommodated in the refill container is entirely used, so as to be replaced with a new refill container.

[0011] However, since the above compact container in the art has a structure in which the refill container and the refill container holder are forcibly separated from the outer container by upwardly pushing a bottom portion of the refill container exposed to the outside in order to replace the refill container containing the cosmetic material from the external container, a relatively weak woman may not easily separate the refill container from the outer container. In addition, when the refill container is excessively pressed by a hand, the bottom portion of the refill container may be crushed and damaged or the refill container may suddenly jumps and fly away from the outer container, thereby causing inconvenience in replacement and use.

[0012] Accordingly, it is necessary to develop a compact container for enabling a user to easily separate and replace a refill container from an outer container through a simple operation.

[Document of conventional art]

[Patent Documents]

[0013]

(Patent Document 001) Korean Utility Model Registration No. 20-0157472 (published on June 30, 1999),

(Patent Document 002) Korean Utility Model Registration No. 20-0458647 (published on February 08, 2012), and
(Patent Document 003) Korean Patent Registration No. 10-1584512 (published on January 06, 2016).

[Disclosure]

[Technical Problem]

[0014] In order to solve the above problems, an object of the present invention is to provide a compact container having a refill container replacement structure in which a refill container ascends from a container body by rotating an intermediate body so as to be in a state separable from the container body, and descends to be inserted and mounted inside the container body, so that the refill container is conveniently separated from the container body and replaced.

[0015] In addition, an object of the present invention is to provide a compact container having a refill container replacement structure in which a fastening part extends downward from the container lid for opening and closing the container body, and the fastening part passes through the intermediate body so as to be fastened to the button, thereby closing the container lid and simultaneously restricting the rotation of the intermediate body, so that the refill container may remain stably fixed within the container body.

[Technical Solution]

[0016] In order to achieve the above-mentioned objects, the present invention provides a compact container having a refill container replacement structure, which includes: a container body having a moving-up/down diagonal groove formed therein; a container lid for opening and closing the container body; an intermediate body which is coupled to the inside of the container body to be rotatable within a certain section and has a moving-up/down vertical hole formed therein; a refill container holder coupled into the intermediate body and formed therein with a moving-up/down protrusion inserted in the moving-up/down diagonal groove through the moving-up/down vertical hole; and a refill container coupled to the refill container holder and accommodating a content therein.

[0017] In addition, the moving-up/down diagonal groove of the container body may be inclined in one direction along an inner circumference of the container body, and the moving-up/down diagonal groove may have one end opened to a top of the container body.

[0018] In addition, the container body may be formed on one side thereof with a button, in which the button may be formed therein with a fastening part insertion space, the intermediate body may be formed therein with a fastening part through-hole, and the container lid may have a fastening part extending downward therefrom, so that the fastening part may be inserted into the fastening part insertion space while passing through the fastening part through-hole, thereby restricting rotation of the intermediate body.

[0019] In addition, the container body may be formed along a circumference thereof with a rotation guide groove, and the intermediate body may be formed along a circumference thereof with a rotation guide protrusion part inserted into the rotation guide groove.

[0020] In addition, the rotation guide groove may be formed on both ends thereof with locking protrusions, and locking grooves may be formed on both ends of the rotation guide protrusion part so as to be engaged with each other.

[0021] In addition, the moving up/down vertical hole of the intermediate body may vertically extend on a side wall of the intermediate body, and the moving up/down vertical hole may have one end opened to a top of the intermediate body.

[0022] In addition, the intermediate body may be formed at a top thereof with a cover part extending outward to cover a top of the container body.

[0023] In addition, a refill container holder lid may be coupled to on one side of the refill container holder to open and close the refill container holder.

[0024] In addition, the refill container holder may be formed therein with a holder outer wall, a holder inner wall spaced apart inward at a predetermined distance from the holder outer wall, and a bent part bent inward from the holder inner wall.

[0025] In addition, the refill container holder may ascend or descend due to rotation of the intermediate body, in which an opened upper portion of the moving up/down diagonal groove may be connected to an opened upper portion of the moving up/down vertical hole when the refill container holder maximally ascends, so that the refill container holder may be detachable from the container body.

[Advantageous Effects]

[0026] According to the embodiment of the present invention, a refill container ascends from a container body by rotating an intermediate body so as to be in a state separable from the container body, and descends to be inserted and mounted inside the container body, so that the refill container can be conveniently separated from the container body and replaced.

[0027] According to the embodiment of the present invention, a fastening part extends downward from the container lid for opening and closing the container body, and the fastening part passes through the intermediate body so as to be fastened to the button, thereby closing the container lid and simultaneously restricting the rotation of the intermediate body from the container body, so that the refill container can remain stably fixed within the container body.

[Description of Drawings]

[0028]

FIG. 1 is a perspective view of a compact container according to the embodiment of the present invention.
FIG. 2 is an exploded perspective view of the compact container according to the embodiment of the present invention.
FIG. 3 is a sectional view of the compact container according to the embodiment of the present invention.
FIG. 4 is a perspective view showing a state in which a refill container holder is raised through rotation of an intermediate body according to the embodiment of the present invention.
FIG. 5 is a sectional view showing a state in which the refill container holder is raised through rotation of the intermediate body according to the embodiments of the present invention.
FIG. 6 is a perspective view showing a state a refill container holder is separated from a container body according to the embodiments of the present invention.
FIG. 7 is a sectional view showing a state the refill container holder is separated from the container body according to the embodiments of the present invention.

[Best Mode]

[Mode for invention]

[0029] Hereinafter, the detailed descriptions of the present invention are embodiments for carrying out the present invention, and the corresponding embodiment refers to the accompanying drawings as an example. The embodiments will be described in detail to enable those skilled in the art to carry out the present invention. It is apparent to be understood that the various embodiments of the present invention may be different from each other but do not need to be mutually exclusive. For example, the particular shape, structure, and feature described herein may be embodied in other embodiments without departing from the idea and scope of the present invention in connection with the embodiment. In addition, it will be understood that the location or arrangement of an individual element within each disclosed embodiment may be modified without departing from the idea and scope of the present invention.

[0030] Accordingly, the following detailed description does not disclose a limited meaning, and the scope of the invention is limited only by the appended claims, along with the full scope of equivalents to which the claims are entitled, if properly explained. Similar reference numerals in the drawings refer to the same or similar function throughout several aspects.

[0031] General term which is widely used recently has been selected in the present invention in consideration of the function according to the present invention as possible, however, the term may vary depending on the intention of those skilled in the art, judicial cases, the advent of new technology, or the like. In addition, in certain cases, the term may be arbitrarily selected by the applicant, and in this case, the meaning thereof will be described in detail in the relevant description of the invention. Therefore, the term used in the present invention will be defined based on the meaning of the term and contents throughout the present invention, not simply on the name of the term.

[0032] When one part "includes" one element in the present invention, the above expression does not exclude other elements, but may further include the other elements unless particularly stated otherwise.

[0033] Hereinafter, a compact container having a refill container replacement structure according to the embodiment of the present invention will be described in detail with reference to the accompanying drawings.

[0034] FIG. 1 is a perspective view of a compact container according to the embodiment of the present invention. FIG. 2 is an exploded perspective view of the compact container according to the embodiment of the present invention. FIG. 3 is a sectional view of the compact container according to the embodiment of the present invention.

[0035] As shown in the drawing, a compact container having a refill container replacement structure according to the embodiment of the present invention may include a container body 10, a container lid 20, an intermediate body 30, a refill container holder 40 and a refill container 50.

[0036] Hereinafter, the compact container having a refill container replacement structure according to the embodiment of the present invention will be described separately for each component as follows.

[0037] The container body 10 is configured to define the appearance of the compact container while protecting the refill container holder 40 and the refill container 50 coupled to the refill container holder 40 from the outside, and may have a rigid three-dimensional form with opened upper and lower portions. The drawings for the cosmetic container according to one embodiment of the present invention shows that the container body 10 has a cylindrical shape with a

low height and a wide width. However, the present invention is not limited thereto, and it may vary into various forms depending on convenience of use, buyer's preference, portability, or fashion.

[0038] As shown in FIG. 2, a button 12 is formed on one side of the container body 10, in which the button 12 may have at least one side exposed to the outside of the container body 10 and be pressed by a user and moved forward or backward to fasten or unfasten the container body 10 and the container lid 20 to or from each other. As shown in FIG. 3, the button 12 may be formed therein with a fastening part insertion space 12a into which at least a portion of the container lid 20 is inserted, and the fastening part insertion space 12a may be formed therein with a first locking protrusion 12b fastened to the container lid 20. According to the above structure, the button 12 may simultaneously perform a function of fastening or unfastening the container body 10 and the container lid 20 to or from each other and a function of limiting rotation of the intermediate body 30 together with the container lid 20.

[0039] A moving up/down diagonal groove 14 may be formed on an inner circumference of the container body 10 to guide an ascending/descending movement of the refill container holder 40. As shown in the partially enlarged view of FIG. 2, the moving up/down diagonal groove 14 may be formed to be inclined in one direction along the inner circumference of the container body 10, and one end of the moving up/down diagonal groove 14 may be opened to the top of the container body 10 to allow a moving up/down protrusion 44 of the refill container holder 40 to pass through. A moving up/down speed of the refill container holder 40 and convenience in use may be adjusted by changing an inclination angle of the moving up/down diagonal groove 14. For example, when the inclination angle of the moving up/down diagonal groove 14 is formed relatively steeply, a rotation range of the intermediate body 30 for completely moving up/down the refill container holder 40 may be shortened, so that the refill container holder 40 is moved up and down more quickly. To the contrary, when the inclination angle of the moving up/down diagonal groove 14 is formed relatively gently, the rotation range of the intermediate body 30 for completely moving up/down the refill container holder 40 may be elongated so that the refill container holder 40 is moved up and down slowly and naturally. Accordingly, it is desirable to form the moving-up/down diagonal groove 14 at an appropriate inclination angle on the inner circumference of the container body 10 by taking into consideration all the moving-up/down speed of the refill container holder 40 and the convenience of use.

[0040] A rotation guide groove 16 may be formed on the inner circumference of the container body 10 to guide horizontal rotation of the intermediate body 30 and simultaneously limit a rotation range of the intermediate body 30. Preferably, the rotation guide groove 16 may extend horizontally in a predetermined section along the inner circumference of the container body 10, and have the same length as the moving up/down diagonal groove 14. Locking protrusions 16a are formed on both ends of the rotation guide groove 16 and engaged with the intermediate body 30. Through the above temporary engagement structure, the intermediate body 30 completely rotated in one direction may be prevented from rotating in the opposite direction due to gravity or external impact regardless of the user's intention.

[0041] In addition, an insertion guide groove 18 may be formed on the inner circumference of the container body 10, so that the intermediate body 30 may be easily inserted and coupled to the inside of the container body 10. The insertion guide groove 18 refers to a portion to which the rotation guide protrusion part 36 of the intermediate body 30 is inserted when the intermediate body 30 is inserted and coupled to the inside of the container body 10, and may be positioned at an upper portion adjacent to the rotation guide groove 16 and correspond to the number of the rotation guide groove 16 such that the rotation guide protrusion part 36 is inserted into the insertion guide groove 18 and then continuously inserted to the inside of the rotation guide groove 16. The drawing of the compact container according to the embodiment of the present invention shows that three rotation guide groove 16 and three insertion guide groove 18 are formed and arranged at regular intervals on the inner circumference of the container body 10. However, the present invention is not limited thereto, and the number and the arranged intervals may vary depending on a size of the container body 10 and rotational stability of the intermediate body 30.

[0042] The container lid 20 is coupled to one side of the container body 10 to open or close the container body 10. In other words, the container lid 20 may be axially coupled to the container body 10 to open the opened upper portion of the container body 10 to the outside while rotating at a predetermined angle or close the opened upper portion.

[0043] As shown in FIG. 3, a fastening part 22 may extend downward from one side of the container lid 20. The fastening part 22 may extend from an end of the container lid 20 toward the container body 10, and have a second locking protrusion 22b protruding at one end thereof, so that the second locking protrusion 22b may be engaged with the first locking protrusion 12b while at least a portion of the fastening part 22 is inserted into the fastening part insertion space 12a of the button 12. In other words, the container body 10 and the container lid 20 are fastened to each other by engaging the button 12 and the fastening part 22 to each other, and the above fastening structure between the button 12 and the fastening part 22 is positioned in the inner space of the button 12.

[0044] In addition, as shown in FIG. 2, a mirror 24 may be formed on an inner surface of the container lid 20 to enable the user to apply makeup while reflecting a makeup area.

[0045] The intermediate body 30 is formed in a ring shape and rotatably coupled to the inside of the container body 10 for a predetermined section.

[0046] A cover part 31 may extend outward from the top of the intermediate body 30. The cover part 31 may cover

the top of the container body 10 to prevent foreign substances from entering between the container body 10 and the intermediate body 30 and prevent the button 12 installed on the container body 10 from being separated from the container body 10. In addition, the cover part 31 may be exposed from the top of an edge of the container body 10 to serve as a gripping portion for rotating the intermediate body 30. Preferably, a friction surface (not shown) may be formed on a top surface of the cover part 31 to enable the user to easily rotate the intermediate body 30. For example, the friction surface may be formed with a plurality of protrusions or curves, or formed by rough processing the top or side surfaces of the cover part 31.

[0047] A fastening part through-hole 32 into which the fastening part 22 of the container lid 20 is inserted may be formed on one side of the cover part 31 of the intermediate body 30, in which the fastening part through-hole 32 may be positioned above the button 12 and connected to the fastening part insertion space 12a of the button 12. In other words, when the container lid 20 is rotated to close the container body 10, the first locking protrusion 12b of the button 12 is coupled to the second locking protrusion 22b of the fastening part 22 while the fastening part 22 extending downward from the container lid 20 passes through the fastening part through-hole 32 of the intermediate body 30 and is inserted into the fastening part insertion space 12a of the button 12, so that the rotation of the intermediate body 30 from the container body 10 is restricted.

[0048] The intermediate body 30 may be formed therein with a moving up/down hole 34 to rotate the refill container holder 40 together. The moving up/down vertical hole 34 may vertically extend on a side wall of the intermediate body 30, and one end of the moving up/down vertical hole 34 may be opened to the top of the intermediate body 30 to allow the moving up/down protrusion 44 of the refill container holder 40 to pass through. As shown in FIG. 3, it is preferable that the opened end of the moving up/down vertical hole 34 may have a width gradually larger to facilitate insertion and separation of the moving up/down protrusion 44.

[0049] As shown in FIG. 2, a rotation guide protrusion 36 may be formed on an outer circumference of the intermediate body 30. The rotation guide protrusion part 36 may have a predetermined section protruding along the circumference of the intermediate body 30 so as to be inserted into the rotation guide groove 16 of the container body 10, and may limit a rotation range of the intermediate body 30 while reciprocating within the rotation guide groove 16. In addition, the intermediate body 30 may be prevented from being separated from the container body 10 through the coupling structure of the rotation guide groove 16 and the rotation guide protrusion part 36.

[0050] In addition, locking grooves 36a may be formed on both ends of the rotation guide protrusion part 36 so as to be engaged with the locking protrusions 16a formed on the both ends of the rotation guide groove 16. Accordingly, at the moment the rotation guide protrusion part 36 is moved to one end of the rotation guide groove 16, the locking groove 36a of the rotation guide protrusion part 36 may be engaged with the locking protrusion 16a of the rotation guide groove 16, so that the rotation of the intermediate body 30 may be restricted until the user applies a predetermined force. For example, the refill container holder 40 may maximally ascend from the container body 10 when the intermediate body 30 is rotated and at the same time, the locking protrusion 16a of the rotation guide groove 16 and the locking groove 36a of the rotation guide protrusion part 36 may be coupled to each other, thereby restricting the rotation of the intermediate body 30, so that the refill container holder 40 is maintained in the fully ascending state. In addition, the refill container holder 40 may descend due to the rotation of the intermediate body 30 and be completely inserted into the container body 10 and at the same time, the locking protrusion 16a of the rotation guide groove 16 and the locking groove 36a of the rotation guide protrusion part 36 may be coupled to each other again on the opposite side, thereby restricting the rotation of the intermediate body 30, so as to maintain the refill container holder 40 to be fully inserted into the container body.

[0051] The refill container holder 40 may be coupled to the inside of the intermediate body 30 and raised and lowered with respect to the container body 10 by the rotation of the intermediate body 30.

[0052] As shown in FIG. 3, the refill container holder 40 may be formed with a holder outer wall 41, a holder inner wall 43 spaced apart inward at a predetermined distance from the holder outer wall 41, and a bent part 45 bent inward from the holder inner wall 43. The holder outer wall 41 may come into contact with the inner circumference of the intermediate body 30, and the refill container 50 may be inserted and coupled to an inner side of the holder inner wall 43. The inner wall of the holder 43 may be bent toward a rear space by the refill container 50 inserted to the inner side of the inner wall so as to be elastically coupled to the refill container 50. The bent part 45 may come into close contact with a top of the refill container 50 to prevent the refill container 50 from being ejected upward from the refill container holder 40, and a fixing protrusion 45a may protrude downward from the bent part 45 to surround an upper portion of the refill container 50, thereby fixing the refill container 50 more stably.

[0053] The moving up/down protrusion 44 may protrude from an outer circumference of the refill container holder 40. The moving up/down protrusion 44 may pass through the moving up/down vertical hole 34 of the intermediate body 30 and be inserted into the moving up/down diagonal groove 14 of the container body 10, in which the moving up/down protrusion 44 may be rotated along the circumference of the container body 10 together with the intermediate body 30 by the moving up/down vertical hole 34 of the intermediate body 30 and moved up or down from the container body 10 while sliding along the moving up/down diagonal groove 14 of the container body 10. As the above description, the refill

container holder 40 may ascend or descend due to the rotation of the intermediate body 30, in which the opened upper portion of the moving up/down diagonal groove 14 is connected to the opened upper portion of the moving up/down vertical hole 34 when the refill container holder 40 maximally ascends, so that the refill container holder 40 may be detachable from the container body 10.

[0054] In addition, a refill container holder lid 60 for opening and closing the refill container holder 40 may be further coupled to the refill container holder 40. The refill container holder lid 60 may be axially coupled to one side of the refill container holder 40 to open or close the refill container holder 60 while being rotated at a predetermined angle. a cosmetic tool storage space 62 may be formed on an upper portion of the refill container holder lid 60 to store a cosmetic tool such as a puff, and a sealing ring 64 may protrude from a lower edge of the refill container holder lid, so as to be tightly fitted to the upper inner circumference of the holder outer wall 41 of the refill container holder 40, thereby maintaining an airtight of the refill container holder 40.

[0055] The refill container 50 may be fixedly coupled to one side of the refill container holder 40 and accommodate contents therein. The refill container 50 may be inserted into the opened lower portion of the refill container holder 40 and coupled to the holder inner wall 43, and an upper end of the refill container may come into close contact with a bottom of the bent part 45.

[0056] As described above, the compact container according to the present invention has a structure in which the intermediate body 30 is rotatably coupled to the inside of the container body 10 by a predetermined section, and due to the rotating operation of the intermediate body 30, the refill container holder 40 and the refill container 50 coupled to the refill container holder 40 ascend to be in a state separable from the container body 10 and descends to be inserted and mounted inside the container body 10. Accordingly, several problems arising due to the forcible attachment and detachment structure of the conventional refill container, that is, the difficulty of a forcibly separated refill container and the inconvenience of a damage and a resulting replacement of a compact container are improved, so that the refill container holder 40 and the refill container 50 coupled to the refill container holder 40 can be conveniently separated from the container body 10 and replaced.

[0057] FIGS. 4 to 7 are views showing the process of replacing a refill container for the compact container according to the embodiment of the present invention. The process of using and replacing the refill container of the compact container according to the embodiment of the present invention will be described with reference to the above drawings.

[0058] FIG. 4 is a perspective view showing a state in which a refill container holder is raised through rotation of an intermediate body according to the embodiments of the present invention. FIG. 5 is a sectional view showing a state in which the refill container holder is raised through rotation of the intermediate body according to the embodiments of the present invention. FIG. 6 is a perspective view showing a state a refill container holder is separated from a container body according to the embodiments of the present invention. FIG. 7 is a sectional view showing a state the refill container holder is separated from the container body according to the embodiments of the present invention.

[0059] In order to use the compact container according to the embodiments of the present invention, the button 12 exposed on one side of the container body 10 is pressed to release the fastening between the container body 10 and the container lid 20, the container lid 20 is rotated to be opened, the refill container holder lid 60 is rotated to open the refill container 50, and then the cosmetic contents contained in the refill container 50 are put on a cosmetic tool such as a puff and applied to the skin. After the makeup is completed, in reverse to the above process, the refill container holder lid 60 is closed, and the container lid 20 is rotated and closed to fasten the container lid 20 to the container body 10 for storage or carrying.

[0060] In addition, when the cosmetic contents contained in the refill container 50 are entirely used, the container lid 20 is opened by rotating the container body 10 to replace and use the refill container 50. The fastening part 22 of the container lid 20 exits the fastening part insertion space 12a of the button 12 and the fastening part through-hole 32 of the intermediate body 30, so that the intermediate body 30 is in a rotatable state with respect to the container body 10.

[0061] As shown in FIGS. 4 and 5, when the cover part 31 of the intermediate body 30 is rotated in one direction, the moving up/down protrusion 44 inserted into the moving up/down vertical hole 34 of the intermediate body 30 is rotated together with the intermediate body 30, and simultaneously moved along the moving up/down diagonal groove 14 of the container body 10, so that the refill container holder 50 gradually ascends from the container body 10. The rotation guide protrusion part 36 of the intermediate body 30 is moved within the rotation guide groove 16 of the container body 10.

[0062] Thereafter, as shown in FIGS. 6 and 7, when the intermediate body 30 is continuously rotated, the refill container holder 40 maximally ascends and the opened upper portion of the moving up/down vertical hole 34 is connected to the opened upper portion of the moving up/down diagonal groove 14, so that the refill container holder 40 is detachable from the container body 10. At this point, one locking protrusion 16a of the rotation guide groove 16 and one locking groove 36a of the rotation guide protrusion part 36 are engaged with each other, so that the rotation of the intermediate body 30 is restricted.

[0063] Thereafter, the refill container holder 40 and the refill container 50 coupled to the refill container holder 40 are separated from the container body 10, a moving up/down protrusion 44 of a new refill container holder 40 is inserted into the opened upper portions of the moving up/down vertical hole 34 and the moving up/down diagonal groove 14,

and then the intermediate body 30 is rotated in the opposite direction to insert the refill container holder 40 into the container body 10. When the intermediate body 30 is completely rotated in the opposite direction, one locking protrusion 16a of the rotation guide groove 16 and one locking groove 36a of the rotation guide protrusion part 36 are engaged again on the opposite side, so that the intermediate body 30 and the refill container holder 40 are stably fixed.

[0064] Although the present invention has been described with the particulars such as specific elements, the limited embodiments, and the drawings, the above description is provided only to help comprehensive understanding of the present invention, and the present invention is not limited to the embodiments. It is obvious to those skilled in the art that various changes and modifications may are available. Therefore, the spirit of the present invention should not be limited to the aforementioned embodiments, and the following claims as well as all modifications or variations belonging to the equivalents of the claims will be within the scope of the invention.

[Description of Reference Numerals]

[0065]

10:	Container body	12:	Button
14:	Moving up/down diagonal groove	16:	Rotation guide groove
20:	Container lid	22:	Fastening part
30:	Intermediate body	32:	Fastening part through-hole
34:	Moving up/down vertical hole	36:	Rotation guide protrusion part
40:	Refill container holder	44:	Moving up/down protrusion
50:	Refill container	60:	Refill container holder lid

Claims

1. A compact container having a refill container replacement structure, the compact container comprising:

a container body formed therein with a moving-up/down diagonal groove;
a container cap for opening and closing the container main body;
an intermediate body rotatably coupled to an inside of the container body within a predetermined section and formed therein with a moving-up/down vertical hole;
a refill container holder coupled into the intermediate body and formed therein with a moving-up/down protrusion inserted in the moving-up/down diagonal groove through the moving-up/down vertical hole; and
a refill container coupled to the refill container holder and accommodating a content therein.

2. The compact container of claim 1, wherein the moving-up/down diagonal groove of the container body is inclined in one direction along an inner circumference of the container body, and the moving-up/down diagonal groove has one end opened to a top of the container body.

3. The compact container of claim 1, wherein the container body is formed on one side thereof with a button, in which the button is formed therein with a fastening part insertion space, the intermediate body is formed therein with a fastening part through-hole, and the container lid has a fastening part extending downward therefrom, so that the fastening part is inserted into the fastening part insertion space while passing through the fastening part through-hole, thereby restricting rotation of the intermediate body.

4. The compact container of claim 1, wherein the container body is formed along a circumference thereof with a rotation guide groove, and the intermediate body is formed along a circumference thereof with a rotation guide protrusion part inserted into the rotation guide groove.

5. The compact container of claim 4, wherein the rotation guide groove is formed on both ends thereof with locking protrusions, and the rotation guide protrusion part is formed on both ends thereof with locking grooves engaged with the locking protrusions.

6. The compact container of claim 1, wherein the moving up/down vertical hole of the intermediate body vertically extends on a side wall of the intermediate body, and the moving up/down vertical hole has one end opened to a top of the intermediate body.

7. The compact container of claim 1, wherein the intermediate body is formed at a top thereof with a cover part extending outward to cover a top of the container body.

8. The compact container of claim 1, wherein a refill container holder lid is coupled to on one side of the refill container holder to open and close the refill container holder.

9. The compact container of claim 1, wherein the refill container holder is formed therein with a holder outer wall, a holder inner wall spaced apart inward at a predetermined distance from the holder outer wall, and a bent part bent inward from the holder inner wall.

10. The compact container of claim 1, wherein the refill container holder ascends or descends due to rotation of the intermediate body, in which an opened upper portion of the moving up/down diagonal groove is connected to an opened upper portion of the moving up/down vertical hole when the refill container holder maximally ascends, so that the refill container holder is detachable from the container body.

Fig. 1

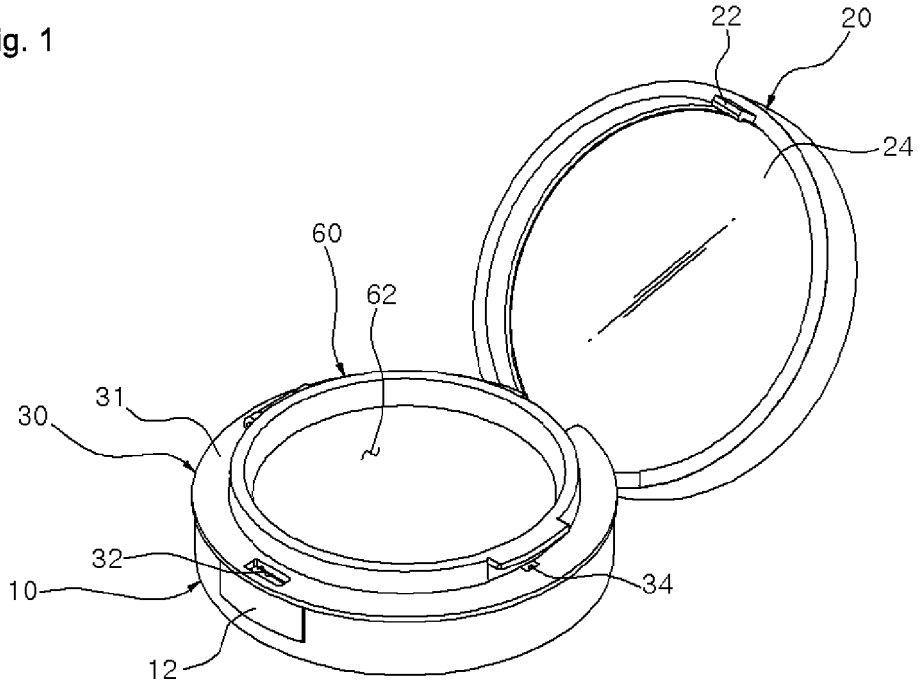

Fig. 2

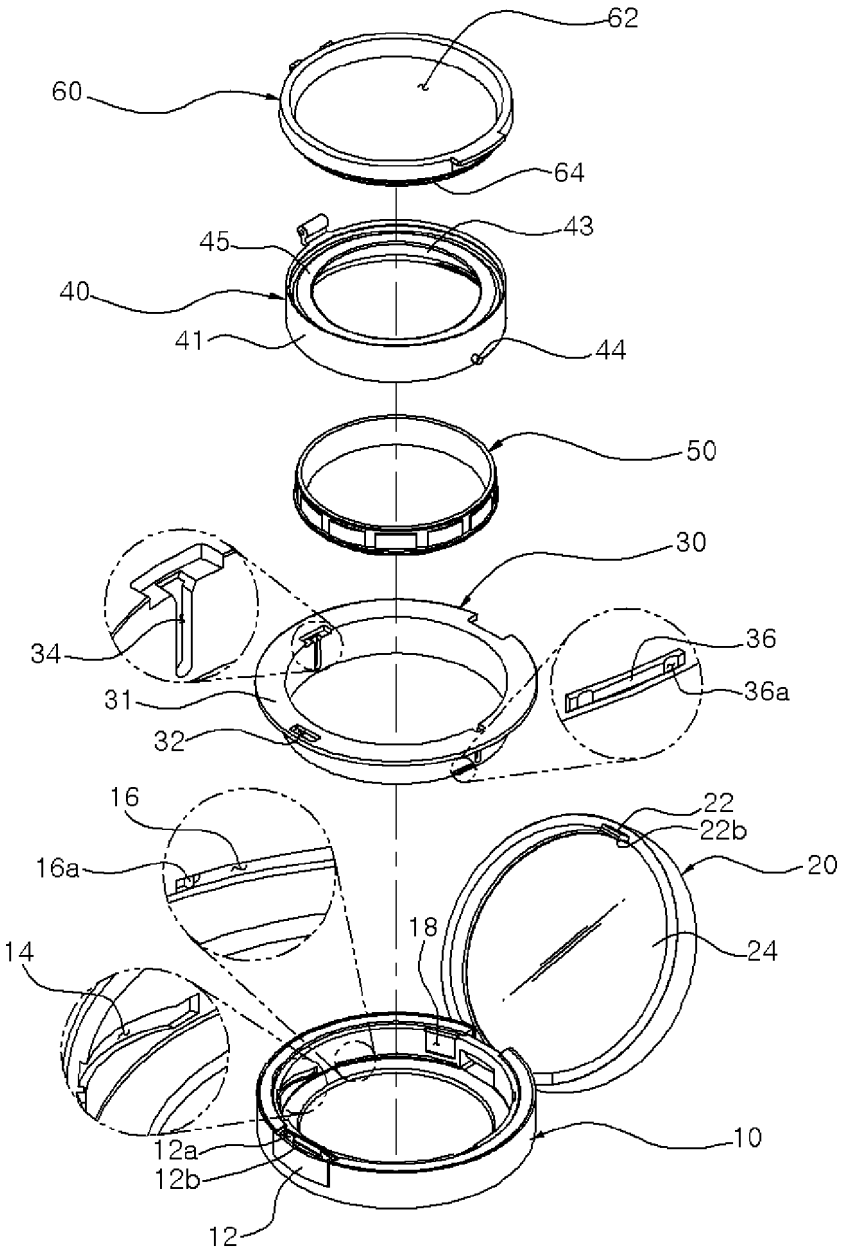
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Fig. 3

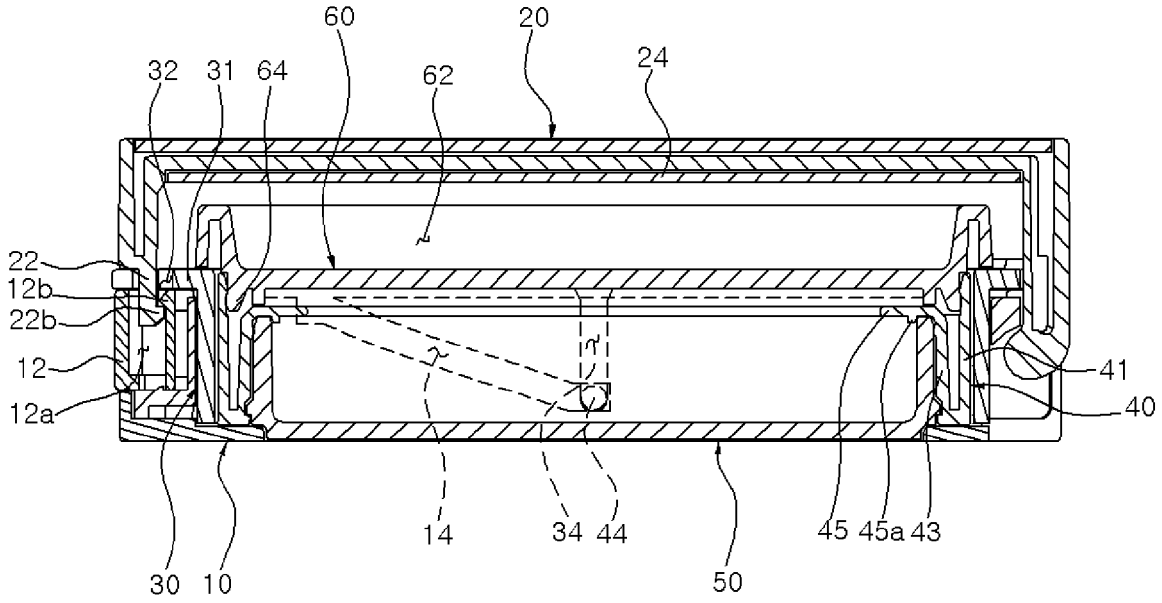
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Fig. 4

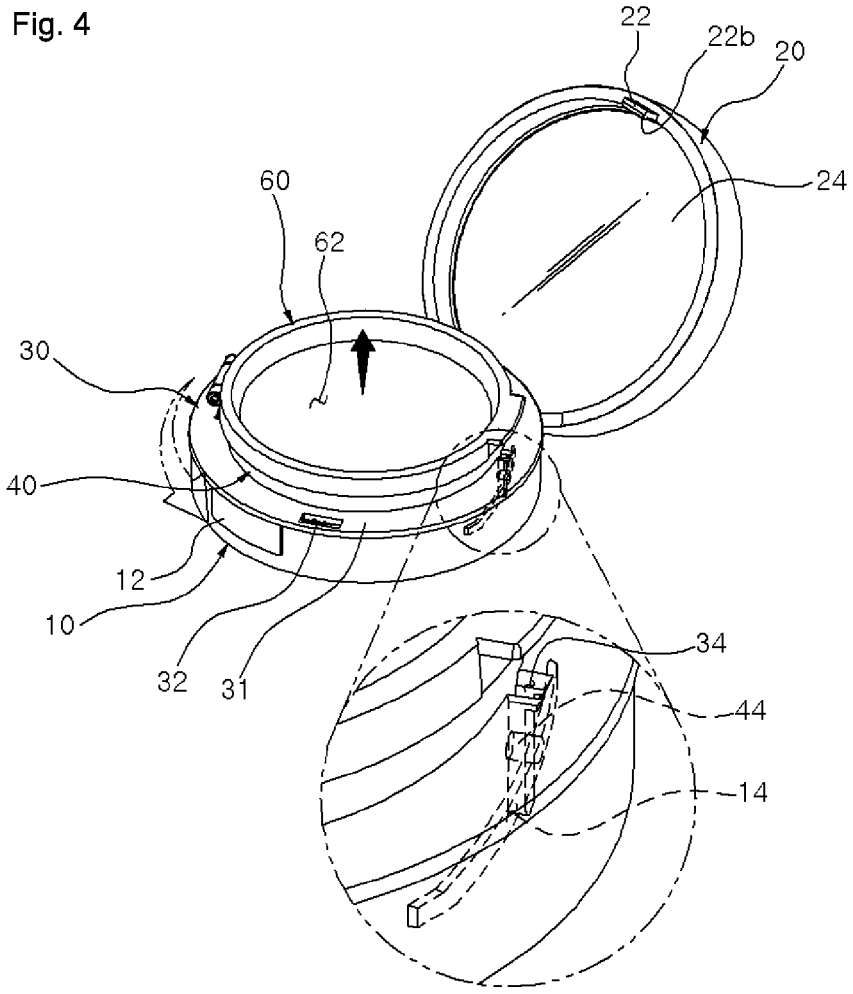
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Fig. 5

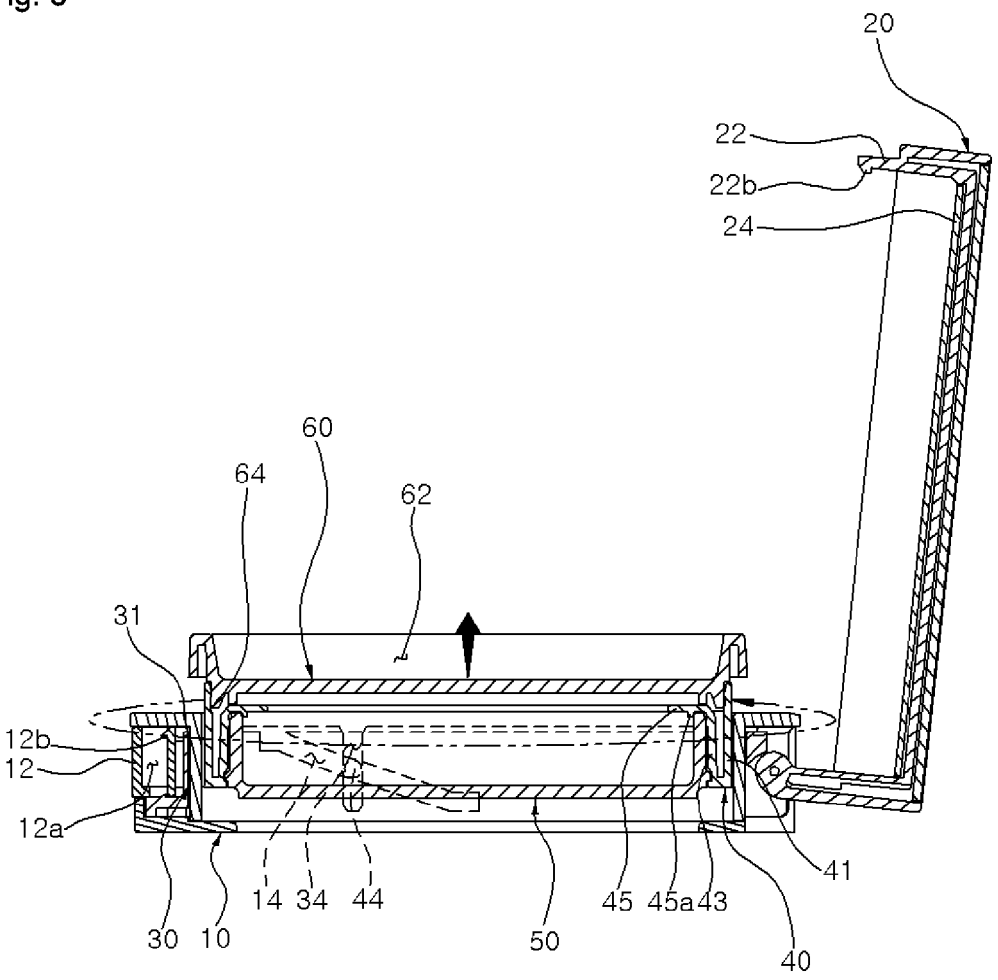


Fig. 6

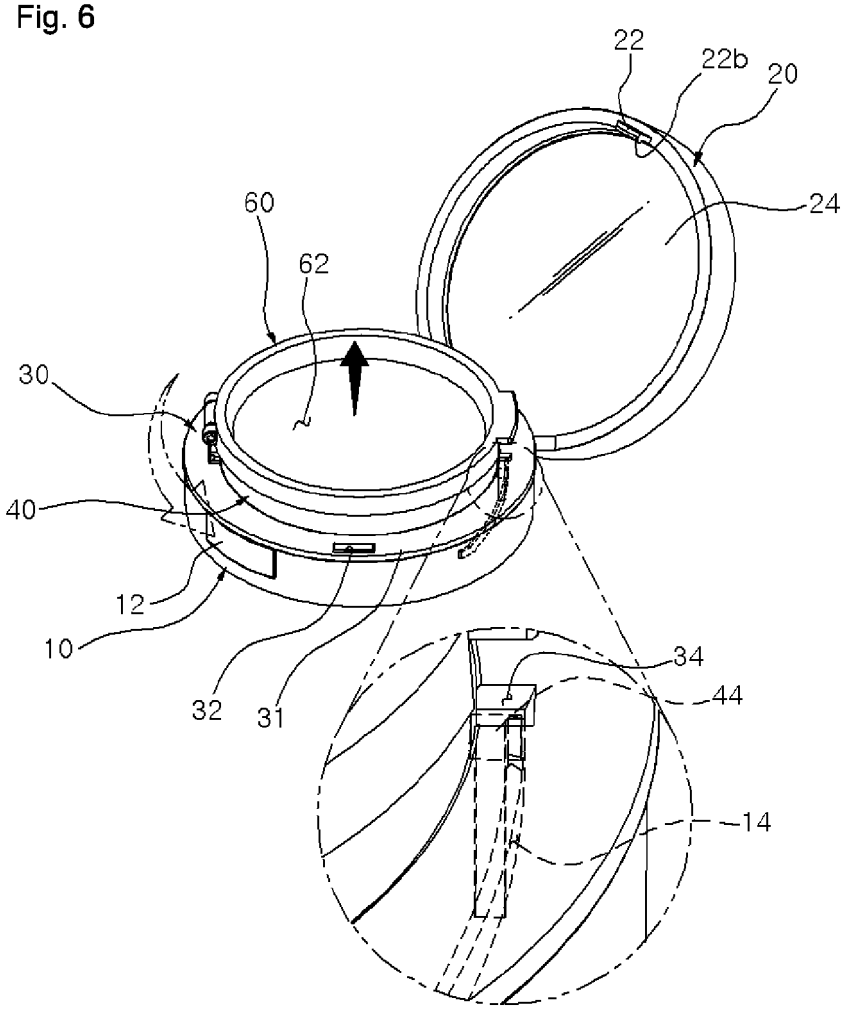
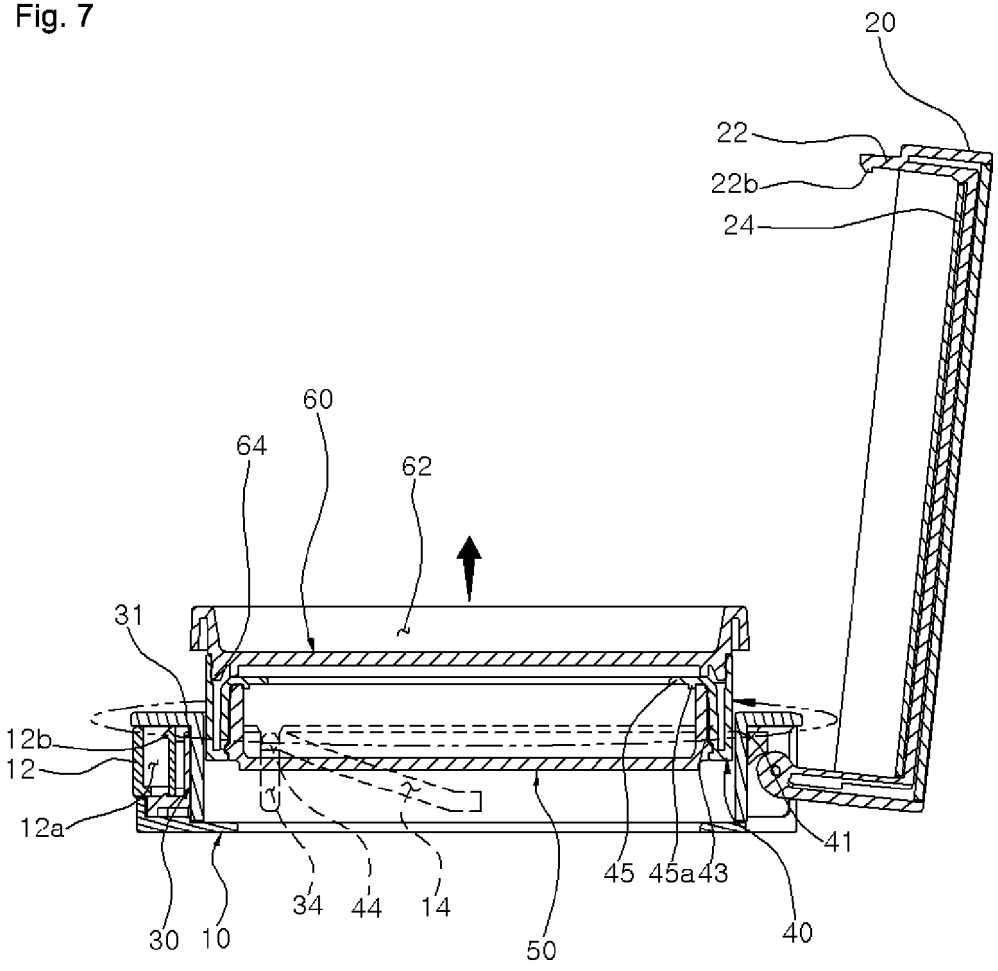


Fig. 7



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2022/009933

A. CLASSIFICATION OF SUBJECT MATTER

A45D 34/04(2006.01)i; **A45D 40/26**(2006.01)i; **A45D 40/22**(2006.01)i; **B65D 77/04**(2006.01)i; **B65D 43/16**(2006.01)i; **A45D 34/00**(2006.01)i; **A45D 40/00**(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 34/04(2006.01); A45D 33/00(2006.01); A45D 33/02(2006.01); A45D 33/24(2006.01); A45D 34/00(2006.01); A45D 40/00(2006.01); B65D 43/16(2006.01)

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: 용기(container), 리필(refill), 화장료(cosmetic), 회전(rotation), 개방(open)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 10-2021-0050865 A (AMOREPACIFIC CORPORATION et al.) 10 May 2021 (2021-05-10) See paragraphs [0036], [0039], [0045], [0048] and [0052]; and figure 2.	1-10
A	KR 10-2164415 B1 (AMOREPACIFIC CORPORATION) 13 October 2020 (2020-10-13) See paragraphs [0029] and [0044]; and figures 2-3.	1-10
A	KR 10-1236050 B1 (KIM, Jin Woo) 28 February 2013 (2013-02-28) See paragraphs [0021]-[0043]; and figures 1-9.	1-10
A	KR 10-2012-0026209 A (LG H&H CO., LTD.) 19 March 2012 (2012-03-19) See paragraphs [0031]-[0044]; and figures 3-5.	1-10
A	KR 10-1262912 B1 (ILLUPACK CO., LTD.) 13 May 2013 (2013-05-13) See paragraphs [0038]-[0065]; and figures 3-11.	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
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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
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
02 November 2022	**02 November 2022**
Name and mailing address of the ISA/KR **Korean Intellectual Property Office** **Government Complex-Daejeon Building 4, 189 Cheongsa-ro, Seo-gu, Daejeon 35208** Facsimile No. **+82-42-481-8578**	Authorized officer Telephone No.

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
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		WO 2012-165700 A1	06 December 2012

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REFERENCES CITED IN THE DESCRIPTION

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- KR 200458647 **[0008] [0013]**
- KR 101584512 **[0010] [0013]**