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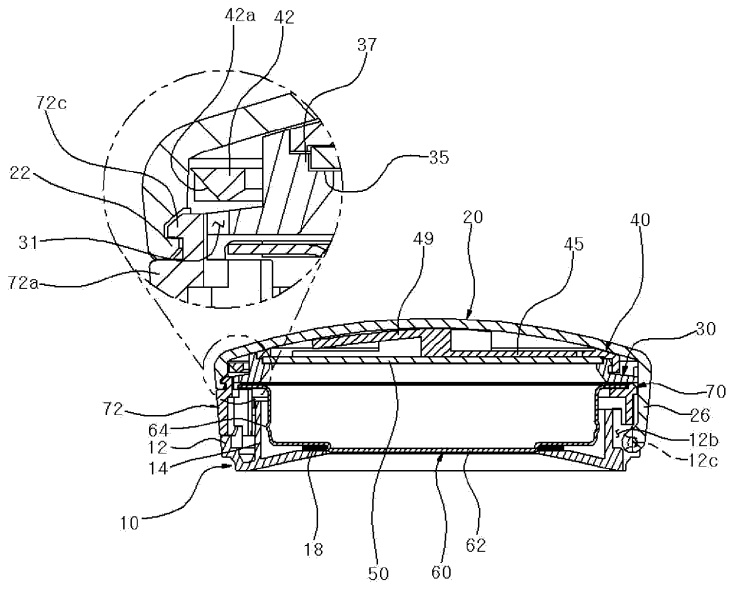
(54) **COSMETIC CONTAINER WITH DETACHABLE MIRROR**

(57) A cosmetic container with a detachable mirror, according to an embodiment of the present invention, comprises: a lower container; an upper container which opens/closes the lower container; an upper container cover which is formed at the inner side of the upper container; a mirror cover which is detachably fastened to the upper container cover and fixedly coupled to the inner side of the upper container; and a mirror which is fitted between the upper container cover and the mirror cover.

[FIG.3]



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Description

[Technical field]

[0001] One aspect of the present disclosure relates to a cosmetic container, and more specifically, to a cosmetic container with a detachable mirror capable of preventing waste of resources and environmental pollution by easily separating a mirror attached inside the container to recycle the container.

[Background Art]

[0002] A cosmetic product is an article used to beautify the appearance of a human body and cover defects of the appearance to enable the human body to appear attractive or to maintain a health of skis, hairs, etc.

[0003] The cosmetic product is classified into base cosmetics, color cosmetics, and functional cosmetics according to the purpose of use, and produced in a liquid or gel form or a solid or powder form according to characteristics thereof and stored and used in various types of cosmetic containers.

[0004] Accordingly, it is necessary to develop containers for various types of cosmetic products according to the purpose of use and characteristics of the cosmetic product. In general, a liquid or gel cosmetic product is used in such a manner that a user fills a glass container or a tube container with the liquid or gel cosmetic product, puts the cosmetic product on his/her hands for use or squeezes the cosmetic product from the container, and then applies the cosmetic product onto his/her skins.

[0005] However, according to such a conventional cosmetic container, there is an inconvenience that the user is required to wash his/her hands on which a cosmetic material is put whenever the user uses the cosmetic material and there is a problem that the cosmetic material is wasted.

[0006] In order to solve the problems as described above, a compact container in which a puff is mounted has been developed, so that the cosmetic material is not put on the hands and the puff is easily carried.

[0007] Korean Registration Patent No. 10-1584512 discloses such a conventional compact container, in which the conventional compact container includes an outer container, a refill container coupled to an inside of the outer container and having a cosmetic material contained therein, an upper refill container for opening and closing the refill container, and an external upper container for opening and closing the outer container, and the outer container and the refill container are undercut-coupled to each other in a detachable manner, such that when the cosmetic materials contained in the refill container are used up, the refill container may be separated from the outer container and a new refill container may be coupled to the outer container.

[0008] However, the conventional compact container has a structure in which a mirror is fixedly coupled to an inside of the external upper container, which was inconvenient to use the compact container by holding the outer container with the external upper container opened, and problematic that the outer container is arbitrary closed to cover the mirror due to external shock or inclination of the outer container.

[0009] In addition, in a case of recycling or discarding the conventional compact container when the cosmetic product contained in the conventional compact container is used up, it is difficult to separate the mirror, which is formed of a material different from materials of other components, such that the mirror and other components may only be discarded at once, resulting in waste of resources and environmental pollution.

[0010] In order to solve the problems, Korean Utility Model Publication No. 20-0488068 discloses a cosmetic container to which a mirror is detachable coupled includes a lower container configured to contain contents, a cover portion configured to open and close an upper portion of the lower container and face the lower container, an outer lid configured to surround a periphery of the cover portion and provided with a side portion extending downward, and a mirror attached to an inside of the outer lid, wherein the cover portion and the side portion are detachably coupled to each other by press-fitting, and the mirror is attached to an inside of the cover portion.

[0011] However, in the related art, the cover portion and the mirror are directly coupled to the outer lid with an open top and bottom or are coupled by a coupling member in a press-fitting manner. Thus, in order to separate the mirror from the outer lid, there was an inconvenience that the cover portion or the coupling member is forcibly separated upward the outer lid by pushing one surface of the mirror. Further, when separating the mirror from the outer lid as described above, the mirror is broken by a force to push the mirror or the mirror separated from the outer lid falls on a bottom and breaks, resulting in a risk of injury to the user.

[0012] Therefore, there is a need to develop an eco-friendly cosmetic container, which can more stably and conveniently separate and collect the mirror, which is formed of a material different from materials of other components, from the outer lid during recycling or discard.

[Related art documents]

[Patent documents]

[0013]

(Patent Document 0001) Korean Registration Patent No. 10-1584512 (published on January 25, 2016)
(Patent Document 0002) Korean Utility Model Publication No. 20-0488068 (published on December 10, 2018)

[Disclosure]

[Technical Problem]

[0014] In order to solve the above problems, an object of the present disclosure is to provide a cosmetic container with a detachable mirror, in which a mirror cover and an upper container cover are coupled to an inner side of an upper container and a mirror is fitted between the mirror cover and the upper container cover, such that the upper container cover and the mirror cover are separated from the upper container, and then the upper container cover is unfastened from the mirror cover to safely and easily separate and collect the mirror fitted between the upper container cover and the mirror cover, and accordingly, waste or resources and environmental pollution can be prevented.

[0015] In addition, an object of the present disclosure is to provide a cosmetic container with a detachable mirror, in which a bottom edge part of the lower container is gradually inclined upward toward a center and the refill container is seated on an edge part of the lower container to allow the refill container to be spaced apart from a bottom at a predetermined interval, so that the refill container can be prevented from easily making contact with foreign substances, and can be prevented from being affected by factors such as external impact, thereby safely storing contents contained in the refill container.

[Technical Solution]

[0016] In order to achieve the above object, there is provided a cosmetic container with a detachable mirror including: a lower container; an upper container which opens/closes the lower container; an upper container cover which is formed at an inner side of the upper container; a mirror cover which is detachably fastened to the upper container cover and fixedly coupled to the inner side of the upper container; and a mirror which is fitted between the upper container cover and the mirror cover.

[0017] In addition, a refill container configured to contain contents may be further coupled to an inner side of the lower container.

[0018] In addition, a bottom edge part of the lower container may be gradually inclined upward toward a center, and the refill container may be seated on the bottom edge part while being spaced apart from a bottom at a predetermined interval.

[0019] In addition, an auxiliary seating ring may be formed between the bottom edge part of the lower container and a bottom surface of the refill container.

[0020] In addition, an intermediate body may be further coupled to an inner side of the lower container, a push button having a locking hook may be formed on the intermediate body, and a locking protrusion may be formed on an inner periphery of the upper container.

[0021] In addition, an insertion hole may be formed in one side edge of the upper container cover at a position adjacent to the locking protrusion of the upper container, the locking hook may be inserted into the insertion hole, and at least a part of the mirror cover may be exposed to an outside through the insertion hole.

[0022] In addition, a seating jaw may be formed on the upper container cover, and a pressing portion may be formed on the mirror cover so that the mirror is pressed and fixed by the pressing portion of the mirror cover in a state in which the mirror is seated on the seating jaw of the upper container cover.

[0023] In addition, a shaft coupling protrusion may be formed on the lower container, and a shaft coupling groove may be formed in the upper container, so that the lower container and the upper container may be detachably coupled to each other.

[0024] In addition a fastening extension portion may be formed on an edge of the mirror cover, a fastening protrusion portion may be formed on the upper container cover to protrude outward so that the fastening extension portion and the fastening protrusion portion are engaged with each other, and simultaneously, a fastening protrusion may be formed on the fastening extension portion of the mirror cover, and a fastening groove may be formed in an inner periphery of the upper container so that the upper container and the mirror cover are coupled to each other.

[0025] In addition, a through-hole may be formed in the mirror cover to allow the fastening protrusion portion of the upper container cover to pass therethrough, and the fastening extension portion of the mirror cover may be elastically bent upward and downward or inward and outward.

[Advantageous Effects]

[0026] According to one aspect of the present disclosure, a mirror cover and an upper container cover are coupled to an inner side of an upper container and a mirror is fitted between the mirror cover and the upper container cover, such that the upper container cover and the mirror cover are separated from the upper container, and then the upper container cover is unfastened from the mirror cover to safely and easily separate and collect the mirror fitted between the upper container cover and the mirror cover, and accordingly, waste or resources and environmental pollution can be prevented.

[0027] According to one aspect of the present disclosure, a bottom edge part of the lower container is gradually inclined upward toward a center and the refill container is seated on an edge part of the lower container to allow the refill container to be spaced apart from a bottom at a predetermined interval, so that the refill container can be prevented from easily making contact with foreign substances, and can be prevented from being affected by factors such as external impact, thereby safely storing contents contained in the refill container.

[Description of Drawings]

[0028]

FIG. 1 is a view of a cosmetic container according to one aspect of the present disclosure.

FIG. 2 is an exploded perspective view of the cosmetic container according to one aspect of the present disclosure.

FIG. 3 is a sectional view of the cosmetic container according to one aspect of the present disclosure.

FIG. 4 is a sectional view illustrating a state in which the cosmetic container is opened and used according to one aspect of the present disclosure.

FIG. 5 is a perspective view illustrating a state of separating a lower container and an upper container according to one aspect of the present disclosure.

FIG. 6 is a partial perspective view illustrating a state in which a tool is inserted into an insertion hole of the upper container according to one aspect of the present disclosure.

FIG. 7 is a partial perspective view illustrating a state of separating the upper container and an upper container cover according to one aspect of the present disclosure.

FIG. 8 is a partial perspective view illustrating a state of separating the upper container cover and a mirror cover according to one aspect of the present disclosure.

FIG. 9 is a partial perspective view illustrating a state of separating a mirror fitted between the upper container cover and the mirror cover according to one aspect of the present disclosure.

[Best Mode]

[0029] The detailed description of the present disclosure will be described below with reference to the accompanying drawings showing specific aspects in which the present disclosure can be embodied. These aspects will be described in detail as sufficient as to enable those skilled in the art to practice the present disclosure. It may be understood that the various aspects of the present disclosure do not need to be mutually exclusive although they are different from each other. For example, the specific shapes, structures and characteristics disclosed herein may be implemented in other aspects in relation to one aspect without departing from the spirit and scope of the present disclosure. In addition, it may be understood that the positions or arrangements of individual constituent elements in each disclosed aspect can be changed without departing from the spirit and scope of the present disclosure.

[0030] Accordingly, the detailed description described below is not intended to be taken as a restrictive meaning, but if it is properly described, the scope of the present disclosure is restricted only by the appended claims, together with all scopes equivalent to the claims. In the drawings, the similar reference symbols refer to the same or similar functions throughout several aspects.

[0031] The terms used in the present disclosure have been selected from currently widely used general terms in consideration of the functions in the present disclosure. However, the terms may vary according to the intention of one of ordinary skill in the art, case precedents, and the advent of new technologies. Also, for special cases, meanings of the terms selected by the applicant are described in detail in the description section. Accordingly, the terms used in the present disclosure are defined based on their meanings in relation to the contents discussed throughout the specification, not by their simple meanings.

[0032] When a part may "include" a certain constituent element, unless specified otherwise, it may not be construed to exclude another constituent element but may be construed to further include other constituent elements.

[0033] Hereinafter, a cosmetic container with a detachable mirror according to one aspect of the present disclosure will be described in detail with reference to FIGS. 1 to 9.

[0034] FIG. 1 is a view of a cosmetic container according to one aspect of the present disclosure, FIG. 2 is an exploded perspective view of the cosmetic container according to one aspect of the present disclosure, and FIG. 3 is a sectional view of the cosmetic container according to one aspect of the present disclosure.

[0035] As illustrated in the drawings, the present disclosure may include a lower container 10, an upper container 20, an upper container cover 30, a mirror cover 40, and a mirror 50.

[0036] The cosmetic container with a detachable mirror according to one aspect of the present disclosure will be described separately for each component as follows.

[0037] The lower container 10 has a cosmetic product contained therein, and has a cylindrical shape with an open top and bottom. In the drawings of the cosmetic container according to one aspect of the present disclosure, the lower container 10 is illustrated as having a cylindrical shape with a lower height and a wide width, but is not limited thereto, and may be changed into various shapes according to convenience of use or preference or fashion of a purchaser.

[0038] As illustrated in FIG. 2, the lower container 10 may be formed with an outer wall 12 extending upward from a bottom thereof and an inner wall 14 spaced apart from the external wall 12 at a predetermined interval inside the outer wall 12.

[0039] A button insertion hole 12a is formed in one side of the outer wall 12, a hinge insertion hole 12b is formed opposite to the button insertion hole 12a, and a shaft coupling protrusion 12c is formed on the hinge insertion hole 12b to be shaft-coupled to the upper container 20. In this case, the button insertion hole 12a has a groove shape with an open upper portion, and the hinge coupling protrusion 12c may be preferably a pair of protrusions

protruding from both side walls of the hinge insertion hole 12b to an inner space.

[0040] The inner wall 14 may be partially formed inside the lower container 10, and a refill container coupling portion 16 may be formed between the inner walls 14 to be fixedly coupled to a refill container 60. In this case, the refill container coupling portion 16 may include an extending part 16a extending upward from a bottom surface of the lower container 10 and a protrusion part 16b protruding from an upper inner peripheral surface thereof.

[0041] Meanwhile, as illustrated in FIG. 3, a bottom edge part of the lower container 10 is preferably formed in a form that is gradually inclined upward toward a center. That is, a center part of the bottom surface of the lower container 10 is opened and an edge part thereof gradually rises to the center so that the edge part is spaced apart from a bottom at a predetermined interval, and the refill container 60 is seated on the bottom edge part of the lower container 10 so that the refill container 10 is spaced apart from the bottom at a predetermined interval. In this way, the refill container 60 can be prevented from easily making contact with foreign substances on the bottom, and can be prevented from being affected by factors such as external impact, thereby safely storing the cosmetic product contained in the refill container.

[0042] In this case, an auxiliary seating ring 18 is formed between the bottom edge part of the lower container 10 and the bottom surface of the refill container 60, such that external impact transmitted to the refill container 60 may be absorbed. The auxiliary seating ring 18 is formed in a ring shape, such that one side thereof is in close contact with the bottom surface of the edge of the lower container 10, and the other side is in close contact with the bottom surface of the refill container 60. In this case, the auxiliary seating ring 18 may be preferably manufactured by a foaming method for absorption of the external impact and stable fixation of the refill container 60.

[0043] In addition, an intermediate body 70 having a fastening structure with the upper container 20 may be further coupled to the lower container 10. The intermediate body 70 is formed in a ring shape to be fixedly coupled to the lower container 10 while being inserted between the outer wall 12 and the inner wall 14 of the lower container 10. A push button 72 may be formed on an outer periphery of the intermediate body 70 to be inserted into an open upper portion of the button insertion hole 12a of the lower container 10, and at least one insertion portion 74 may be formed on an inner periphery of the intermediate body 70 to be inserted between the inner wall 14 of the lower container 10 and the refill container coupling portion 16 of the lower container 10.

[0044] As illustrated in FIG. 2, the push button 72 may include a pressing portion 72a pressed by a user with a finger or the like, elastic blades 72b extending from both sides of the pressing portion 72a, and a locking hook 72c formed on an upper portion of the pressing portion 72a.

[0045] The pressing portion 72a of the push button 72 may be exposed to an outside of the cosmetic container through the button insertion hole 12a of the lower container 10, and the locking hook 72c may be coupled to a locking protrusion 22 formed on the upper container 20. In this case, in the push button 72, an end portion of the elastic blade 72b may be integrally connected to one side of the intermediate body 70 to constitute a part of the intermediate body 70 while the pressing portion 72a is spaced apart from the intermediate body 70 at a predetermined interval, such that the push button 72 may be easily moved forward and rearward by a pressing operation of the user.

[0046] The elastic blade 72b of the push button 72 may include at least one bent portion 72d extending along the outer periphery of the intermediate body 70. In other words, the elastic blade 72b may be formed in a curved shape due to a plurality of bent portions 72d, that is, in a corrugated shape while extending outward from the pressing portion 72a, such that the pressing portion 72a may be more elastically moved forward and rearward when the pressing portion 72 is pressed.

[0047] In this case, the push button 72 is preferably injection-molded integrally with the intermediate body 70.

[0048] In the drawings of the cosmetic container according to one aspect of the present disclosure, it is illustrated that a groove formed in the inner periphery of the lower container 10 and a protrusion formed on the outer periphery of the intermediate body 70 are coupled to each other by fitting, but the present disclosure is not limited thereto, and various coupling methods, such as undercut-coupling or press-fitting coupling, may be provided to the extent that the intermediate body 70 may be firmly and fixedly coupled to the inside of the lower container 10.

[0049] Meanwhile, an inner space of the lower container 10 may be coupled with the refill container 60 having the cosmetic product contained therein. The cosmetic product or an impregnated sponge impregnated with the cosmetic product may be mounted inside the refill container.

[0050] As illustrated in FIG. 3, an upper portion of the refill container 60 may extend outward to be seated on an upper end of the intermediate body 70, a bottom protrusion portion 62 may be formed on an bottom surface thereof to protrude downward and inserted into an open lower portion of the lower container 10 and a center of the auxiliary seating ring 18, and an outside part of the bottom protrusion portion 62 may be seated on an upper surface of the auxiliary seating ring 18, thus stably fixing the refill container 60 without shaking. In addition, a coupling protrusion ring 64 may protrude along the outer periphery of the refill container 60 and is undercut-coupled to the refill container coupling portion 16 of the lower container 10. In this case, the refill container 60 may be preferably formed of a thin metal material in order to effectively secure an inner space and enhance durability.

[0051] The upper container 20 is coupled to one side

of the lower container 10 to close the lower container 10 by covering the upper portion of the lower container 10 or to open the lower container 10 by opening the upper portion of the lower container 10 while pivoting.

[0052] As illustrated in FIG. 2, a locking protrusion 22 may be formed on an inner periphery of the upper container 20 to be fastened to the locking hook 72c of the push button 72. A hinge portion 26 extends downward on a side opposite to the locking protrusion 22, the hinge portion 26 is inserted into the hinge insertion hole 12b of the lower container 10, and the shaft coupling groove 26a is formed in the hinge portion 26 to be fitted with the shaft coupling protrusion 12c formed on the hinge insertion hole 12b, such that the upper container 20 may be detachable from the lower container 10. In this case, the shaft coupling groove 26a may be preferably a pair of grooves formed in both side of an inner peripheral surface of the hinge portion 26.

[0053] In addition, a fastening groove 24 and an auxiliary fastening groove 28 may be formed in the inner periphery of the upper container 20, such that the upper cover 20 may be detachably coupled to the mirror cover 40.

[0054] As illustrated in FIG. 3, an upper surface of the upper container 20 is preferably convex upward from the outside to the center.

[0055] The upper container cover 30 is formed at the inner side of the upper container 20 so that the mirror 50 is fixed into the upper container 20. Obviously, the upper container cover 30 may be preferably formed in a ring shape so that most of the mirror 50 may be exposed to the outside.

[0056] An insertion hole 31 is formed in one side edge of the upper container cover 30, the locking hook 72c formed on the lower container 10 is inserted into the insertion hole 31 when the lower container 10 is fastened to the upper container 20, and a tool t such as a ballpoint pen or pin is inserted when the upper container cover 30 is separated from the upper container 20. Accordingly, the insertion hole 31 is formed at a position adjacent to the locking protrusion 22 of the upper container 20, and a part of an edge of the mirror cover 40 may be exposed to the outside through the insertion hole 31.

[0057] As illustrated in FIG. 2, a fastening protrusion portion 32 is formed on the upper portion of the upper container cover 30 to protrude to the outside, and the fastening protrusion portion 32 is undercut-fastened to the mirror cover 40. The fastening protrusion portion 32 is preferably formed on an upper portion adjacent to the insertion hole 31, and spaced apart from the upper surface of the upper container cover 30 at a predetermined interval.

[0058] A seating jaw 35 on which the mirror 50 is seated may be formed on the upper container cover 30. The seating jaw 35 has a predetermined width along the inner periphery of the upper container cover 30, an upper extension protrusion ring 37 is formed at an outer side of the seating jaw 35 to surround an outer periphery of the mirror 50 seated on the seating jaw 35 and prevent the mirror 50 from moving.

[0059] In addition, at least one fitting groove 37a may be formed on an outer periphery of the upper extension protrusion ring 37 of the upper container cover 30 to be coupled to the mirror cover 40.

[0060] The mirror cover 40 is detachably coupled to the upper portion of the upper container cover 30 while surrounding the mirror 50. The mirror cover 40, which has a configuration for fixing the mirror 50, is preferably formed in a disc shape having a predetermined space therein as illustrated in drawings.

[0061] A fastening extension portion 42 may protrude from the edge of the mirror cover 40 and is engaged with the fastening protrusion portion 32 of the upper container cover 30. The fastening extension portion 42 may lengthily extend along an outer periphery of the mirror cover 40 while protruding from the outside of the mirror cover 40, and may be disposed at a position adjacent to the insertion hole 31 of the upper container cover 30 to be exposed to the outside through the insertion hole 31. As illustrated in FIG. 3, as an oblique surface 42a inclined downward at a predetermined angle is formed on an outer periphery of the fastening extension portion 42 positioned on the upper portion of the insertion hole 31 of the upper container cover 30, the tool t inserted into the insertion hole 31, such as a ballpoint pen or a pin, is easily pushed in a central direction of the mirror cover 40.

[0062] In addition, a fastening protrusion 44 may be formed on one side of the fastening extension portion 42 to be coupled to the fastening groove 24 of the upper container 20. In this case, the fastening extension portion 42 is in close contact with the inner wall of the upper container 20, and the fastening protrusion 44 protrudes from the fastening extension portion 42 to the outside and is fitted to the fastening groove 24.

[0063] Briefly, the upper container cover 30 and the mirror cover 40 are fixedly coupled with the mirror 50 interposed therebetween, and as the mirror cover 40 is fixedly coupled to the inner side of the upper container 20, the upper container cover 30 and the mirror 50 are fixed to the inner space of the upper container 20, such that the fastening extension portion 42 formed on the edge of the mirror cover 40 and the fastening protrusion portion 32 formed on the upper container cover 30 are engaged with each other, and simultaneously, the fastening protrusion 44 formed on the mirror cover 40 is fitted and coupled to the fastening groove 24 formed in the upper container 20.

[0064] Meanwhile, when the cosmetic container is desired to be separated and collected, the tool t is inserted into the insertion groove 31 of the upper container cover 30 to unfasten the fastening protrusion 44 of the mirror cover 40 from the fastening groove 24 of the upper container 20 while pushing the fastening extension portion 42 of the mirror cover 40 inside, such that the upper container cover 30 and the mirror cover 40 are separated from the upper container 20. In addition, the fastening

extension portion 42 of the mirror cover 40 is unfastened from the fastening protrusion portion 32 of the upper container cover 30 by pushing the fastening extension portion 42 and the fastening protrusion portion 32 in upward, downward, and opposite directions, such that the upper container cover 30 is separated from the mirror cover 40, and then the mirror 50 is taken out.

[0065] As illustrated in FIG. 2, a through-hole 46 is formed in an upper corner of the mirror cover 40, and the fastening protrusion portion 32 of the upper container cover 30 may pass through the through-hole 46 so as to protrude from a side surface of the mirror cover 40. The through-hole 46 is formed on a rear side of the fastening extension portion 42 of the mirror cover 40, so that the fastening extension portion 42 is bent upward and downward or inward and outward, and accordingly, the fastening protrusion 44 is moved inward or outward.

[0066] In addition, at least one fitting protrusion 47 may be formed on the inner periphery of the mirror cover 40 to be coupled to the fitting groove 37a of the upper container cover 30. The fitting protrusion 47 assists a fastening force between the fastening extension portion 42 of the mirror cover 40 and the fastening protrusion portion 32 of the upper container cover 30. Obviously, the upper container cover 30 and the mirror cover 40 are not coupled by the above fastening structure, and various fastening structures, such as coupling by a magnetic force, undercut-coupling, or press-fitting coupling, may be provided to the extent that the upper container cover 30 may be easily detached from the mirror cover 40.

[0067] Further, at least one auxiliary fastening portion 48 may be formed on the outer periphery of the mirror cover 40. The auxiliary fastening portion 48 assists the fastening force between the fastening protrusion 44 of the mirror cover 40 and the fastening groove 24 of the upper container 20, in which an auxiliary fastening protrusion 48a may protrude from an outer peripheral surface of the auxiliary fastening portion 48 and may be coupled to the auxiliary fastening groove 28 of the upper container 20, and an auxiliary elastic groove 48b may be formed on a rear side of the auxiliary fastening protrusion 48a to allow the auxiliary fastening protrusion 48a to move forward and rearward. As illustrated in FIG. 2, the auxiliary fastening portion 48 is preferably formed on the outer periphery of the mirror cover 40 by being spaced apart from the fastening extension portion 42 at a predetermined interval. In the drawings of the cosmetic container according to one aspect of the present disclosure, it is illustrated that the auxiliary fastening portions 48 are formed on both sides of the auxiliary fastening portion 48, but the present disclosure is not limited thereto, and the number and position of auxiliary fastening portions 48 may be changed in consideration of the fastening force between the upper container 20 and the mirror cover 40 or the ease of separation from the mirror cover 40.

[0068] As illustrated in FIG. 3, a pressing portion 45 may be formed on the mirror cover 40, and the pressing portion 45 presses and fixes the mirror 50 seated on the seating jaw 35 of the upper container cover 30 from above. Accordingly, the mirror 50 is not shaken or taken out because it is strongly fixed between the upper container cover 30 and the mirror cover 40.

[0069] In addition, a pushed portion 49 may be formed on an upper portion of the pressing portion 45 of the mirror cover 40, in which the pushed portion 49 may protrude from the upper surface of the mirror cover 40 and may be pushed and bent by an inner surface of the upper container 20 to push the pressing portion 45 downward, and accordingly, the pressing portion 45 may more strongly push the mirror 50.

[0070] As illustrated in FIG. 2, the mirror cover 40 may be formed in a plurality of fan shapes spaced apart from each other at predetermined intervals, and the pushed portion 49 may be formed in a radial shape extending outward in several branches from a center of the mirror cover 40. Obviously, the pressing portion 45 and the pushed portion 49 are not limited to the above shapes, and may be variously changed in addition to the above shapes.

[0071] The mirror 50, which is a makeup auxiliary tool that is disposed at the inner side of the upper container 20 and illuminates a user's makeup area, is fixed to the inner side of the upper container 20 while being fitted between the upper container cover 30 and the mirror cover 40. That is, the mirror 50 is seated on the seating jaw 35 while a side thereof is surrounded by the upper extension protrusion ring 37 of the upper container cover 30, and simultaneously, is pressed by the pressing portion 45 of the mirror cover 40 and fixed.

[0072] As described above, in the cosmetic container according to one aspect of the present disclosure, the mirror 50 is fitted between the upper container cover 30 and the mirror cover 40, and the mirror cover 40 is fixedly coupled to the inner side of the upper container 20, such that the mirror 50 is stably fixed during using the cosmetic container, and the upper container cover 30 and the mirror cover 40 are separated from the upper container 20 during recycling or discard, and then the mirror cover 40 is unfastened from the upper container cover 30, such that the mirror 50 fitted between the upper container cover 30 and the mirror cover 40 is safely and easily separated and collected, thereby preventing waste of resources and environmental pollution.

[0073] FIGS. 4 to 9 are views illustrating use of the cosmetic container according to one aspect of the present disclosure, which describe a method for using a cosmetic container according to one aspect of the present disclosure with reference to FIGS. 4 to 9.

[0074] FIG. 4 is a sectional view illustrating a state in which the cosmetic container is opened and used according to one aspect of the present disclosure, FIG. 5 is a perspective view illustrating a state of separating a lower container and an upper container according to one aspect of the present disclosure, FIG. 6 is a partial perspective view illustrating a state in which a tool is inserted into an insertion hole of the upper container according to

one aspect of the present disclosure, FIG. 7 is a partial perspective view illustrating a state of separating the upper container and an upper container cover according to one aspect of the present disclosure, FIG. 8 is a partial perspective view illustrating a state of separating the upper container cover and a mirror cover according to one aspect of the present disclosure, and FIG. 9 is a partial perspective view illustrating a state of separating a mirror fitted between the upper container cover and the mirror cover according to one aspect of the present disclosure.

[0075] In order to use the cosmetic container according to one aspect of the present disclosure, the push button 72 exposed to one side of the lower container 10 is first pushed to unfasten the upper container 20 and the lower container 10. In this case, the elastic blades 72b are elastically bent in a curved form by the plurality of bent portions 72d while pushing the pressing portion 72a of the push button 72, and simultaneously, the locking hook 72c retracts backward, such that the locking hook 72c is unfastened from the locking protrusion 22 formed on the upper container 20.

[0076] Thereafter, the upper container 20 is rotated to open the refill container 60 coupled to the inner side of the lower container 10, and as illustrated in FIG. 4, the cosmetic product contained in the refill container 60 is used for makeup with a makeup tool such as a puff P.

[0077] Meanwhile, when the cosmetic container is desired to be recycled or discarded, the upper container 20 is separated from the lower container 10 as illustrated in FIG. 5. In this case, the shaft coupling protrusion 12c of the lower container 10 and the shaft coupling groove 26c of the upper container 20 are separated by forcibly pulling the upper container 20 from the lower container 10.

[0078] Thereafter, as illustrated in FIG. 6, the tool t such as a ballpoint pen or a pin is inserted into the insertion hole 31 of the upper container cover 30 coupled to the inner side of the upper container 20 to unfasten the upper container 20 and the mirror cover 40. In more detail, when a thin and pointed tool t is pushed into the insertion hole 31 of the upper container cover 30, an end part of the tool t makes contact with the oblique surface 42a of the fastening extension portion 42, and then the tool t is pushed in the central direction of the mirror cover 40, the fastening extension portion 42 of the mirror cover 40 is moved together with the fastening protrusion 44 formed on one side of the fastening extension portion 42 while being pushed in the central direction of the mirror cover 40 to escape from the fastening groove 24 of the upper container 20, such that unfastening between the mirror cover 40 and the upper container 20 is made. In this case, the through-hole 46 is formed in a back side of the fastening protrusion 44 of the mirror cover 40 to elastically move the fastening protrusion 44 inward and outward.

[0079] Thereafter, as illustrated in FIG. 7, the upper container cover 30 and the mirror cover 40 are separated from the upper container 20, and as illustrated in FIG. 8, the fastening protrusion portion 32 of the upper container cover 30 is unfastened from the fastening extension portion 42 of the mirror cover 40. In more detail, the fastening extension portion 42 of the mirror cover 40 is pushed upward while slightly pulling the fastening extension portion 42 outward, and simultaneously, the fastening protrusion portion 32 of the upper container cover 30 is pushed downward to release undercut-coupling between the fastening extension portion 42 and the fastening protrusion portion 32. In this case, the through-hole 46 is formed in a back side of the fastening extension portion 42 of the mirror cover 40 to elastically bend the fastening protrusion 42 forward and downward or inward and outward.

[0080] Finally, as illustrated in FIG. 9, the mirror cover 40 is separated from the upper container cover 30 and the mirror 50 fitted between the upper container cover 30 and the mirror cover 40 is taken out, and the mirror 50 and other components are thus separated and collected.

[0081] Although the above description has been made with reference to illustrative aspects and drawings as well as certain matters such as specific elements, the aspects are provided for overall understanding of the present disclosure, and the present disclosure is not limited to the aspects. It is understood by those skilled in the art that various changes and modifications can be made in these aspects.

[0082] Therefore, the spirit of the present disclosure may not be construed as being limited to the aspects described herein, and all variations within the scope of the appended claims and their equivalents are to be construed as being included in the scope of the present disclosure.

[Description of Reference numerals]

[0083]

10: lower container 12: outer wall
14: inner wall 18: seating ring
20: upper container 22: locking protrusion
24: fastening groove 28: auxiliary fastening groove
30: upper container cover 31: insertion hole
32: fastening protrusion portion 35: seating jaw
40: mirror cover 42: fastening extension portion
44: fastening protrusion 45: pressing portion
46: through-hole 48: auxiliary fastening portion
50: mirror 60: refill container
70: intermediate body 72: push button
P: puff t: tool

Claims

1. A cosmetic container with a detachable mirror, the cosmetic container comprising:

a lower container;
an upper container which opens/closes the low-

er container;
an upper container cover which is formed at an inner side of the upper container;
a mirror cover which is detachably fastened to the upper container cover and fixedly coupled to the inner side of the upper container; and
a mirror which is fitted between the upper container cover and the mirror cover.

2. The cosmetic container of claim 1, wherein a refill container configured to contain contents is further coupled to an inner side of the lower container.

3. The cosmetic container of claim 2, wherein a bottom edge part of the lower container is gradually inclined upward toward a center, and the refill container is seated on the bottom edge part while being spaced apart from a bottom at a predetermined interval.

4. The cosmetic container of claim 2, wherein an auxiliary seating ring is formed between the bottom edge part of the lower container and a bottom surface of the refill container.

5. The cosmetic container of claim 1, wherein an intermediate body is further coupled to an inner side of the lower container, a push button having a locking hook is formed on the intermediate body, and a locking protrusion is formed on an inner periphery of the upper container.

6. The cosmetic container of claim 5, wherein an insertion hole is formed in one side edge of the upper container cover at a position adjacent to the locking protrusion of the upper container, the locking hook is inserted into the insertion hole, and at least a part of the mirror cover is exposed to an outside through the insertion hole.

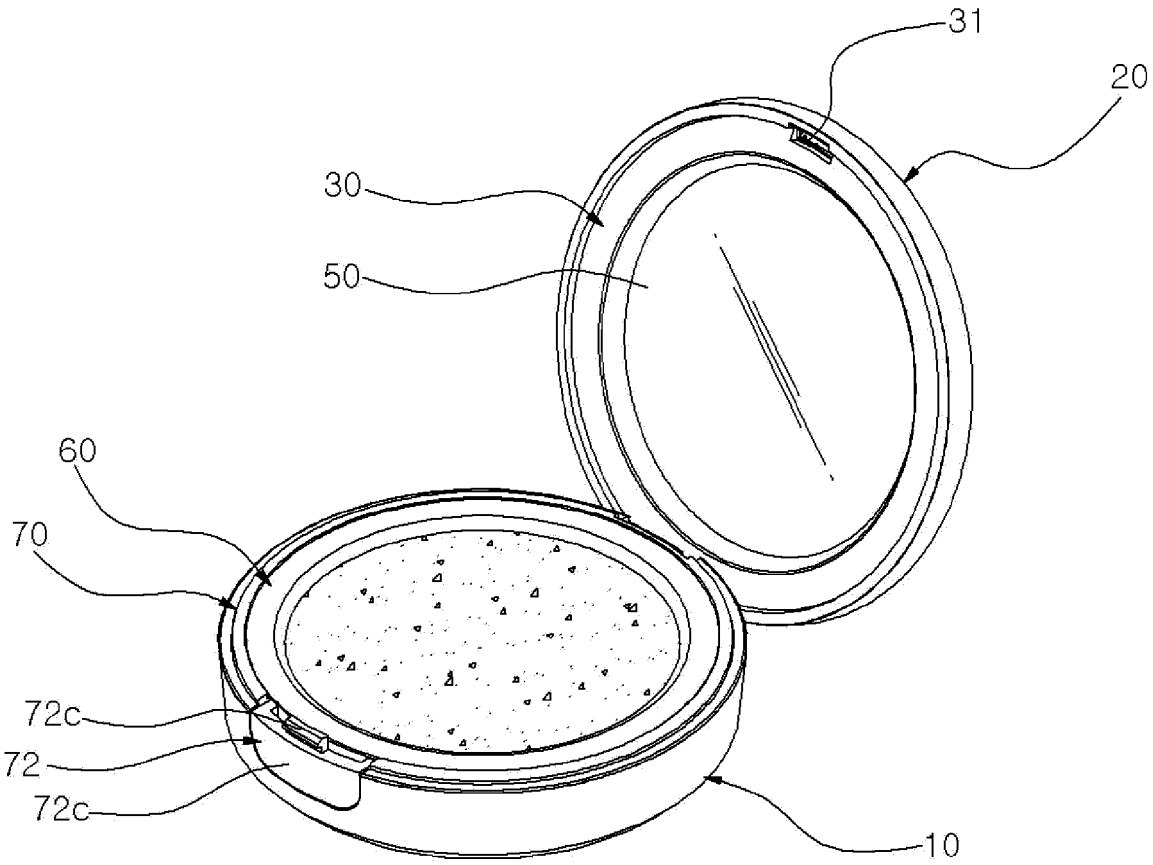
7. The cosmetic container of claim 1, wherein a seating jaw is formed on the upper container cover, and a pressing portion is formed on the mirror cover so that the mirror is pressed and fixed by the pressing portion of the mirror cover in a state in which the mirror is seated on the seating jaw of the upper container cover.

8. The cosmetic container of claim 1, wherein a shaft coupling protrusion is formed on the lower container, and a shaft coupling groove is formed in the upper container, so that the lower container and the upper container are detachably coupled to each other.

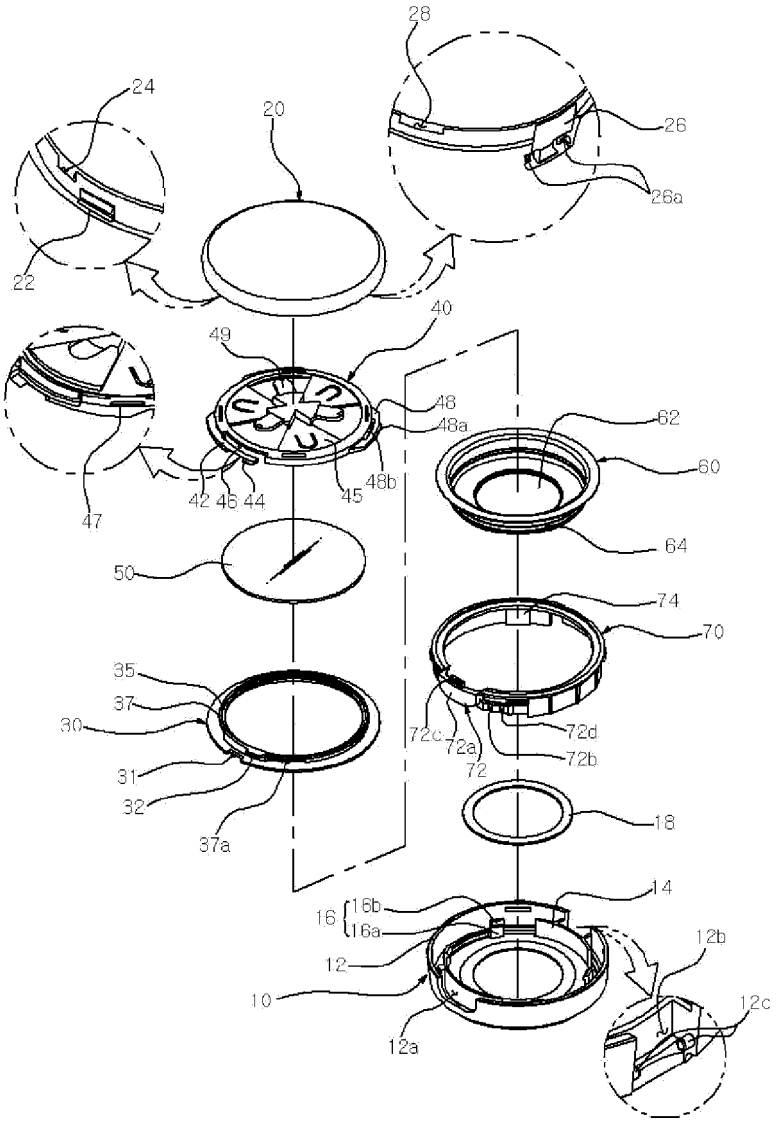
9. The cosmetic container of claim 1, wherein a fastening extension portion is formed on an edge of the mirror cover, a fastening protrusion portion is formed on the upper container cover to protrude outward so that the fastening extension portion and the fastening protrusion portion are engaged with each other, and simultaneously, a fastening protrusion is formed on the fastening extension portion of the mirror cover, and a fastening groove is formed in an inner periphery of the upper container so that the upper container and the mirror cover are coupled to each other.

10. The cosmetic container of claim 9, wherein a through-hole is formed in the mirror cover to allow the fastening protrusion portion of the upper container cover to pass therethrough, and the fastening extension portion of the mirror cover is elastically bent upward and downward or inward and outward.

[FIG.1]



[FIG.2]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26a
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44
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74
70
35
37
30
72c
72a
72
72d
72b
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37a
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14
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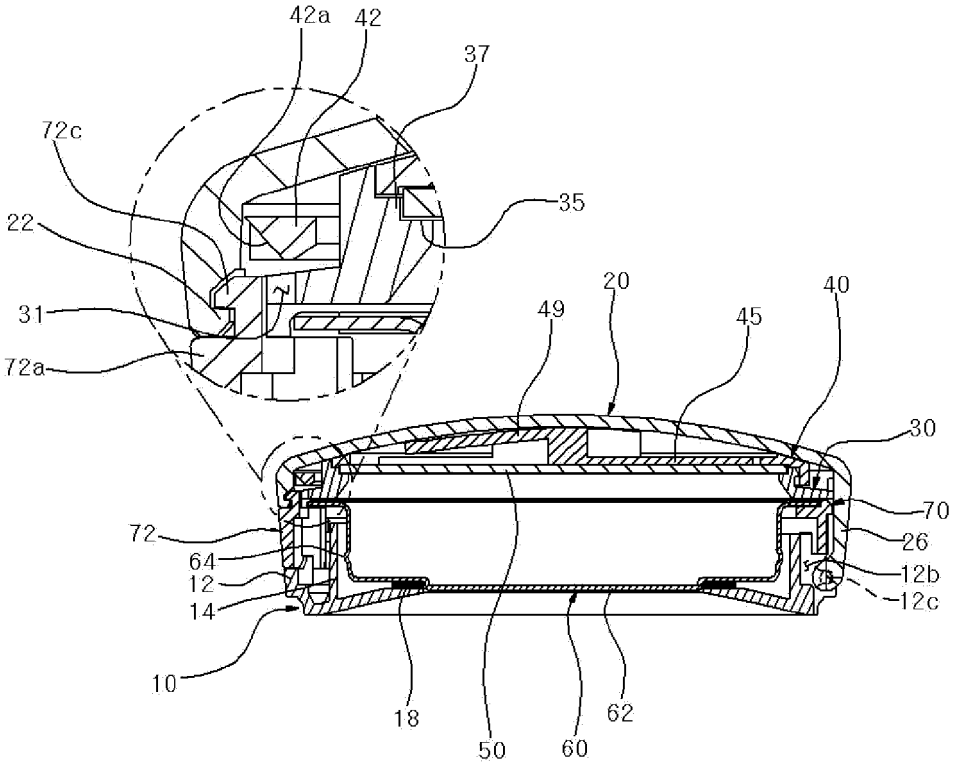
16b
16a
12b
12
10
12c
12a

[FIG.3]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12c
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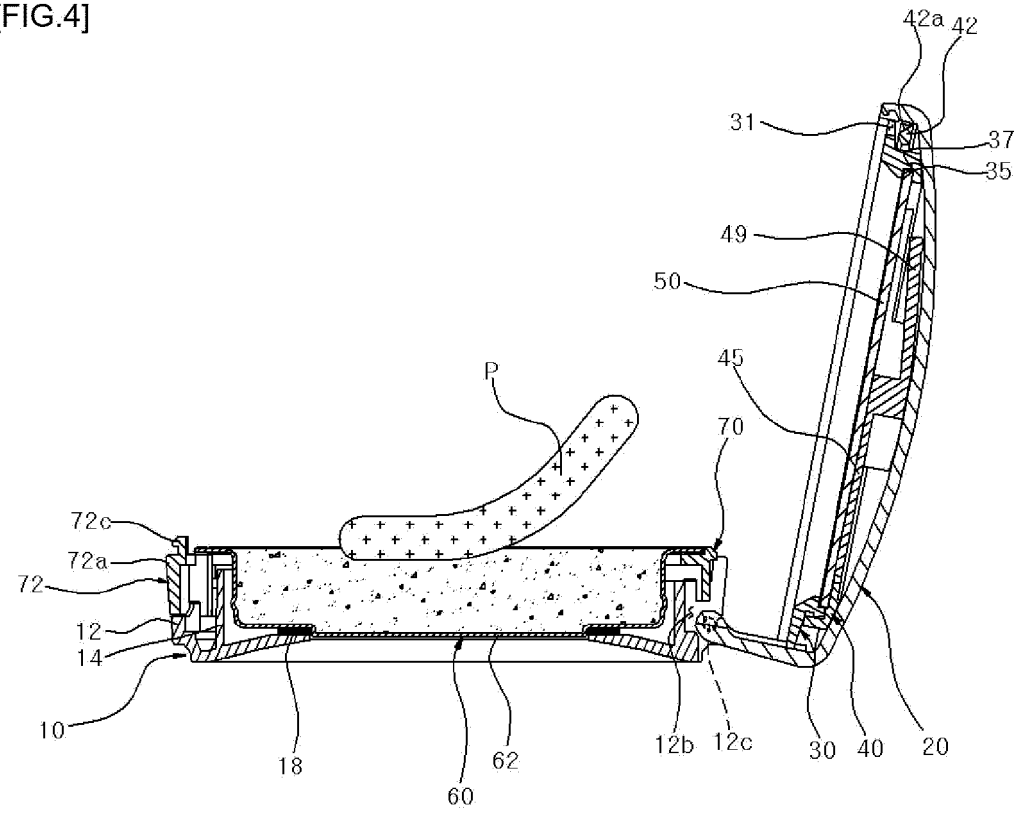
[FIG.4]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12c
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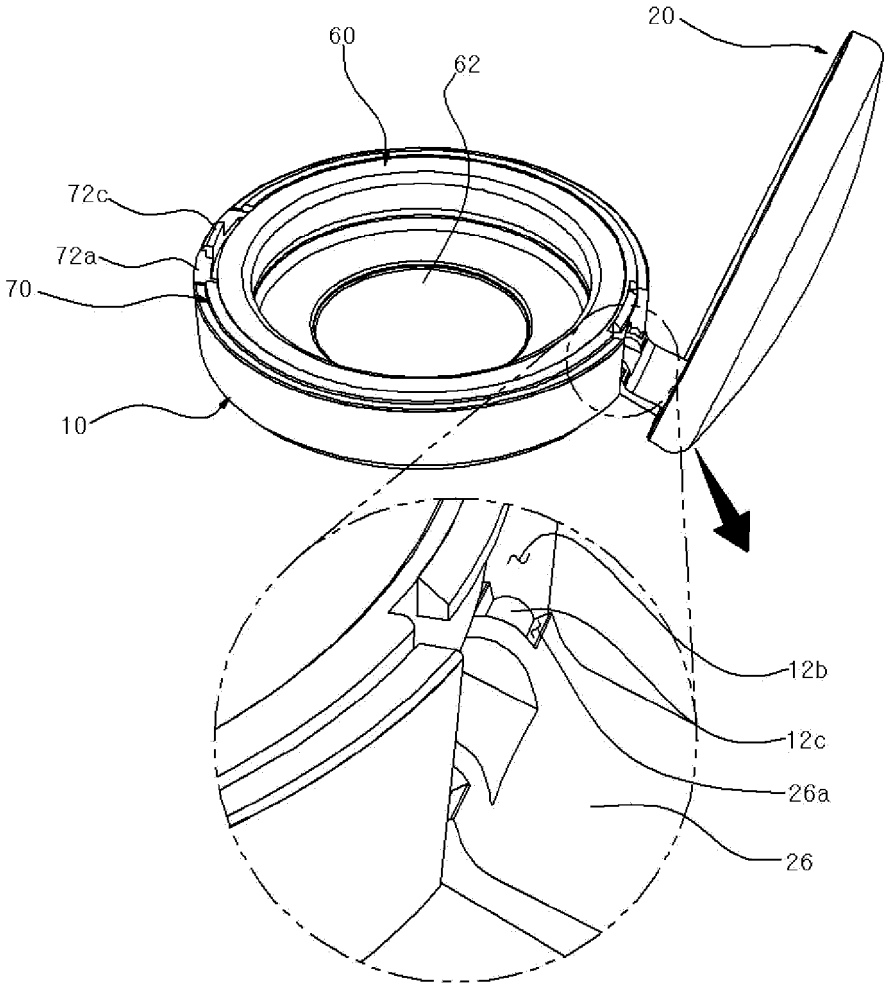
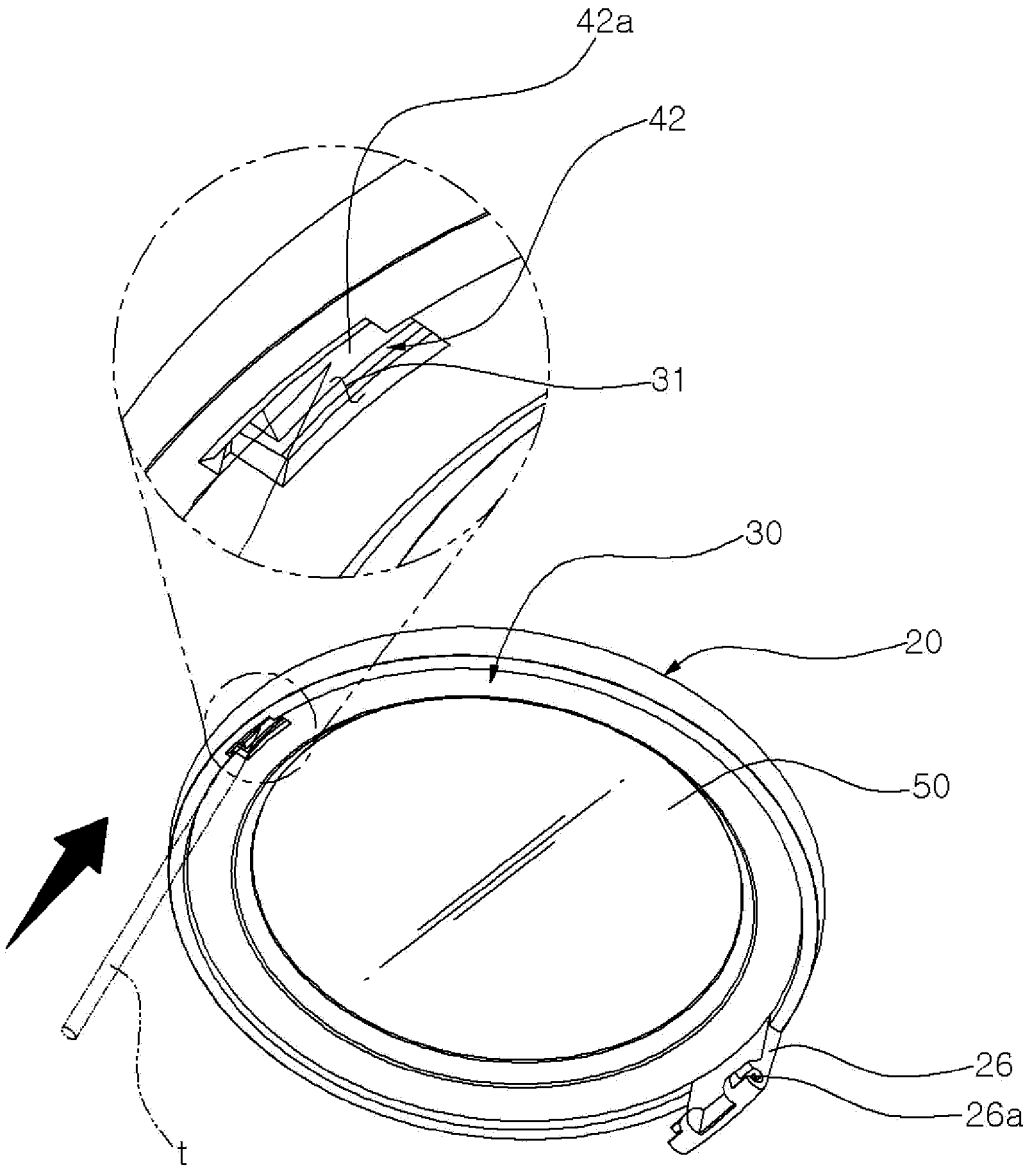
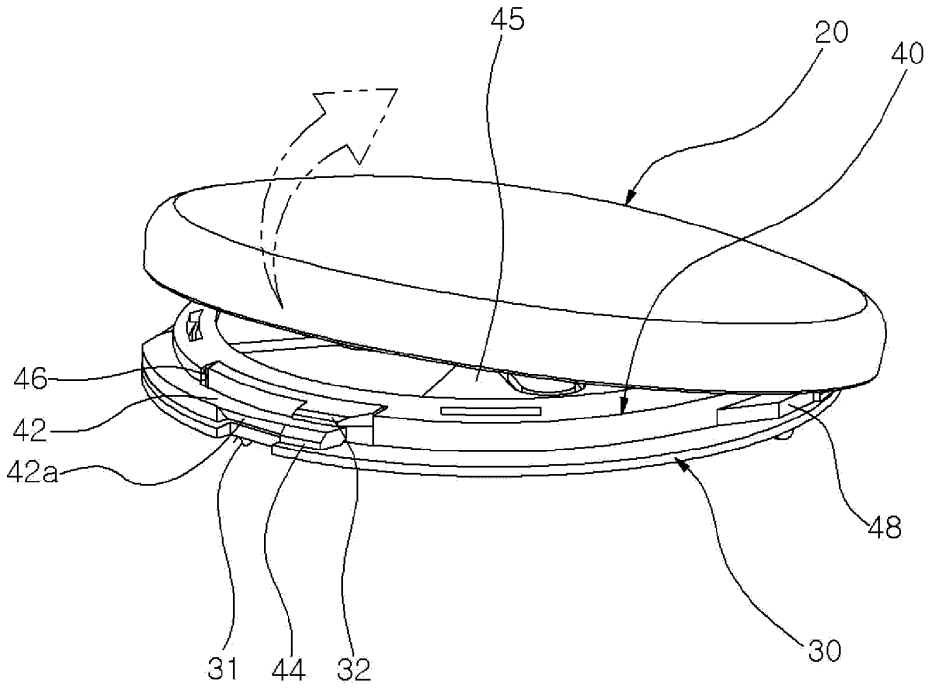
[FIG.5]



[FIG.6]



[FIG.7]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42a
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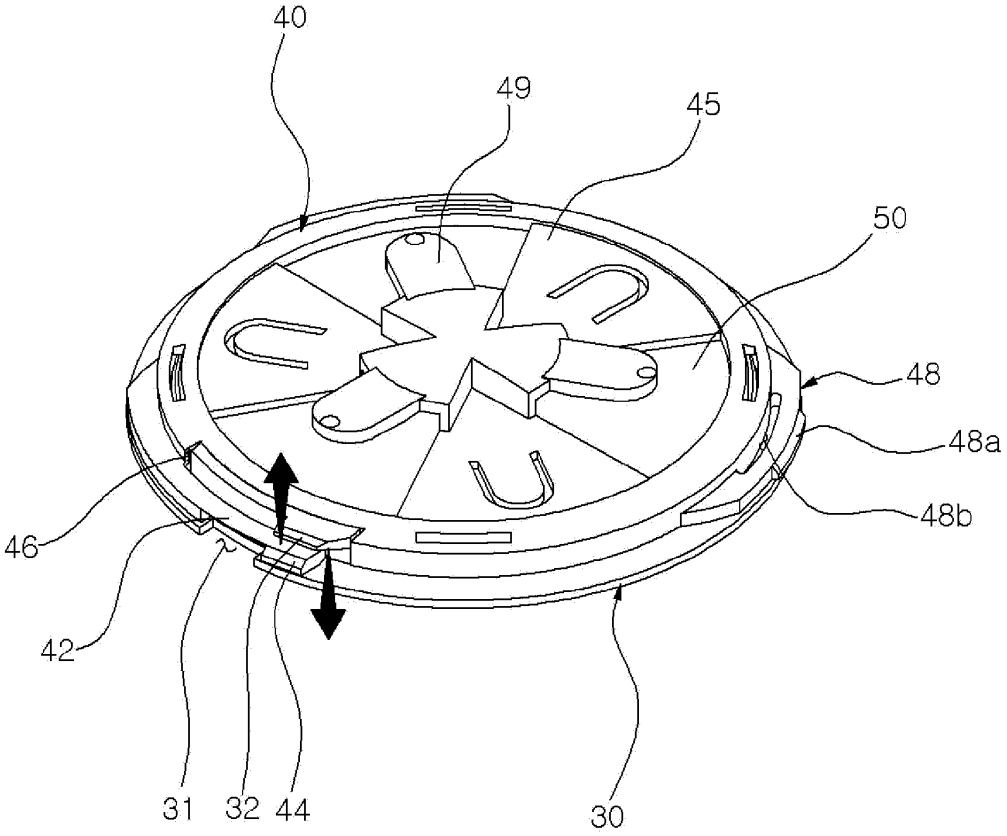
32
30

[FIG.8]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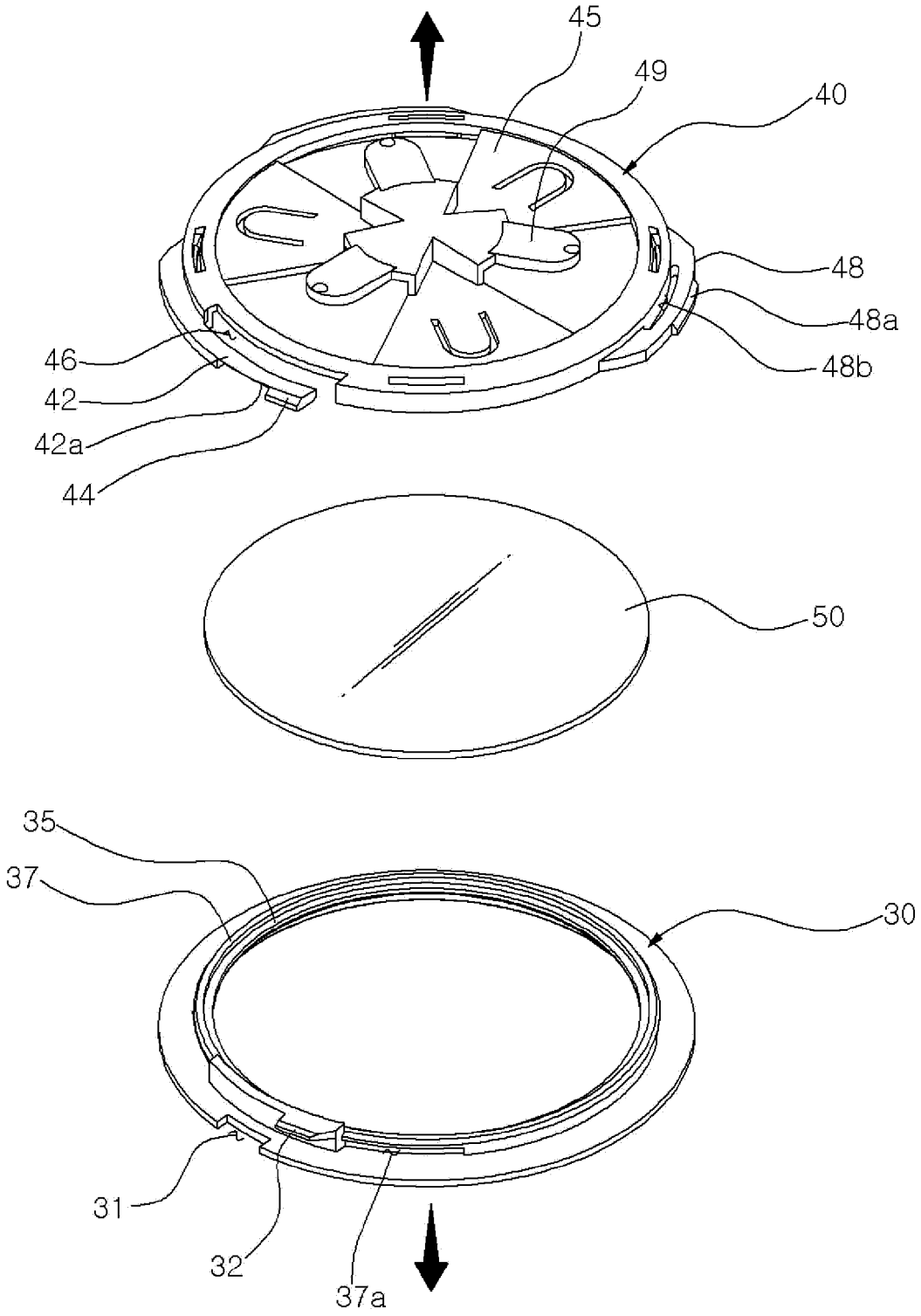
32
44
30

[FIG.9]



INTERNATIONAL SEARCH REPORT

International application No.
PCT/KR2021/006066

A. CLASSIFICATION OF SUBJECT MATTER

A45D 33/00(2006.01)i; **A45D 40/22**(2006.01)i; **A45D 40/18**(2006.01)i; **B65D 77/04**(2006.01)i; **B65D 43/16**(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 33/00(2006.01); A45D 33/16(2006.01); A45D 33/26(2006.01); A45D 40/00(2006.01); A45D 42/00(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: 거울(mirror), 분리(detach), 용기(vessel), 커버(cover), 리필(refill), 링(ring), 버튼(button), 후크(hook), 돌기(protrusion)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 20-2017-0003642 U (HWANG, Keunho) 20 October 2017 (2017-10-20) See paragraphs [0027]-[0035], claim 1 and figures 1-4.	1-10
A	KR 20-0429553 Y1 (JUNG MIN CO., LTD.) 24 October 2006 (2006-10-24) See claims 1-3 and figures 1-7.	1-10
A	JP 2000-217634 A (YOSHINO KOGYOSHO CO., LTD.) 08 August 2000 (2000-08-08) See paragraphs [0009]-[0010], claims 1-3 and figures 1-4.	1-10
A	KR 10-1937371 B1 (LG HOUSEHOLD & HEALTH CARE LTD.) 10 January 2019 (2019-01-10) See claim 1 and figures 1-24.	1-10
A	KR 10-1574997 B1 (TAP KOREA. CO., LTD. et al.) 21 December 2015 (2015-12-21) See paragraphs [0042]-[0046] and figures 3-7.	1-10

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

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"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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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
31 August 2021	**31 August 2021**
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.
PCT/KR2021/006066

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
KR 20-2017-0003642 U	20 October 2017	None	
KR 20-0429553 Y1	24 October 2006	EP 2043482 A1	08 April 2009
		EP 2043482 A4	18 May 2011
		EP 2043482 B1	25 March 2015
		WO 2008-010628 A1	24 January 2008
JP 2000-217634 A	08 August 2000	None	
KR 10-1937371 B1	10 January 2019	CN 211431425 U	08 September 2020
		KR 10-2018-0035183 A	05 April 2018
		WO 2018-062815 A2	05 April 2018
		WO 2018-062815 A3	09 August 2018
KR 10-1574997 B1	21 December 2015	None	

Form PCT/ISA/210 (patent family annex) (July 2019)

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- KR 101584512 **[0007] [0013]**
- KR 200488068 **[0010] [0013]**