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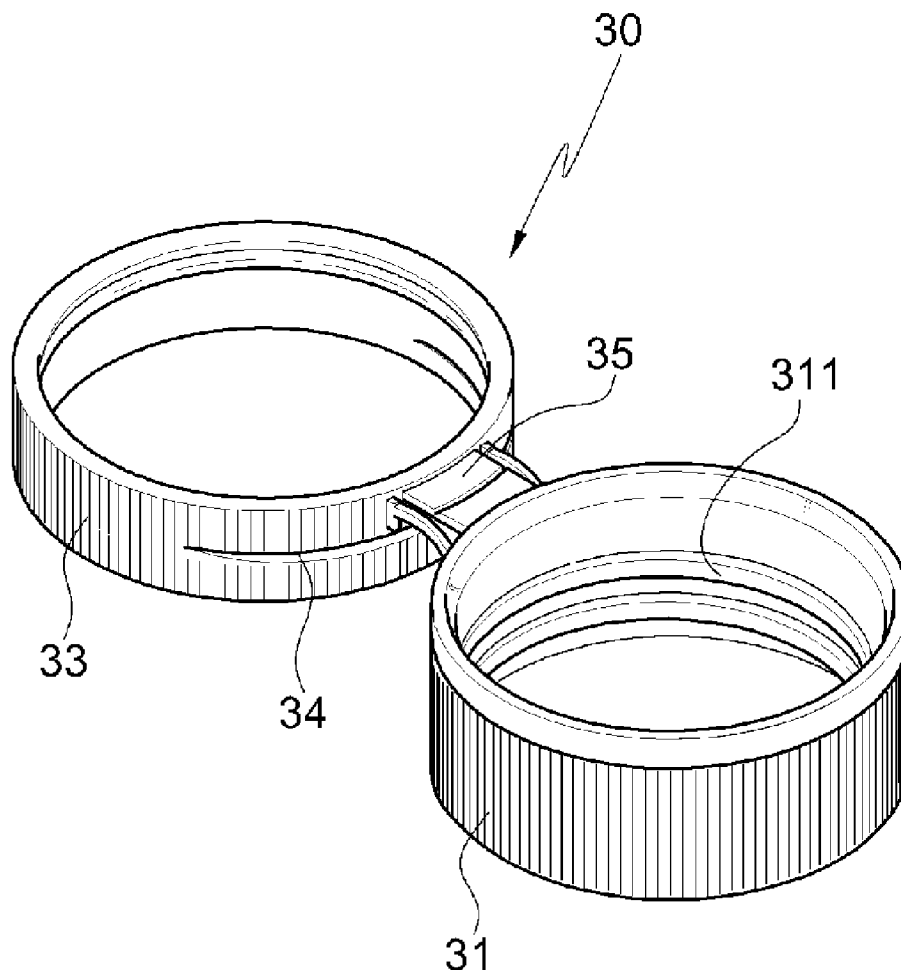
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Kwon(10) **Pub. No.: US 2012/0024815 A1**(43) **Pub. Date: Feb. 2, 2012**(54) **CONTAINER WITH ANTI-LOSS AND
ANTI-IDLE-ROTATION CAP****Publication Classification**(51) **Int. Cl.**
B65D 45/32 (2006.01)(52) **U.S. Cl.** **215/272**(57) **ABSTRACT**(76) **Inventor: Si Joong Kwon, Gyeonggi-do (KR)**(21) **Appl. No.: 13/147,976**(22) **PCT Filed: Oct. 9, 2008**(86) **PCT No.: PCT/KR08/05932**§ 371 (c)(1),
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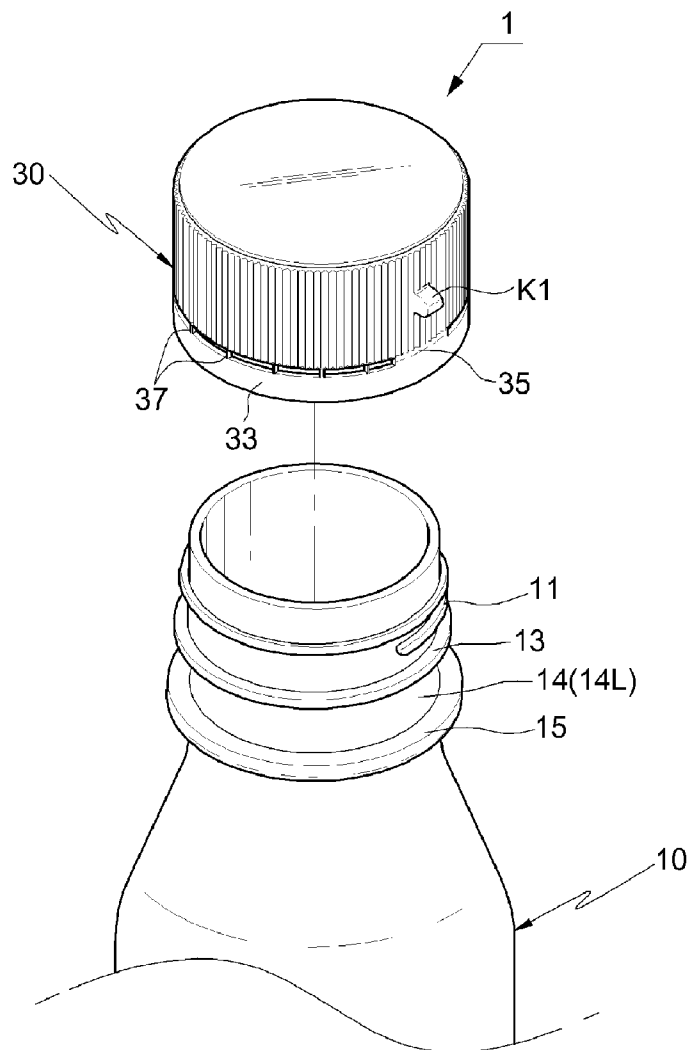
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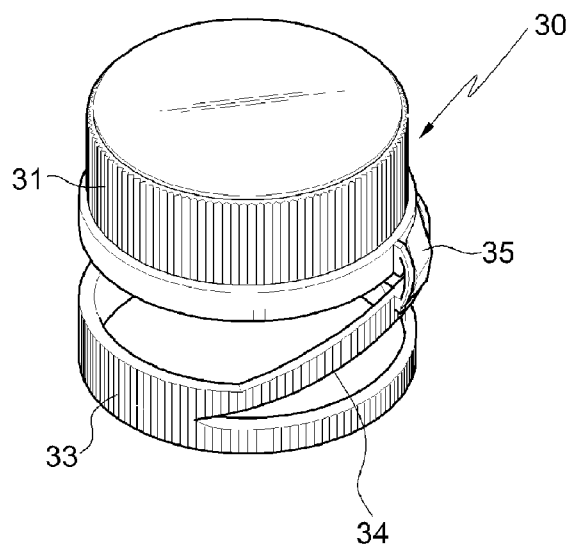
A container with an anti-loss and anti-idle-rotation cap is disclosed. The container is constructed so that a cap is fastened to a container body in a threaded manner. The container body has a ring stopping step provided under a threaded part of a spout to prevent removal of the cap, a support step provided under the ring stopping step to be spaced apart therefrom, and a support ring seat provided between the ring stopping step and the support step. The cap includes a support ring, a cap body and a hinge part which are integrally connected to each other. The support ring is placed on the support ring seat to prevent the removal and idle rotation of the cap. The cap body opens or closes the container body and has on an inner circumference thereof a threaded part. The hinge part couples the support ring with the cap body.



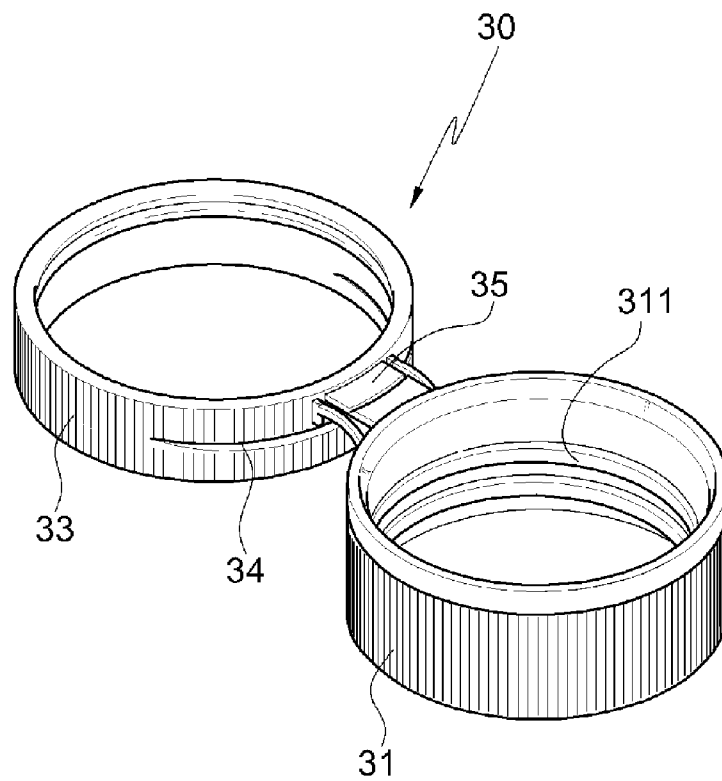
[Fig. 1]



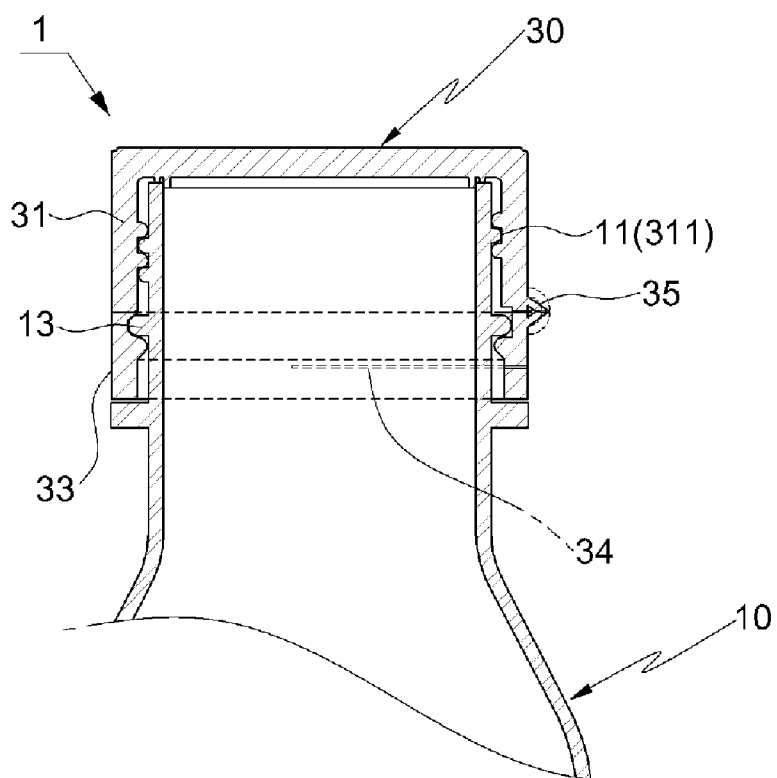
[Fig. 2]



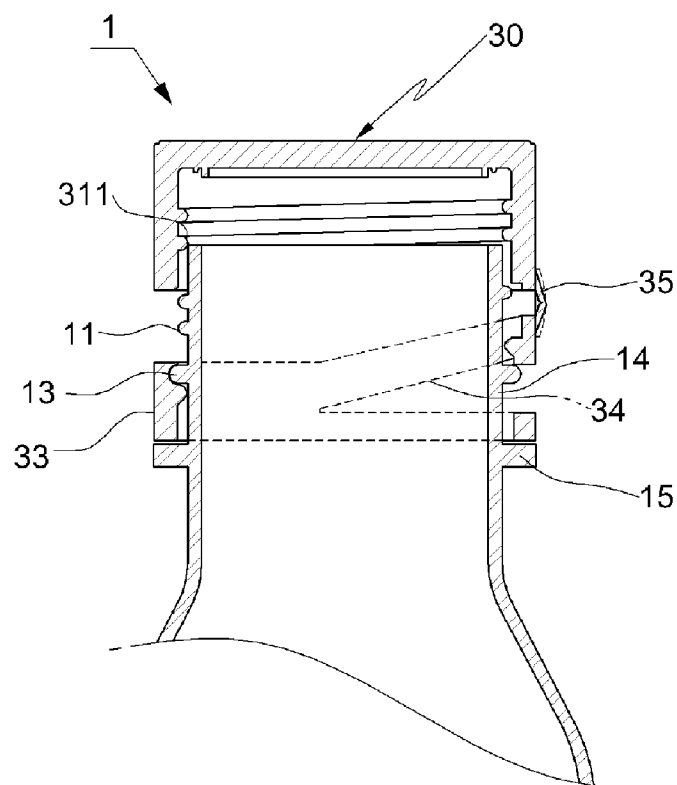
[Fig. 3]



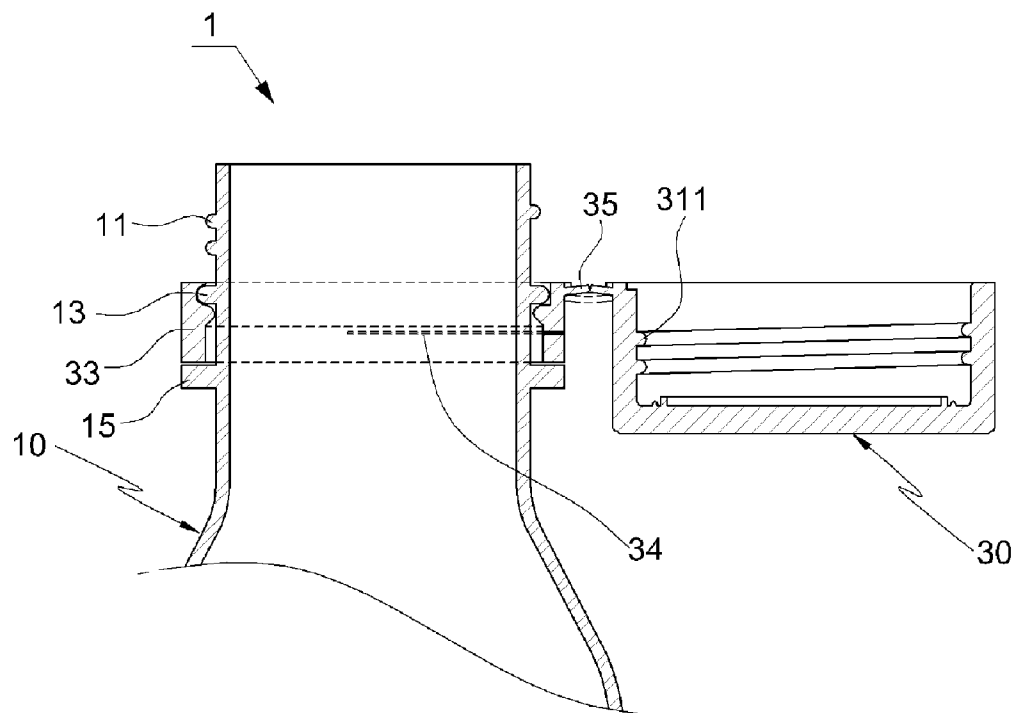
[Fig. 4]



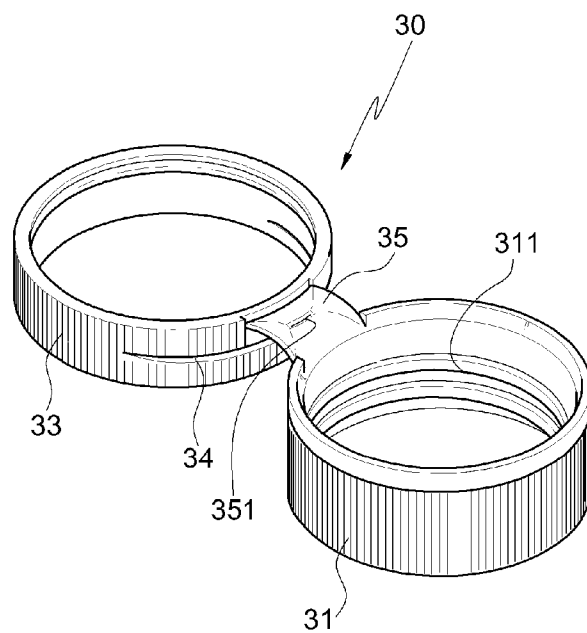
[Fig. 5]



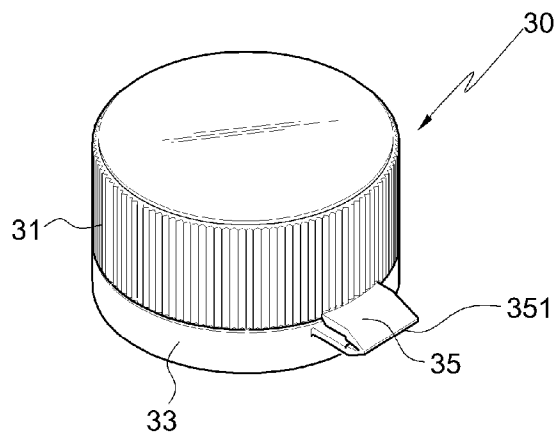
[Fig. 6]



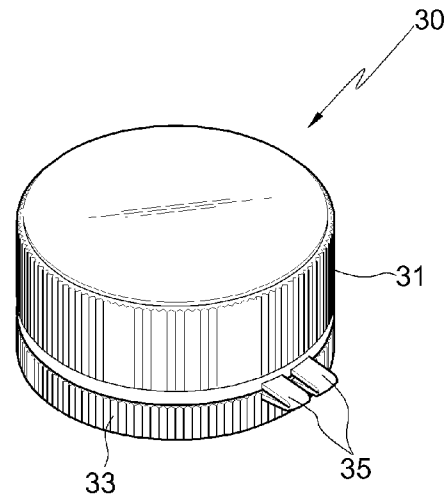
[Fig. 7]



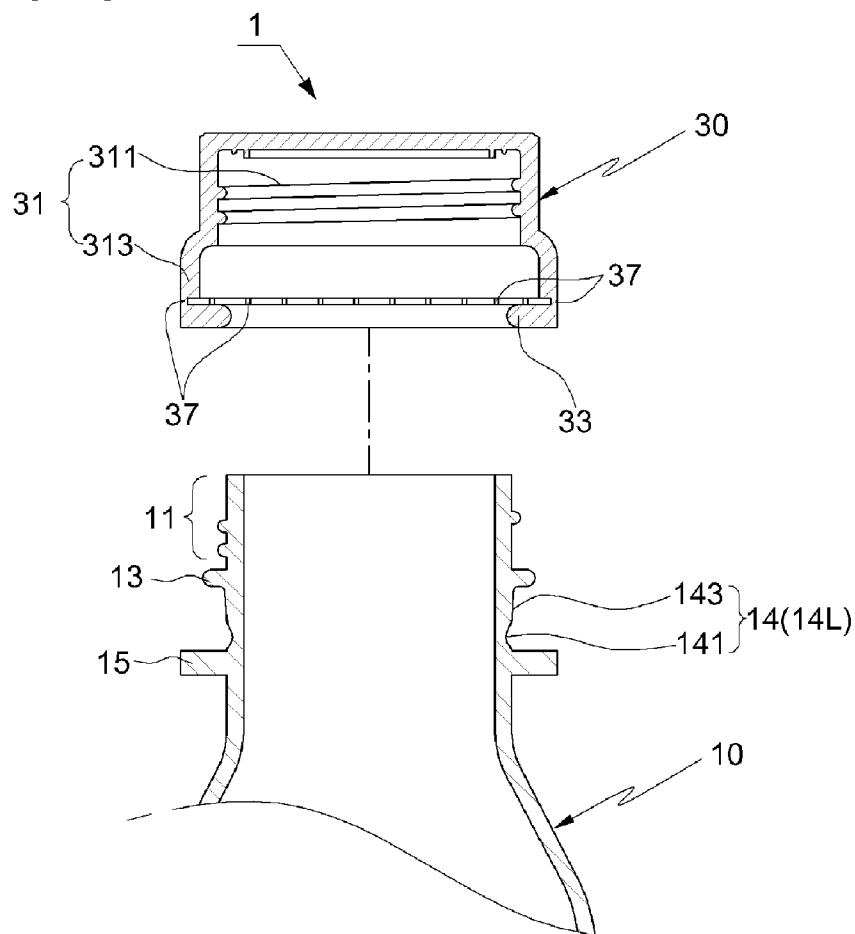
[Fig. 8]



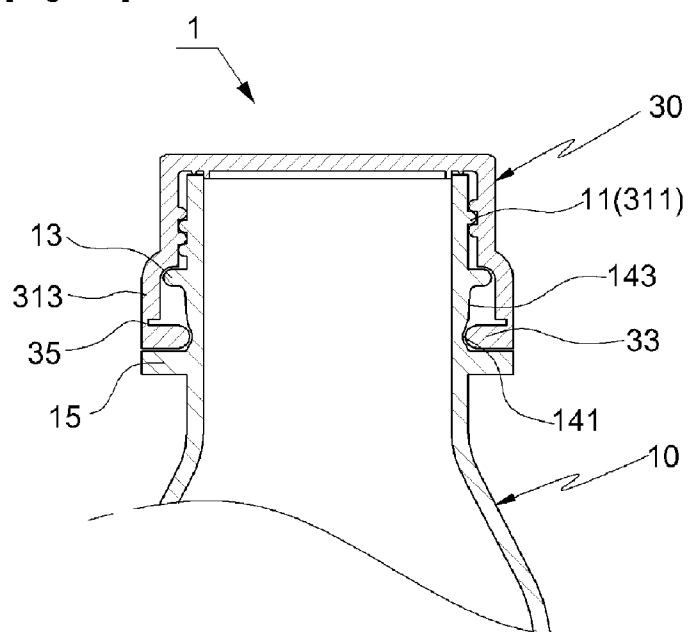
[Fig. 9]



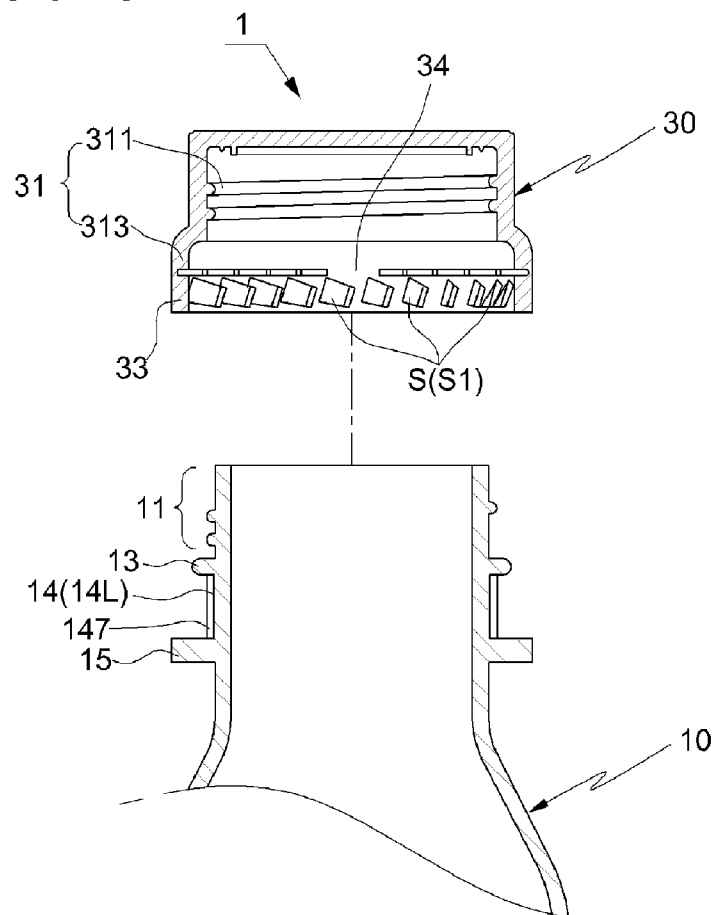
[Fig. 10]



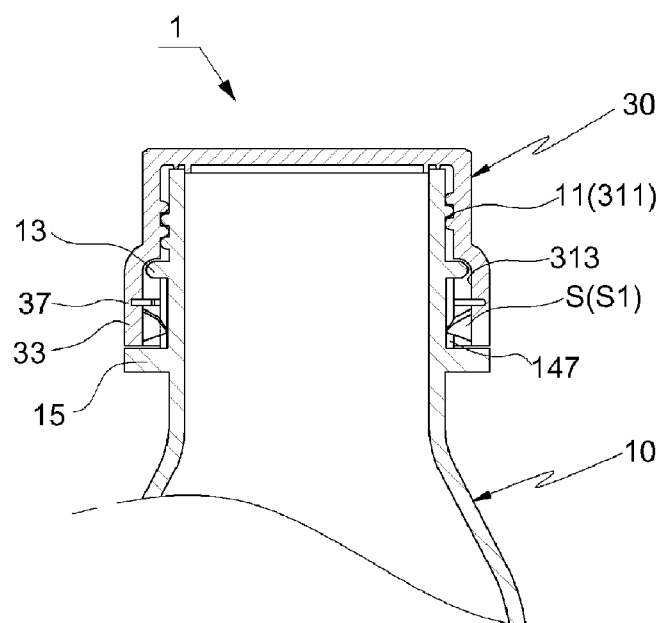
[Fig. 11]

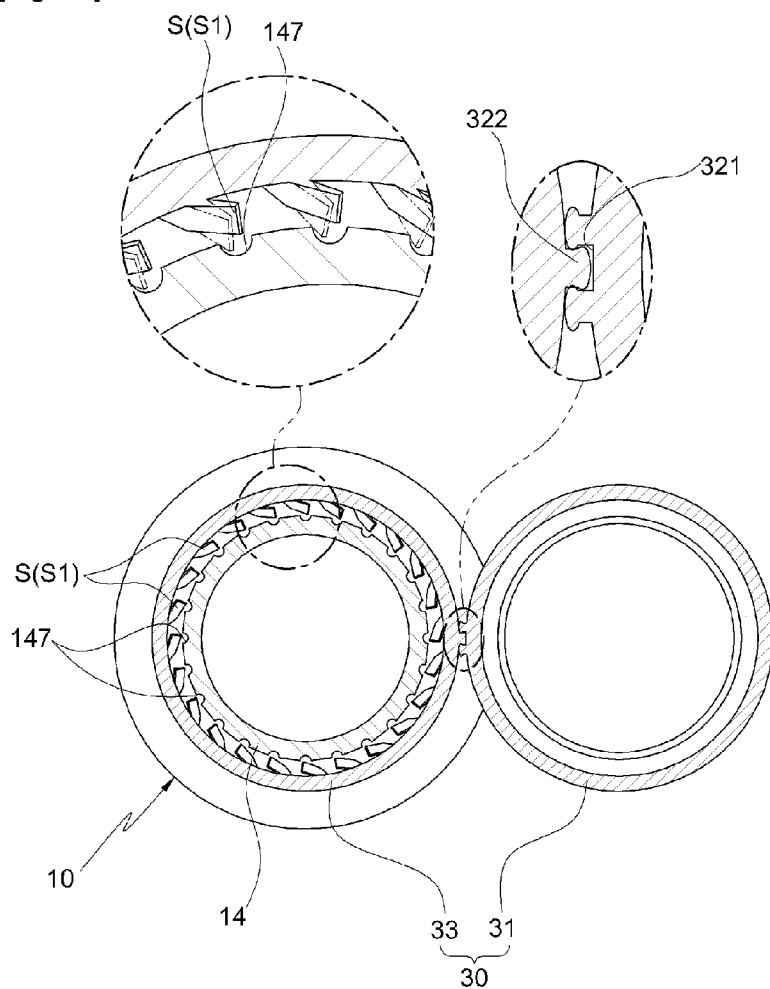


[Fig. 14]

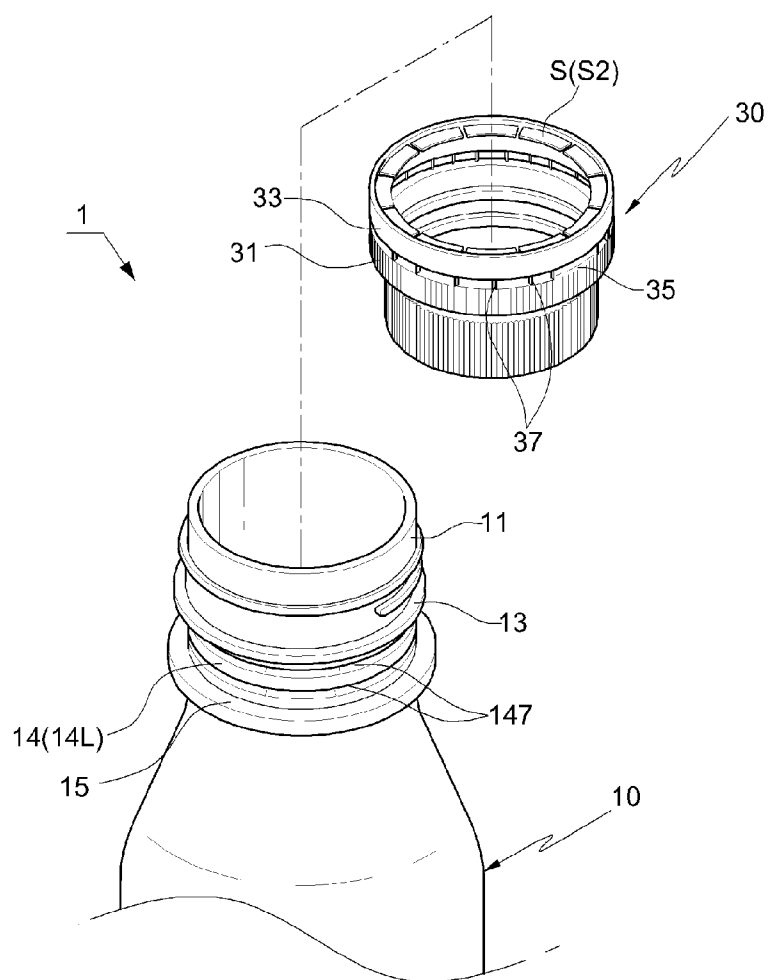


[Fig. 15]

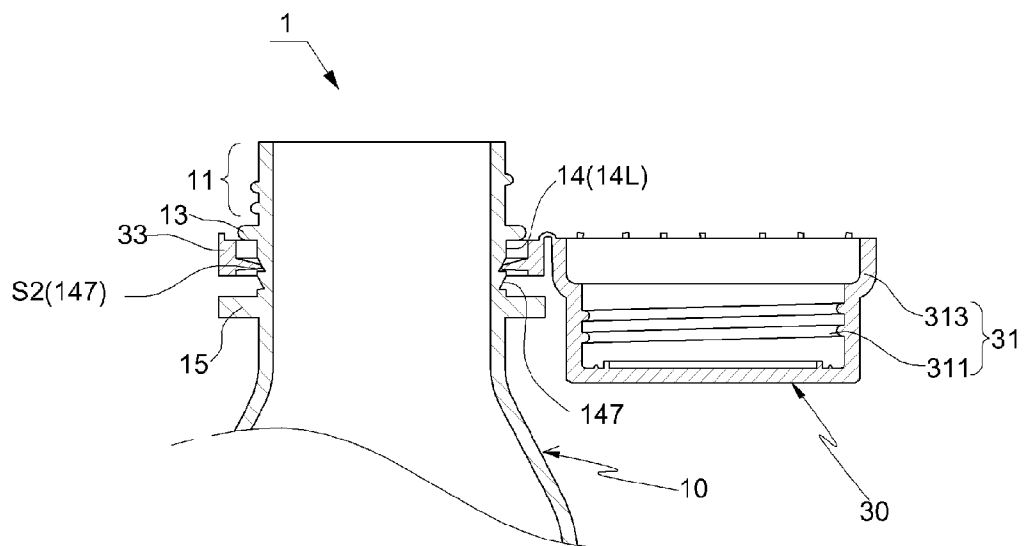




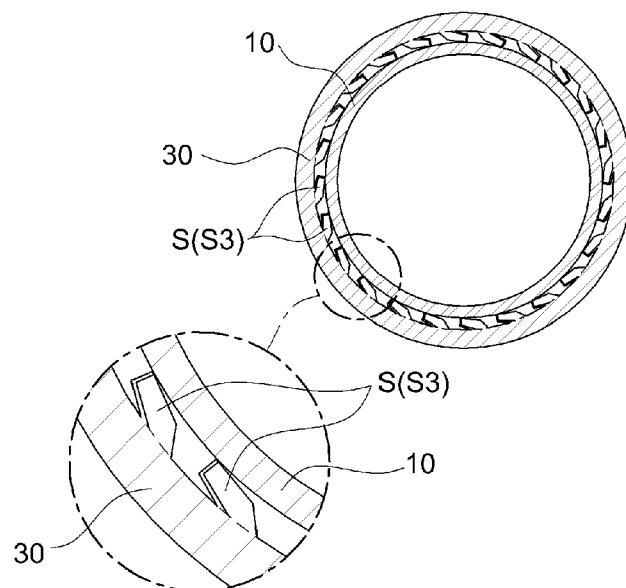
[Fig. 18]



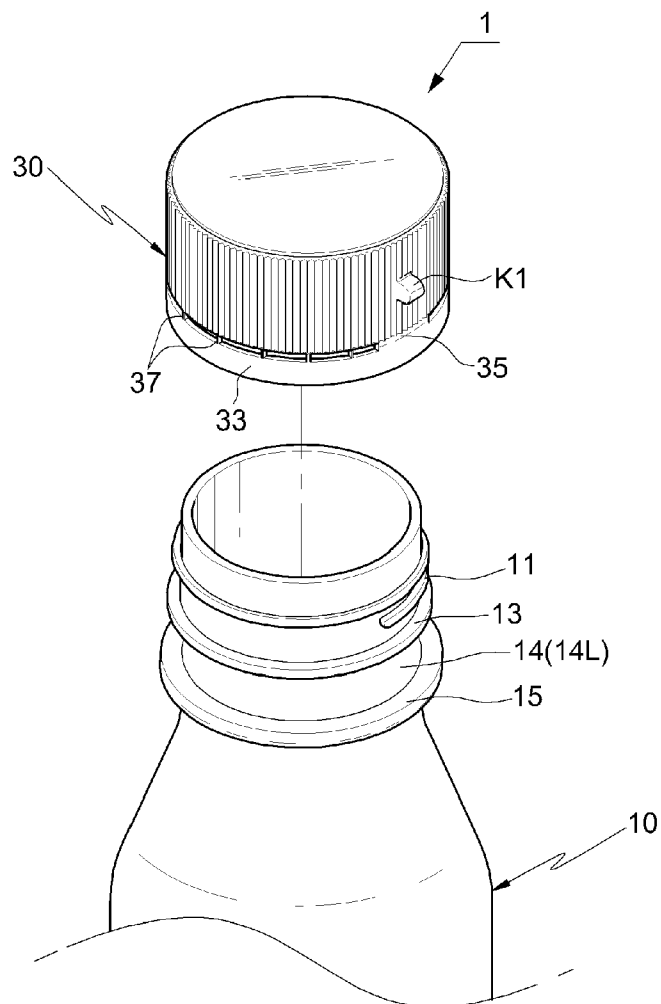
[Fig. 19]



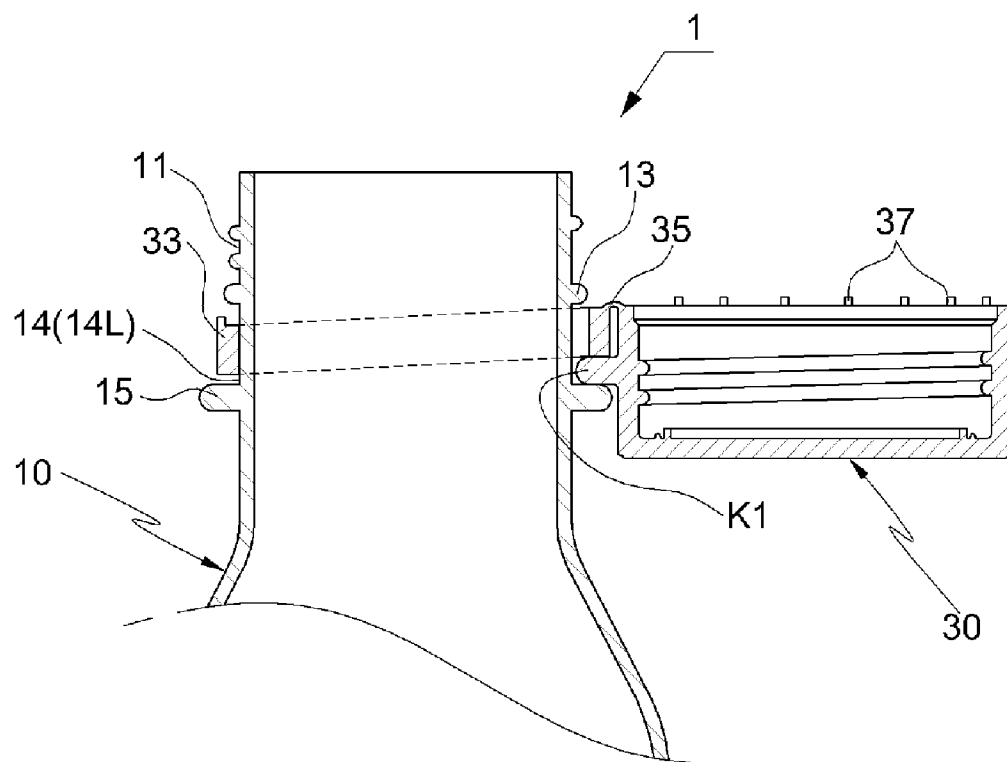
[Fig. 20]



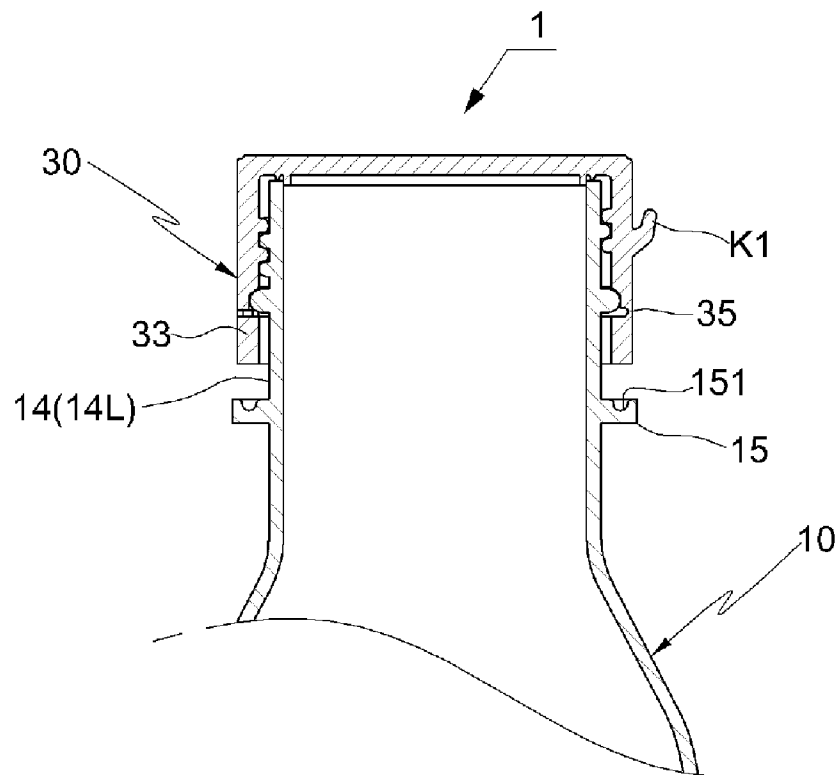
[Fig. 21]



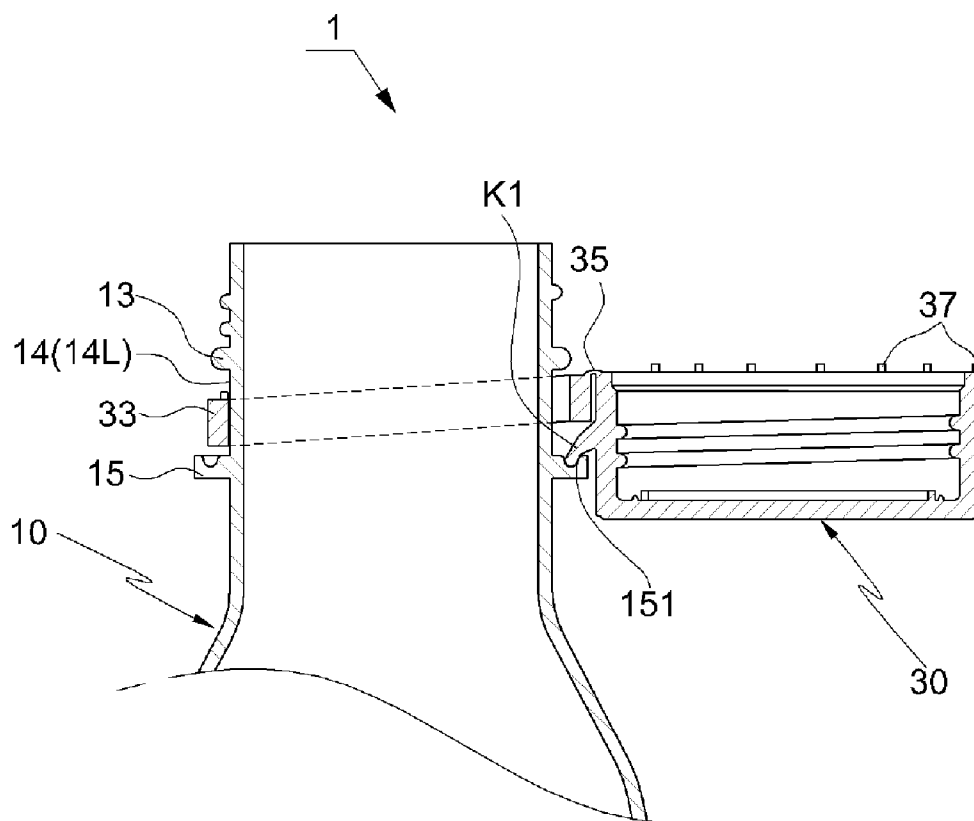
[Fig. 22]



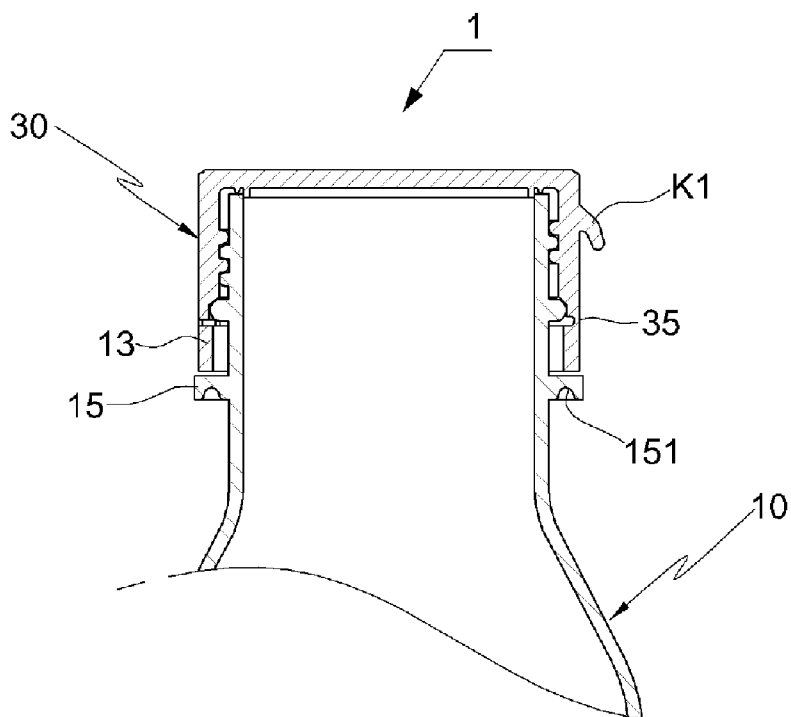
[Fig. 23]



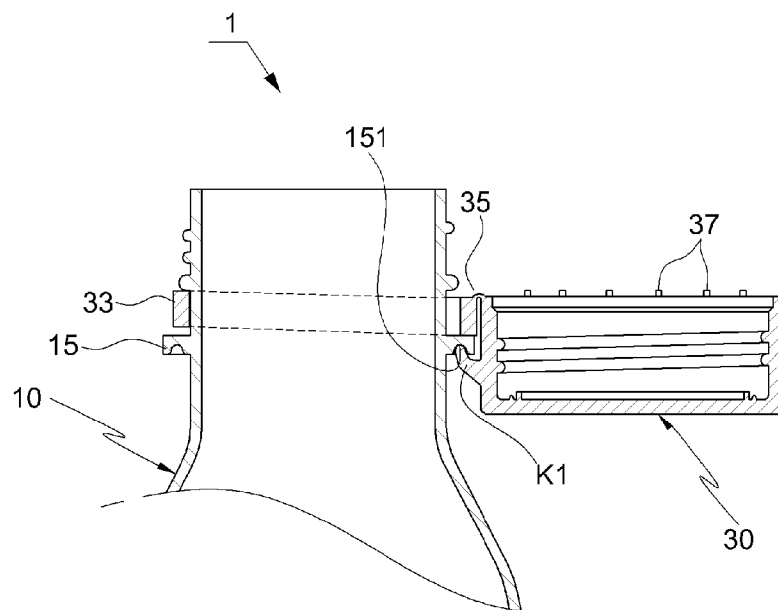
[Fig. 24]



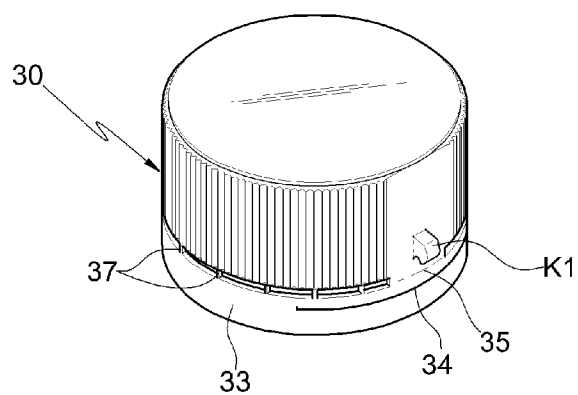
[Fig. 25]



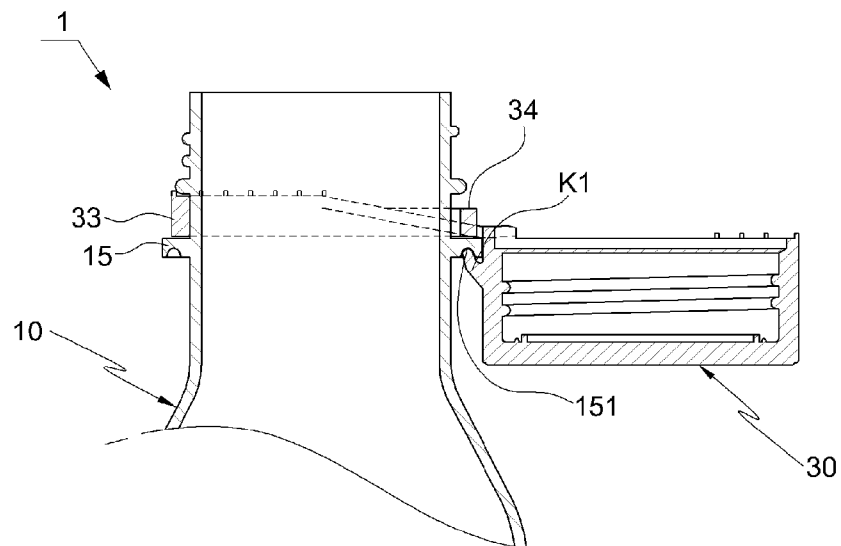
[Fig. 26]



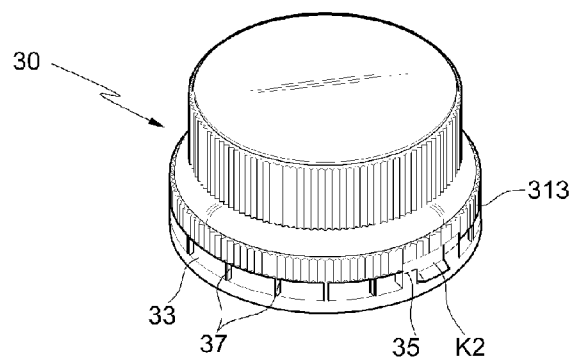
[Fig. 27]



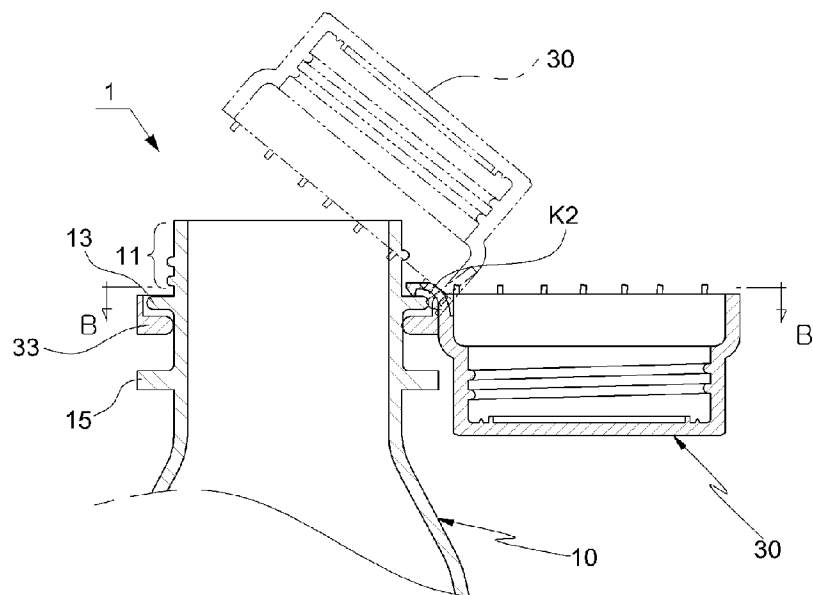
[Fig. 28]



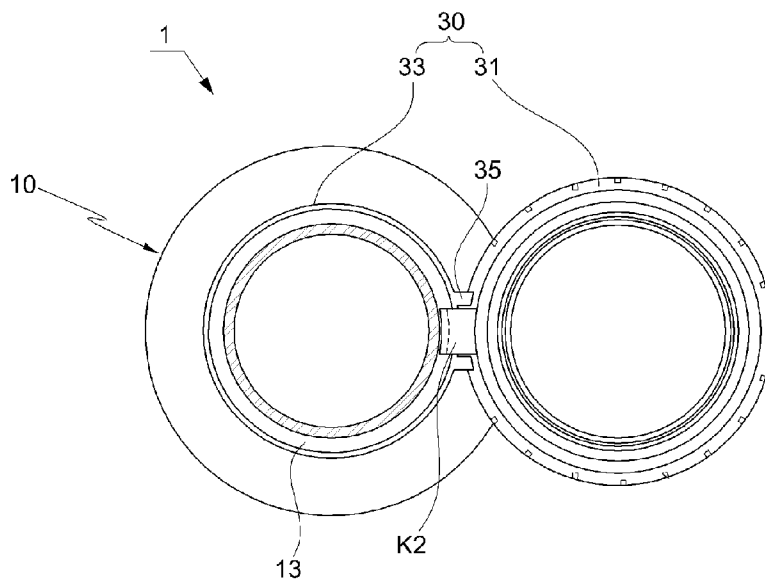
[Fig. 29]



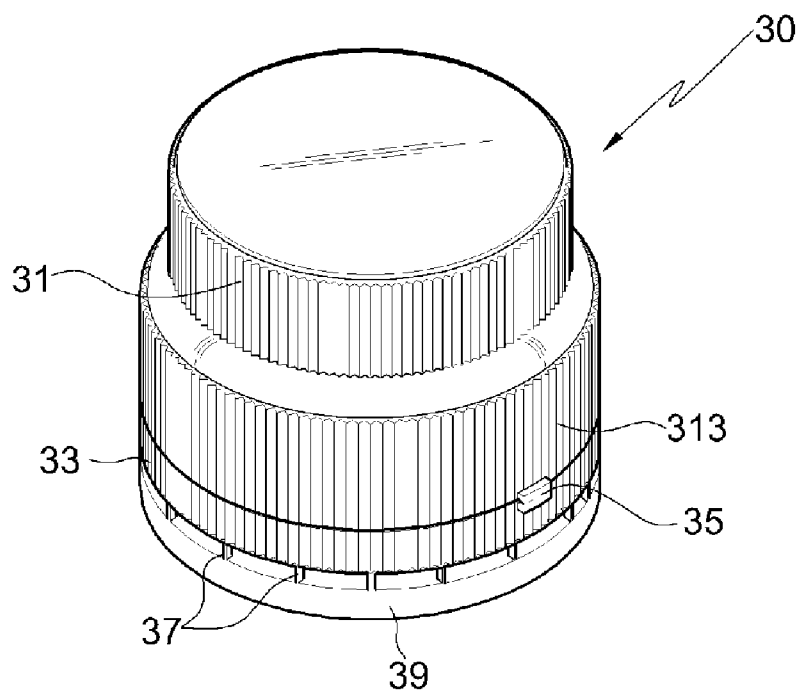
[Fig. 30]



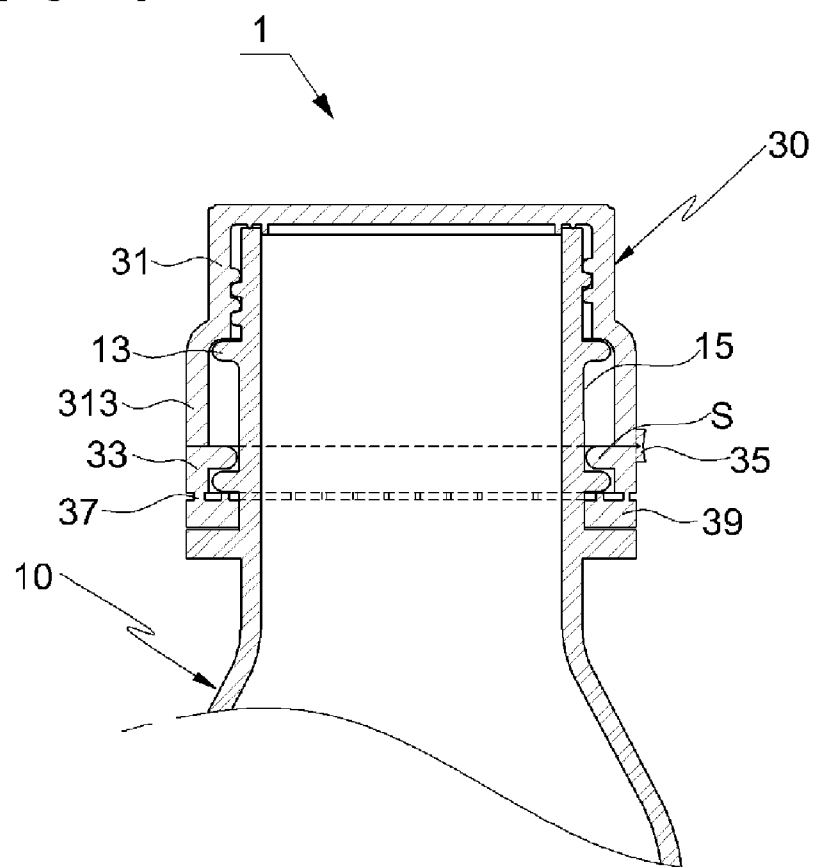
[Fig. 31]



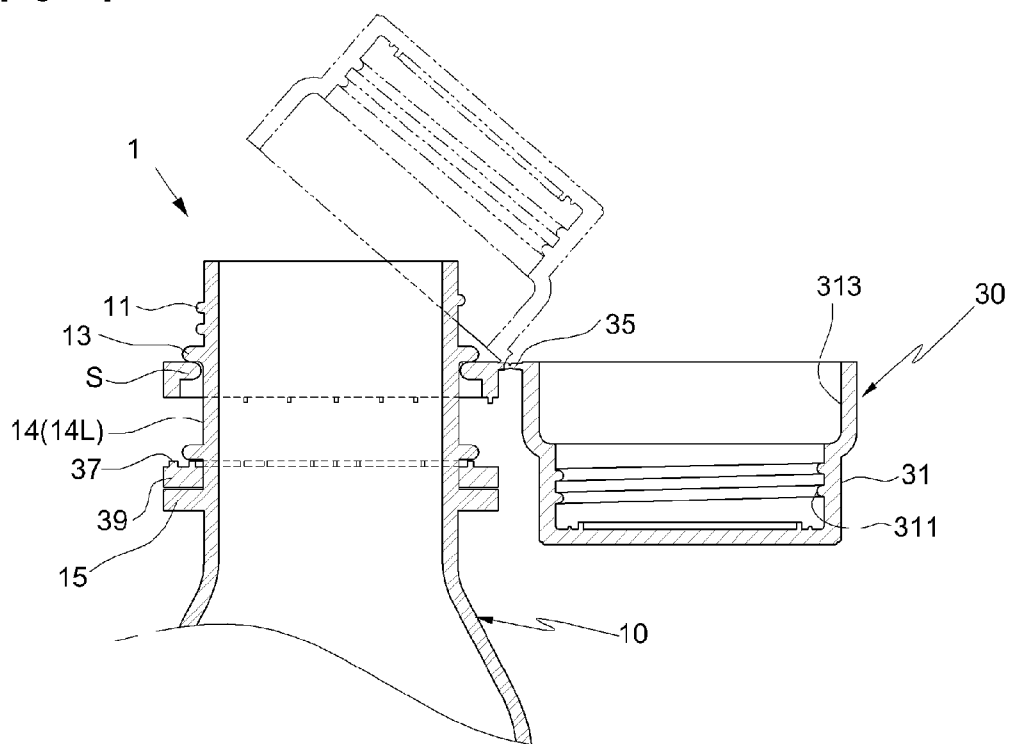
[Fig. 32]



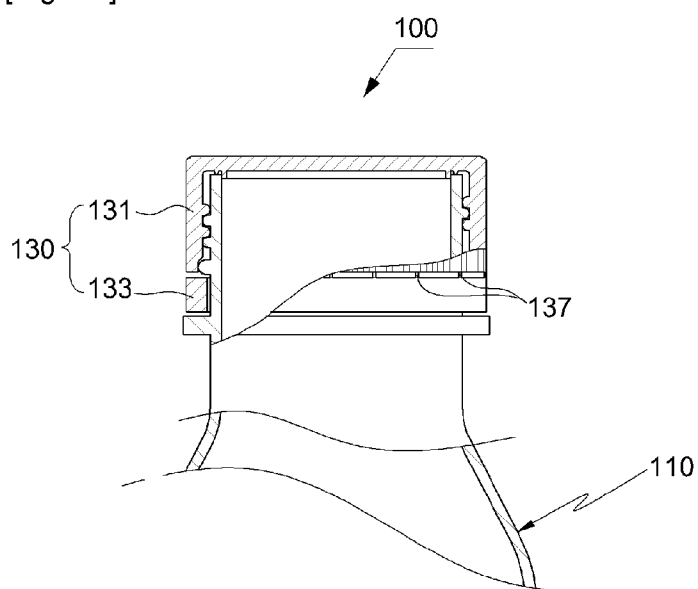
[Fig. 33]



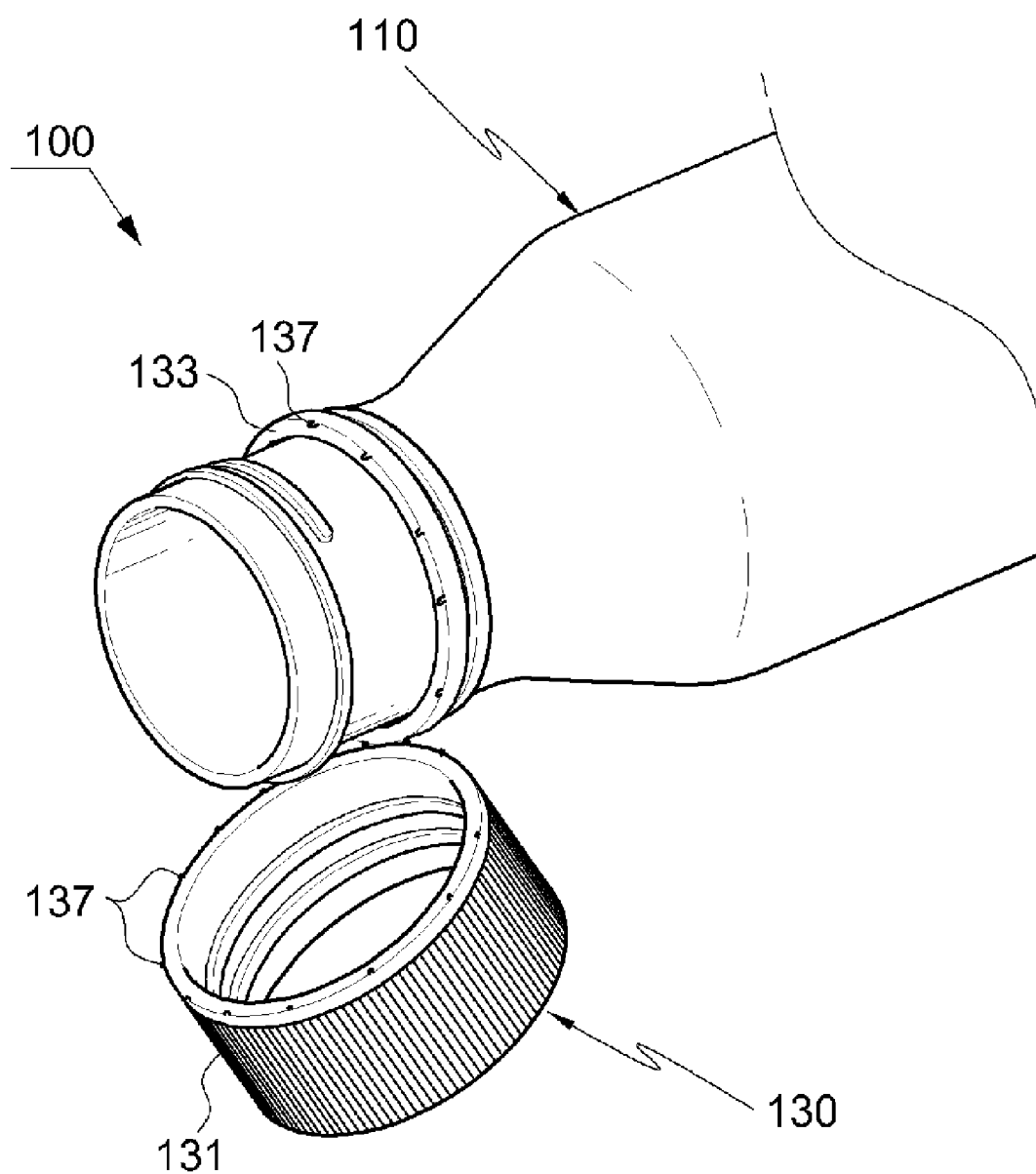
[Fig. 34]



[Fig. 35]



[Fig. 36]



CONTAINER WITH ANTI-LOSS AND ANTI-IDLE-ROTATION CAP

TECHNICAL FIELD

[0001] The present invention relates to a container with an anti-loss and anti-idle-rotation cap, which maintains the coupling state of a cap body with a container body even when the cap has been opened, thus preventing the loss of the cap, and which prevents the cap from rotating downwards by gravity when contents are discharged out of the container, thus preventing the cap from touching a user's face even if he or she does not hold the cap with his or her hand, and preventing the cap from being hit by the contents when some contents come out of the container.

BACKGROUND ART

[0002] Generally, a container, which is used to hold food, beverage and other liquid materials, such as potable water or milk, oil, paints, and chemical products, is provided with a container body which has a spout, and a cap which opens or closes the spout of the container body. The cap is detachably coupled to the spout to open or close it through a screw-type coupling method or a pressure-type coupling method using an elastic hooking end.

[0003] According to the prior art, as shown in FIGS. 35 and 36, a cap 130 is provided with an annular ring 133 under a cap body 131 in such a way that the annular ring is not removed from a container body 110, enabling a user to see whether a container 100 has been opened or not.

[0004] The cap body 131 and the ring 133 are connected to each other via a plurality of bridges 137 which are provided in a radial direction of the cap. When the cap has been opened, the bridges 137 connecting the cap body 131 with the ring 133 are severed, thus leaving evidence that the container has been opened.

[0005] In such a container, after the cap body 131 is detached from the container body 110 to open the container when a user desires to take some of the contents out of the container, the cap body is coupled to the container body again. The detaching and coupling operations are repeatedly conducted. Meanwhile, when the cap body is completely removed from the ring, the cap may be contaminated or lost. Thus, in order to solve this problem, the ring 133 and the container body may be connected to each other in such a way that part of the ring is not removed from the container body.

[0006] However, since the ring 133 is coupled to the container body 110 in such a way as to be idly rotated, the opened cap body 131 is idly rotated together with the ring and is moved to a lower position by gravity when the contents are discharged out of the container.

[0007] Thus, when a user puts his or her mouth to the spout of the container body in order to drink the contents, the cap contacts his or her mouth or jaw, thus giving the user an unpleasant feeling and being cumbersome. Further, when the contents are transferred to another container, the contents flow into the cap, so that the cap becomes dirty and interferes with the discharge of the contents.

[0008] Further, as the cap is repeatedly opened or closed, even the one remaining bridge is severed too soon, so that the cap may be undesirably lost.

DISCLOSURE OF INVENTION

Technical Problem

[0009] Accordingly, the present invention has been made keeping in mind the above problems occurring in the prior art,

and an object of the present invention is to provide a container with an anti-loss and anti-idle-rotation cap, which maintains the coupling of a cap body with a container body even when the cap has been opened, thus preventing the cap from being lost, and which prevents gravity from rotating the cap downwards when contents are discharged from the container, thus preventing the cap from contacting a user's face even though the user does not hold the cap with his or her hand when he or she puts his or her mouth on the container, e.g. a beverage bottle, and drinks directly from the container, and preventing the cap from being hit by the contents when the contents come out of the container, therefore preventing the contamination of the cap and thereby affording convenience.

Technical Solution

[0010] In order to accomplish the above object, the present invention provides a container with an anti-loss and anti-idle-rotation cap, which is constructed so that a cap is fastened to a container body in a threaded manner, the container body having a ring stopping step provided under a threaded part of a spout so as to prevent removal of the cap, a support step provided under the ring stopping step to be spaced apart therefrom, and a support ring seat provided between the ring stopping step and the support step, wherein the cap includes a support ring, a cap body and a hinge part which are integrally connected to each other, the support ring being placed on the support ring seat to prevent the cap from being removed from the container body and from idly rotating, the cap body opening or closing the container body and having on an inner circumference thereof a threaded part, the hinge part coupling the support ring with the cap body.

Advantageous Effects

[0011] A container with an anti-loss and anti-idle-rotation cap according to the present invention is advantageous in that it maintains the coupling of a cap body with a container body even when the cap has been opened, thus preventing the cap from being lost, and prevents gravity from rotating the cap downwards when contents are discharged from the container, thus preventing the cap from contacting a user's face even though the user does not hold the cap with his or her hand when he or she puts his or her mouth on the container, e.g. a beverage bottle, and drinks directly from the container, and preventing the cap from being hit by the contents when the contents come out of the container, therefore preventing the contamination of the cap and thereby affording convenience.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 is an exploded perspective view illustrating the construction of a container according to an embodiment of the present invention;

[0013] FIG. 2 is a view illustrating the varying state of the cap of FIG. 1;

[0014] FIG. 3 is a view illustrating the state in which the cap of FIG. 1 has been opened;

[0015] FIG. 4 is a sectional view illustrating the coupled state of the container of FIG. 1, in which some parts of the container are omitted;

[0016] FIG. 5 is a view illustrating the container which is changed from the state of FIG. 4 to an open state;

[0017] FIG. 6 is a view illustrating the state in which the container of FIG. 4 has been completely opened;

[0018] FIGS. 7 to 9 are views illustrating the construction of caps according to embodiments of the present invention;

[0019] FIG. 10 is an exploded sectional view illustrating a container according to an embodiment of the present invention;

[0020] FIG. 11 is a sectional view illustrating the coupled state of the container of FIG. 10;

[0021] FIG. 12 is a view illustrating the state in which the cap of FIG. 11 has been opened;

[0022] FIG. 13 is an exploded perspective view illustrating the construction of a container according to an embodiment of the present invention;

[0023] FIG. 14 is a vertical sectional view of FIG. 13;

[0024] FIG. 15 is a sectional view illustrating the coupled state of the container of FIG. 14;

[0025] FIG. 16 is a view illustrating the state in which the cap of FIG. 15 has been opened;

[0026] FIG. 17 is a sectional view taken along line A-A of FIG. 16;

[0027] FIG. 18 is a view illustrating the construction of a container according to an embodiment of the present invention;

[0028] FIG. 19 is a view illustrating the coupled state of the container of FIG. 18, in which a cap has been opened;

[0029] FIG. 20 is a view illustrating the construction of a container according to another embodiment corresponding to that of FIG. 19;

[0030] FIG. 21 is an exploded perspective view illustrating the construction of a container according to an embodiment of the present invention;

[0031] FIG. 22 is a sectional view illustrating the state in which the cap of FIG. 21 has been opened;

[0032] FIG. 23 is a view illustrating the construction of a container according to an embodiment of the present invention;

[0033] FIG. 24 is a view illustrating the state in which a cap of FIG. 23 has been opened;

[0034] FIG. 25 is a view illustrating the construction of a container according to an embodiment of the present invention;

[0035] FIG. 26 is a view illustrating the state in which the cap of FIG. 25 has been opened;

[0036] FIG. 27 is a perspective view illustrating a cap according to an embodiment of the present invention;

[0037] FIG. 28 is a sectional view illustrating the cap which has changed from the state of

[0038] FIG. 27 to an open state;

[0039] FIG. 29 is a perspective view illustrating a cap according to an embodiment of the present invention;

[0040] FIG. 30 is a sectional view illustrating the state in which the cap of FIG. 29 has been opened;

[0041] FIG. 31 is a sectional view taken along line B-B of FIG. 30;

[0042] FIG. 32 is a view illustrating the construction of a cap according to an embodiment of the present invention;

[0043] FIG. 33 is a sectional view illustrating the state in which the cap of FIG. 32 is coupled to the container;

[0044] FIG. 34 is a view illustrating the state in which the cap of FIG. 33 has been opened;

[0045] FIG. 35 is a view illustrating the construction of a conventional container; and

[0046] FIG. 36 is a perspective view illustrating the state in which the container of FIG. 35 has been opened;

DESCRIPTION OF REFERENCE CHARACTERS OF IMPORTANT PARTS

[0047] 1: container with anti-loss and anti-idle-rotation cap according to the present invention

[0048] 10: container body 13: stopping step

[0049] 14: support ring seat 14L: long neck part

[0050] 15: support step 151: locking hole

[0051] 30: cap 31: cap body 33: support ring

[0052] 35: hinge part 37: bridge 39: indication ring

[0053] S; locking protrusion K1, K2: wedge

Mode for the Invention

[0054] Hereinafter, a container with an anti-loss and anti-idle-rotation cap according to the preferred embodiment of the present invention will be described in detail with reference to the accompanying drawings.

[0055] FIG. 1 is an exploded perspective view illustrating the construction of a container according to an embodiment of the present invention, FIG. 2 is a view illustrating the varying state of a cap of FIG. 1, FIG. 3 is a view illustrating the state in which the cap of FIG. 1 has been opened, FIG. 4 is a sectional view illustrating the coupled state of the container of FIG. 1, in which some parts of the container are omitted, FIG. 5 is a view illustrating the container which has changed from the state of FIG. 4 to an open state, and FIG. 6 is a view illustrating the state in which the container of FIG. 4 has been completely opened.

[0056] As shown in FIGS. 1 to 6, a container 1 with an anti-loss and anti-idle-rotation cap according to an embodiment of the present invention is constructed so that a cap 30 is fastened to a container body 10 in a threaded manner. The container body includes a ring stopping step 13 provided under a threaded part 11 of a spout so as to prevent the removal of the cap, a support step 15 provided under the ring stopping step 13 to be spaced apart therefrom, and a support ring seat 14 provided between the ring stopping step and the support step. Here, the cap 30 includes a support ring 33, a cap body 31 and a hinge part 35 which are integrally connected to each other. The support ring is placed on the support ring seat 14 to prevent the cap from being removed from the container body 10 and from being idly rotated. The cap body opens or closes the container body 10 and has on an inner circumference thereof a threaded part 311. The hinge part couples the support ring 33 with the cap body 31.

[0057] The support ring 33 includes a cut line 34 at a position adjacent to the hinge part 35 to extend the coupling length of the supporting ring with the cap body 31.

[0058] The cut line 34 is formed within the range of from 45 to 65% of the circumference of the support ring 33 around the hinge part 35. The cut line is formed such that it is not too short or long.

[0059] As an embodiment of the present invention, as shown in FIGS. 7 and 8, the hinge part 35 comprises a foldable hinge which has a foldable line 351 to extend a length between the cap body 31 and the supporting ring 33 when the cap 30 has been opened.

[0060] The foldable hinge is folded by the foldable line 351 when the cap is closed, and is unfolded when the cap is opened, thus ensuring a length which allows the cap body 31 to be separated from the container body.

[0061] The hinge part 35 may comprise two or more hinges (see FIG. 9).

[0062] In the present invention constructed as described above, the cap body 31 is connected to the support ring 33 via the hinge part 35. The support ring 33 is fitted somewhat tightly over the container body 10 so as to prevent the removal and idle rotation of the cap. Thereby, the loss and idle rotation of the cap can be prevented without using a wedge.

[0063] Further, in order to separate the cap body 31 from the container body when the cap is opened, a spacing length from the support ring 33 is required. To this end, the cut line 34 or the foldable hinge is provided on the support ring 33.

[0064] The cap 30 of the present invention is manufactured through injection molding, in the state where the hinge part 35 is unfolded between the support ring 33 and the cap body 31 (see FIGS. 3 and 7).

[0065] According to an embodiment of the present invention, as shown in FIGS. 10 to 12, the support ring seat 14 of the container body 10 comprises a long neck part 14L such that the support ring is movable up and down. The cap body 31 includes a step receiving end 313 under the threaded part 311. The inner diameter of the step receiving end is larger than that of the threaded part 311 to allow the step receiving end to pass over the ring stopping step 13 of the container body.

[0066] Here, the long neck part 14L includes a smaller diameter part 141 and a larger diameter part 143. The smaller diameter part is provided on the lower portion of the long neck part, the outer diameter of the smaller diameter part being formed to be smaller than the inner diameter of the support ring to permit the free rotation of the support ring 33. The larger diameter part is provided above the smaller diameter part 141 to prevent the support ring 33 from rotating as long as external force is not applied.

[0067] Further, the outer diameter of the support ring seat 14 is set to prevent the support ring 33 from rotating as long as external force is not applied. In other words, the support ring 33 is fitted somewhat tightly over the support ring seat 14, thus preventing the idle rotation of the cap.

[0068] Since the support ring seat 14 comprises the long neck part 14L as such, the support ring 33 can move vertically in a predetermined range while being coupled to the cap body 31 when the cap is opened, thus maintaining the coupled state of the cap body 31 with the support ring 33. Further, as long as external force, namely, the rotating force for opening or closing the cap is not applied, the rotation of the support ring 33 relative to the support ring seat 14 is prevented, thus preventing the rotation of the cap by gravity. That is, the support ring 33 is movable up and down along the support ring seat 14 of the container body. Thus, when the cap is opened, the support ring is moved up along the cap body. The opening of the cap is performed while the coupling state is maintained by the hinge part 35.

[0069] Further, the support ring seat 14 provided on the spout of the container body 10 is constructed so that the smaller diameter part 141 is provided on the lower portion of the support ring seat to cause the support ring to be loosely fitted, and the larger diameter part 143 is provided on the upper portion of the support ring seat to cause the support ring to be tightly fitted. In this construction, as long as external force is not applied when the support ring 33 is moved up to the larger diameter part 143, the cap does not rotate, thus preventing the rotation of the cap by gravity when the cap is opened. In the case where the entire portion of the support ring seat 14 is formed to have the same diameter as the larger

diameter part 143, the support ring 33 is rotated and moved up while pressure is applied to rotate and open the cap because the container body 10 and the cap 30 are made of a resin material having elasticity. Meanwhile, when external force is not present, the rotation of the cap is prevented regardless of position.

[0070] According to an embodiment of the present invention, the cap 30 includes a plurality of bridges 37 which are connected integrally between the cap body 31 and the support ring 33 and are severed when the cap has been opened (see FIGS. 10 to 13). The bridges allow a user to see whether the container has been opened or not.

[0071] According to an embodiment of the present invention, as shown in FIGS. 13 to 20, the support ring 33 has on an inner circumference thereof locking protrusions S for preventing the idle rotation of the cap.

[0072] The locking protrusions S may comprise steps which are formed to allow the support ring 33 to be easily fitted over the container body and prevent the removal of the support ring in cooperation with the ring stopping step 13. The locking protrusions may comprise radial wings S1 (see FIGS. 13 to 17) which protrude inwards in a radial direction and are locked by locking grooves 147 formed in a corresponding portion of the container body.

[0073] The locking protrusions S and the locking grooves 147 may be vertically formed as shown in FIGS. 13 to 17, or may comprise horizontal locking protrusions S2 and locking grooves 147 as shown in FIGS. 18 and 19.

[0074] Further, as shown in FIG. 20, the locking protrusions S may comprise screw-type wings S3 which are inclined in one direction to interfere with the cap only when it is rotated in a cap opening direction. As such, the locking protrusions may have various shapes.

[0075] In the case of applying external force, the locking protrusions S allow the support ring 33 or an indication ring 39 to be rotatable with respect to the container body 10. In contrast, when there is no external force, the locking protrusions prevent the support ring or indication ring from rotating, thus preventing the idle rotation of the cap. Especially, the screw-type wings S3 are folded and closed when the cap is rotated in a closure direction, thus enabling the smooth rotation of the cap. Meanwhile, the screw-type wings are unfolded and opened when the cap is rotated in a direction distant from the container body, thus interfering with the rotation of the cap, therefore preventing the idle rotation of the cap.

[0076] According to an embodiment of the present invention, uneven coupling parts 321 and 322 are provided on the cap body 31 and the support ring 33 and are coupled to each other at a position adjacent to the hinge part 35 so that the cap body 31 is bent and secured to the support ring 33 when the cap has been opened (see FIGS. 13 and 16).

[0077] According to an embodiment of the present invention, as shown in FIGS. 21 to 28, a wedge K1 is provided on the cap 30 to be positioned above the hinge part 35. The wedge K1 passes over the support ring 33 to be supported by the support step 15 when the cap has been opened, thus straining the cap so as to prevent the support ring 33 from being idly rotated.

[0078] Here, a locking hole 151 having the shape of a concentric circle is formed in the upper or lower surface of the support step 15, and the wedge K1 protrudes in the form of a hook which is fitted into the locking hole 151.

[0079] The locking hole 151 may be formed in both upper and lower surfaces of the support step. The wedge K1 is inclined upwards (see FIG. 24) or downwards (see FIGS. 25 to 27) to correspond to the locking hole 151.

[0080] In this case, the support ring 33 is loosely coupled to the container body 10, so that the idle rotation of the cap is possible. As the wedge K1 is supported by the ring stopping step 13, the wedge is pulled to one side and tension for preventing the rotation of the cap is generated, thus supporting the cap 30 and preventing the idle rotation of the cap.

[0081] As such, when the locking hole 151 is formed in the support step 15 and the wedge K1 is formed in the shape of a hook, a projection of the wedge is fitted into the locking hole 151, so that the cap is more firmly supported.

[0082] According to an embodiment of the present invention, as shown in FIGS. 29 to 31, a wedge K2 is provided on the hinge part 35 and is supported by the ring stopping step 13 when the cap has been opened so as to prevent the cap from rotating.

[0083] Here, the hinge part 35 is formed to be longer than a general length. A portion of the hinge part 35 is cut and protruded, thus providing the wedge K2.

[0084] In the construction having the wedge K2, the outer diameter of the entire portion of the support ring seat 14 is set to have the same diameter as the smaller diameter part 141 which allows the support ring 33 to be loosely rotated.

[0085] The wedge K2 is formed to be pushed into the support ring 33. Thus, when the cap body 31 is bent backwards, the wedge is caught between the container body 10 and the support ring 33, so that the cap is held on the container body. The wedge K2 may comprise a plurality of wedges.

[0086] According to an embodiment of the present invention, as shown in FIGS. 32 to 34, the cap 30 further includes an indication ring 39 under the support ring 33. The indication ring is integrally coupled to the support ring via the bridges 37 which are severed when the cap is opened.

[0087] Further, the indication ring 39 may have on the inner circumference thereof a locking protrusion for preventing the idle rotation of the cap.

[0088] As such, the present invention provides a container with an anti-loss and anti-idle-rotation cap, which maintains the coupling state of a cap body with a container body even when the cap has been opened, thus preventing the loss of the cap, and which prevents gravity from rotating the cap downwards when contents are discharged out of the container, thus preventing the cap from touching a user's face when the user drinks directly from the container even if he or she does not hold the cap with his or her hand, and preventing the cap from being hit by the contents when some contents come out of the container, therefore preventing the contamination of the cap and thereby affording convenience.

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[0089] As described above, the present invention provides a container with an anti-loss and anti-idle-rotation cap, which maintains the coupling of a cap body with a container body even when the cap has been opened, thus preventing the cap from being lost, and which prevents gravity from rotating the cap downwards when contents are discharged from the container, thus preventing the cap from contacting a user's face even though the user does not hold the cap with his or her hand when he or she puts his or her mouth on the container, e.g. a beverage bottle, and drinks directly from the container, and preventing the cap from being hit by the contents when the

contents come out of the container, therefore preventing the contamination of the cap and thereby affording convenience.

1. A container with an anti-loss and anti-idle-rotation cap, which is constructed so that a cap (30) is fastened to a container body (10) in a threaded manner, the container body having a ring stopping step (13) provided under a threaded part (11) of a spout so as to prevent removal of the cap, a support step (15) provided under the ring stopping step (13) to be spaced apart therefrom, and a support ring seat (14) provided between the ring stopping step and the support step, wherein the cap (30) comprises a support ring (33), a cap body (31) and a hinge part (35) which are integrally connected to each other, the support ring being placed on the support ring seat (14) to prevent the cap from being removed from the container body (10) and from idly rotating, the cap body opening or closing the container body (10) and having on an inner circumference thereof a threaded part (311), the hinge part coupling the support ring (33) with the cap body (31).

2. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein the support ring (33) comprises a cut line (34) at a position adjacent to the hinge part (35) to extend a coupling length of the supporting ring with the cap body (31).

3. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein the hinge part (35) comprises a foldable hinge which has a foldable line (351) to extend a length between the cap body (31) and the supporting ring (33) when the cap (30) has been opened.

4. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein the support ring seat (14) of the container body (10) comprises a long neck part (14L) such that the support ring is movable up and down, and the cap body (31) comprises a step receiving end (313) under the threaded part (311), an inner diameter of the step receiving end being larger than that of the threaded part (311) to allow the step receiving end to pass over the ring stopping step (13) of the container body.

5. The container with the anti-loss and anti-idle-rotation cap according to claim 4, wherein the long neck part (14L) comprises:

a smaller diameter part (141) provided on a lower portion of the long neck part,

an outer diameter of the smaller diameter part being formed to be smaller than an inner diameter of the support ring to permit free rotation of the support ring (33); and

a larger diameter part (143) provided above the smaller diameter part (141) to prevent the support ring (33) from rotating as long as external force is not applied.

6. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein an outer diameter of the support ring seat (14) is set so as to prevent the support ring (33) from rotating as long as external force is not applied.

7. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein the cap (30) comprises a plurality of bridges (37) which are integrally connected between the cap body (31) and the support ring (33) and which are severed when the cap is opened.

8. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein the support ring (33) has on an inner circumference thereof a locking protrusion (S) for preventing idle rotation.

9. The container with the anti-loss and anti-idle-rotation cap according to claim 8, wherein the locking protrusion (S)

comprises a step which is formed to allow the support ring (33) to be easily fitted over the container body and prevent removal of the support ring in cooperation with the ring stopping step (13), or comprises a radial wing (S1) which protrudes inwards in a radial direction and is locked by a locking groove (147) formed in a corresponding portion of the container body.

10. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein uneven coupling parts (321 and 322) are provided on the cap body (31) and the support ring (33) and are coupled to each other at a position adjacent to the hinge part (35) so that the cap body (31) is bent and secured to the support ring (33) when the cap is opened.

11. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein

a wedge (K1) is provided on the cap (30) to be positioned above the hinge part (35), and

the wedge (K1) passes over the support ring (33) to be supported by the support step (15) when the cap is opened, thus straining the cap so as to prevent the support ring (33) from being idly rotated.

12. The container with the anti-loss and anti-idle-rotation cap according to claim 11, wherein

a locking hole (151) having a shape of a concentric circle is formed in an upper or lower surface of the support step (15), and

the wedge (K1) protrudes in a form of a hook which is fitted into the locking hole (151).

13. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein a wedge (K2) is provided on the hinge part (35) and is supported by the ring stopping step (13) when the cap is opened so as to prevent the cap from rotating.

14. The container with the anti-loss and anti-idle-rotation cap according to claim 1, wherein

the cap (30) further comprises an indication ring (39) under the support ring (33),

the indication ring integrally coupled to the support ring via the bridges (37) which are severed when the cap is opened.

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