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(71) Applicant (for all designated States except US): **YON-
WOO CO., LTD.** [KR/KR]; 473-5 Gajwa-dong, Seo-gu,
Incheon 404-250 (KR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **KI, Joong Hyun**
[KR/KR]; Hanshin Hyuplus 208-1702, Gajwa-dong,
Seo-gu, Incheon 404-250 (KR).

(74) Agent: **LEE, Dae Sun**; Chongkundang Bldg. 5F, 441
Shipjeong-2dong, Bupyeong-gu, Incheon 403-132 (KR).

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(54) Title: TUBULAR RECEPTACLE HAVING RETRACTABLE OUTLET

(57) Abstract: Provided is a tubular receptacle or vessel whose outlet through which contents are discharged is protruded so that the contents do not remain around the outlet and whose cap is rotated to be opened and closed at a state where the cap is combined with the outlet, to thereby solve inconveniences in use. The tubular receptacle includes: a receptacle main body in which contents are charged and which has an opening portion through which the contents are charged and discharged; a fixed cap that is formed integrally with or separately from the opening portion of the receptacle main body, so as to be combined with the opening portion, and at the central part of which an discharge portion having an outlet is protruded and formed lengthily to the outside; and an over cap which is combined with the outside of the fixed cap so as to ascend and descend, in which a throughhole through which the discharge portion passes and a flip top which opens and closes the throughhole are formed, and the discharge portion is projected outwards or is accommodated inwards from the receptacle main body according to position of the top and bottom of the flip top.



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Description

TUBULAR RECEPTACLE HAVING RETRACTABLE OUTLET

Technical Field

- [1] The present invention relates to a tubular receptacle having retractable outlet, and more particularly, to a tubular receptacle or vessel in which an discharge portion of a receptacle main body is protruded to the outside of a cap at use, to thus discharge contents cleanly, and the discharge portion of the receptacle main body is accommodated into the inside of the cap after use, to thus protect the discharge portion of the receptacle main body conveniently.

[2]

Background Art

- [3] Usually, tubular receptacles or vessels are used as containers for packaging very various products such as cosmetics, medicines, cleaning materials such as detergents, etc. Although these tubular receptacles or vessels are made in various forms, they may be divided greatly into a tubular receptacle having a separable cap and a tubular receptacle having a hinge cap according to structure of the cap, respectively.
- [4] That is, in the case of the tubular receptacle having a separable cap, an discharge portion of a main body of the receptacle is lengthily protruded to the outside, and a screw-connectable cap or a fittable cap is combined with the discharge portion of the main body. Accordingly, if the screw-connectable cap is unscrewed, or the fittable cap is pulled out from the discharge portion of the main body, contents can be discharged through the discharge portion of the main body. Since contents are discharged via an outlet formed in the discharge portion of the main body which is protruded from the receptacle or vessel, there is an advantage of reducing a defect that the contents may stick to and remain around the outlet.
- [5] However, because the cap is perfectly detached from the receptacle main body, there is an inconvenience that a user should catch the receptacle main body and the cap with his or her both hands, when he or she opens and closes the cap. Further, such an inconvenience is increased since the screw-connectable cap should be turned. In addition, the separated cap should be inconveniently caught by his or her hand, or is put down on the other places, and the separated cap may be left uncapped, or may be lost, after use.
- [6] Meanwhile, in the case of the tubular receptacle having a hinge cap, part of the cap combined with the receptacle main frame is rotated to be opened or closed in a one-touch manner. Here, an outlet is formed at the central part of the cap, and a rotary stopper is provided at one side of the cap. Thus, the stopper is pushed or pulled so that

the outlet can be opened or closed. Since the cap is not separated from the receptacle main body, in this type of the receptacle, there are not problems such as inconveniences and losses in use. However, there have been problems that the contents stick to and remain around the outlet of the cap, when contents are discharged, and the periphery of the outlet becomes very grubby when the contents which are stuck to and remaining around the outlet are accumulated.

[7]

Disclosure of Invention

Technical Problem

[8] To solve the above problems, it is an object of the present invention to provide a tubular receptacle or vessel whose outlet through which contents are discharged is protruded so that the contents do not remain around the outlet and whose cap is rotated to be opened and closed at a state where the cap is combined with the outlet, to thereby solve inconveniences in use.

[9]

Technical Solution

[10] To accomplish the above object of the present invention, according to an aspect of the present invention, there is provided a tubular receptacle having a retractable outlet, the tubular receptacle comprising:

[11] a receptacle main body in which contents are charged and which has an opening portion through which the contents are charged and discharged;

[12] a fixed cap that is formed integrally with or separately from the opening portion of the receptacle main body, so as to be combined with the opening portion, and at the central part of which an discharge portion having an outlet is protruded and formed lengthily to the outside; and

[13] an over cap which is combined with the outside of the fixed cap so as to ascend and descend, in which a throughhole through which the discharge portion passes and a flip top which opens and closes the throughhole are formed, and the discharge portion is projected outwards or is accommodated inwards from the receptacle main body according to position of the top and bottom of the flip top.

[14] Preferably but not necessarily, in the case of the tubular receptacle according to the present invention, a guide groove is formed vertically at one side of the inner circumferential surface of the over cap and the outer circumferential surface of the fixed cap, a guide protrusion which moves along the guide groove is formed at the other side thereof, and a fixing groove is formed horizontally at at least one side of both ends of the guide groove.

[15] Preferably but not necessarily, at least one part of the guide groove is slantly formed

so that the over cap is lifted while rotating.

[16]

Advantageous Effects

[17] According to the present invention, a discharge portion is protruded to the outside of the tubular receptacle cap. Therefore, after contents have been discharged from the tubular receptacle, the contents do not remain around the outlet, to thus keep the outlet to be clean during use. And the opening and closing operation of the receptacle is implemented by simply ascending and descending the over cap, the using of the receptacle is very easy and convenient. And any inconveniences which may be caused by loss of the cap can be prevented. Therefore, the tubular receptacle according to the present invention provides an effect of enhancing conveniences at use of users.

[18] In addition, a fixing groove is formed at at least one side of a guide groove which is vertically formed, to thereby make the over cap conveniently positioned and fixed, and the guide groove is slantly formed to have a rotary type operating structure. Therefore, the tubular receptacle according to the present invention provides an effect of further enhancing conveniences at use of users.

[19]

Brief Description of the Drawings

[20] The above and/or other objects and/or advantages of the present invention will become more apparent by describing the preferred embodiments thereof in detail with reference to the accompanying drawings in which:

[21] FIG. 1 is a perspective view of the embodiment according to the present invention;

[22] FIGS. 2 and 3 are cross-sectional views showing an opened state and a closed state of the embodiment according to the present invention respectively; and

[23] FIG. 4 is a side view illustrating another example of a fixed cap which is an essential element of the present invention.

[24]

Best Mode for Carrying Out the Invention

[25] Hereinbelow, a tubular receptacle having a retractable outlet according to respective preferred embodiments of the present invention will be described with reference to the accompanying drawings. Like reference numerals denote like elements through the following embodiments.

[26] FIG. 1 shows the perspective view of the embodiment according to the invention, and FIG. 2 shows an opened state of an example of a tubular receptacle having a retractable outlet according to the present invention, and FIG. 3 shows a closed state thereof.

[27] As illustrated in FIGS. 1 to 3, a tubular receptacle having a retractable outlet

includes: a receptacle main body 100 which is formed in a conventional tubular receptacle or vessel in which contents are charged and which has an opening portion 101 through which the contents are charged and discharged; a fixed cap 110 that is combined with the opening portion 101 of the receptacle main body 100, so as to be combined with the opening portion 101, and at the central part of which an discharge portion 111 having an outlet 113 is protruded and formed lengthily to the outside; and an over cap 120 which is combined with and surrounds the outside of the fixed cap 110 so as to ascend and descend, in which the discharge portion 111 is projected outwards or is concealed inwards .

- [28] The fixed cap 110 opens and closes the opening portion 101 of the receptacle main body 100. Accordingly, during production, contents are injected into the receptacle main body 100 through the opening portion 101. And, contents may be refilled through this the fixed cap 110. The fixed cap 110 may be combined with the receptacle main body 100 in various manners such as a screw connection and a fitting combination. As being the case, the fixed cap 110 may be combined with and fixed to the receptacle main body 100, and may be integrally molded with the receptacle main body 100, so that the fixed cap 110 cannot be easily opened. A sealing material 103 which seals the periphery of the opening portion 101 of the receptacle main body 100 is provided in the inside of the fixed cap 110. The outlet 113 is formed at the end of the outer side of the discharge portion 111 so that contents are discharged through the outlet 113 and used by users.
- [29] A throughhole 123 through which the discharge portion 111 passes is formed at the central part of the over cap 120. A flip top 125 which is swung to open and close the throughhole 123 is provided to cover the throughhole 123 at a state where the discharge portion 111 is positioned at the inside of the flip top 125. An engaging protrusion 127 is formed in the flip top 125 in order to maintain a closed state. As shown, the engaging protrusion 127 may be combined with the outlet 113 of the fixed cap 120, or may be combined with a separate combining hole (not shown).
- [30] Other than the fitting combination structure of the engaging protrusion 127, the locking structure of the flip top 125 may be accomplished in a variety of conventional manners. For example, the flip top 125 and the over cap 120 may be constructed to have a locking protrusion and a locking groove whose locking state is maintained or released according to an intensity of an external force at a portion where the flip top 125 and the over cap 120 contact each other.
- [31] The structure of the lifting operation of the over cap 120 may be constructed in various forms. As illustrated, most simply, a guide groove 115 is formed vertically on the outer circumferential surface of the fixed cap 110, and a guide projection 121 which moves along the guide groove 115 is formed on the inner circumferential

surface of the over cap 120. Accordingly, the over cap 120 does not secede from the fixed cap 110 so as to ascend and descend. A fixing groove 116 for positioning is formed on both sides or at least one side of the guide groove 115.

- [32] In the case of the tubular receptacle which has been constructed as described above according to the present invention, if the over cap 120 is pushed down toward the receptacle main body 100 at a state where the over cap 120 is positioned upwards as shown in FIG. 3, the protruded discharge portion 111 is projected and externally exposed through the throughhole 123 according to descending of the over cap as shown in FIG. 2. Here, the flip top 125 may be opened while swinging by being pushed by the exposed discharge portion 111. Otherwise, the flip top 125 may be firstly made to swung to expose the protruded discharge portion 113 and then the over cap 120 may be made to descend. If the discharge portion 113 is exposed externally, a user may pressurize the receptacle main body 100 so that contents can be discharged through the outlet 113 to enable the user to use the discharged contents. As described above, since contents are discharged through the protruded discharge portion 111, the contents do not remain around the outlet 113 after use, and thus the receptacle or vessel can be kept cleanly even if the receptacle or vessel has been used for a long time.
- [33] Here, when the protruded discharge portion 111 is exposed and the over cap 120 descends, as shown in FIG. 2, a fixing groove 116 is positioned at the upper side of the guide groove 115 and a guide protrusion 121 is positioned at the lower side thereof, when viewed from an "A" direction of FIG. 2. Meanwhile, when the protruded discharge portion 111 is not exposed and the over cap 120 does not descend, as shown in FIG. 3, the fixing groove 116 is positioned at the lower side of the guide groove 115 and the guide protrusion 121 is positioned at the upper side thereof, when viewed from an "A" direction of FIG. 3.
- [34] After use, the over cap 120 is pulled up to move upwards again and to make the flip top 125 to be swung to cover the discharge portion 111, so that the discharge portion 111 is not exposed externally. Accordingly, the receptacle or vessel is closed. As described above, the over cap 120 is not separated from the receptacle main body 100, but is opened and closed. As a result, any inconveniences which may occur due to loss of a separated cap do not occur. Since the discharge portion 111 is opened and closed by the simple operation of the over cap 120 which moves upwards or downwards, conveniences in use of users are enhanced.
- [35] Meanwhile, in the above-described embodiment of the present invention, a cap has been described with respect to the structure that the cap is divided into the fixed cap 110 and the over cap 120. However, alternatively, the cap may be constructed so that the fixed cap 110 is integrally formed with the receptacle main body 100, and the over cap 120 is directly combined with the fixed cap 110.

[36] In addition, the position and form of the guide groove 115 and the guide protrusion 121 for the ascending and descending operations of the over cap 120 are not limited to the above-described embodiment of the present invention. For example, to the contrary to the above-described embodiment, a guide protrusion 121 may be formed in the fixed cap 110 or the receptacle main body 100, and a guide groove 115 may be formed in the over cap 120. Further, alternatively, as shown in FIG. 4, a guide groove 115 may be formed in a slant form or a spiral form. Accordingly, if the over cap 120 is made to rotate, the guide groove 115 may ascend and descend. Even in this case, it is preferable that fixed grooves 116 are respectively formed at both ends of the guide groove 115 in a form the fixed grooves 116 are horizontally extended for positioning the over cap 120.

[37]

Mode for the Invention

[38] As described above, the present invention has been described with respect to particularly preferred embodiments. However, the present invention is not limited to the above embodiments, and it is possible for one who has an ordinary skill in the art to make various modifications and variations, without departing off the spirit of the present invention. Thus, the protective scope of the present invention is not defined within the detailed description thereof but is defined by the claims to be described later and the technical spirit of the present invention.

[39]

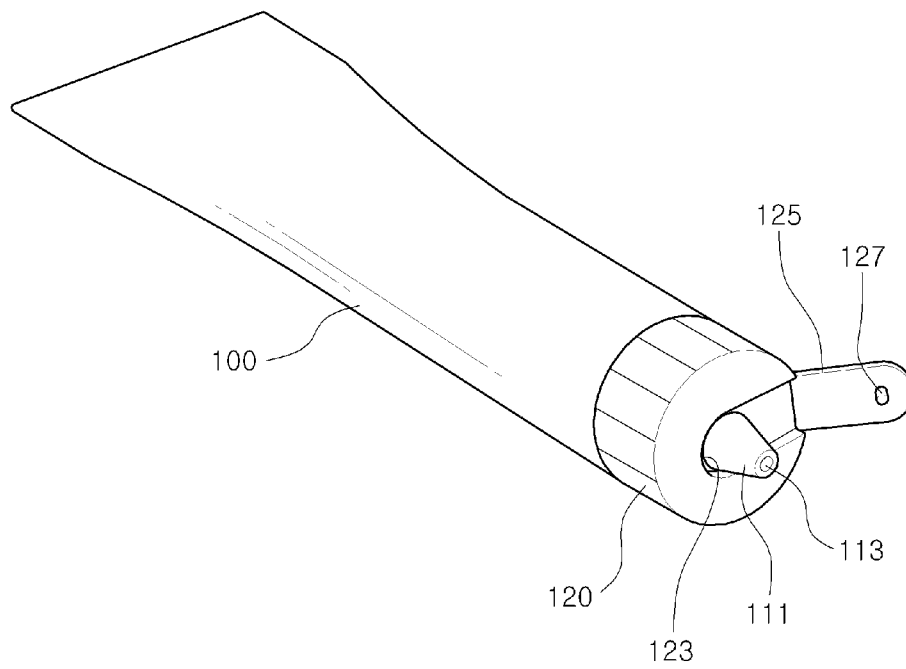
Industrial Applicability

[40] As described above, the present invention provides a tubular receptacle or vessel whose outlet is protruded so that the contents do not remain around the outlet and whose cap is rotated to be opened and closed at a state where the cap is combined with the outlet, to thereby solve inconveniences in use.

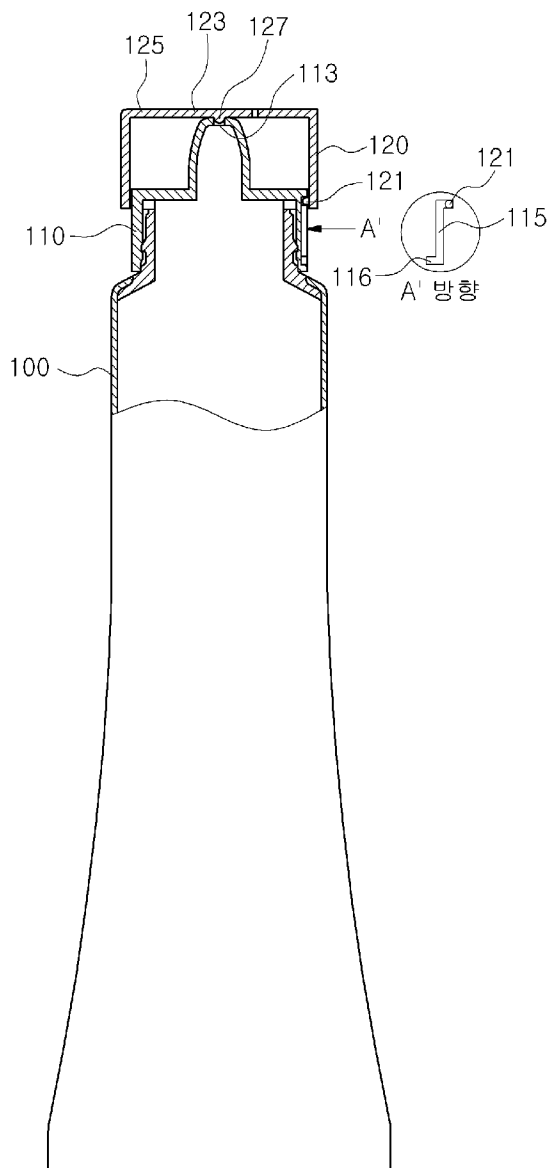
Claims

- [1] A tubular receptacle having a retractable outlet, the tubular receptacle comprising:
a receptacle main body in which contents are charged and which has an opening portion through which the contents are charged and discharged;
a fixed cap that is formed integrally with or separately from the opening portion of the receptacle main body, so as to be combined with the opening portion, and at the central part of which an discharge portion having an outlet is protruded and formed lengthily to the outside; and
an over cap which is combined with the outside of the fixed cap so as to ascend and descend, in which a throughhole through which the discharge portion passes and a flip top which opens and closes the throughhole are formed, and the discharge portion is projected outwards or is accommodated inwards from the receptacle main body according to position of the top and bottom of the flip top.
- [2] The tubular receptacle according to claim 1, wherein a guide groove is formed vertically at one side of the inner circumferential surface of the over cap and the outer circumferential surface of the fixed cap, a guide protrusion which moves along the guide groove is formed at the other side thereof, and a fixing groove is formed horizontally at at least one side of both ends of the guide groove.
- [3] The tubular receptacle according to claim 2, wherein at least one part of the guide groove is slantly formed so that the over cap is lifted while rotating.

[Fig. 1]



[Fig. 3]



[Fig. 4]

