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(54) **TUBULAR COSMETICS CONTAINER**

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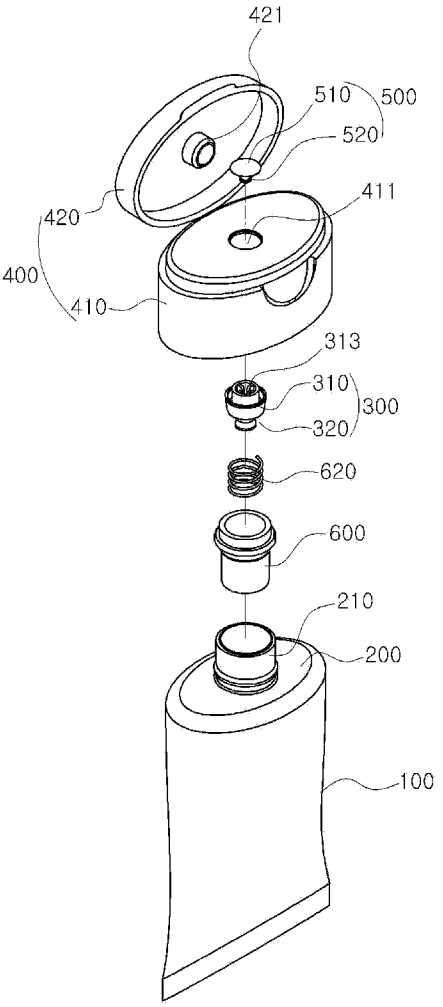
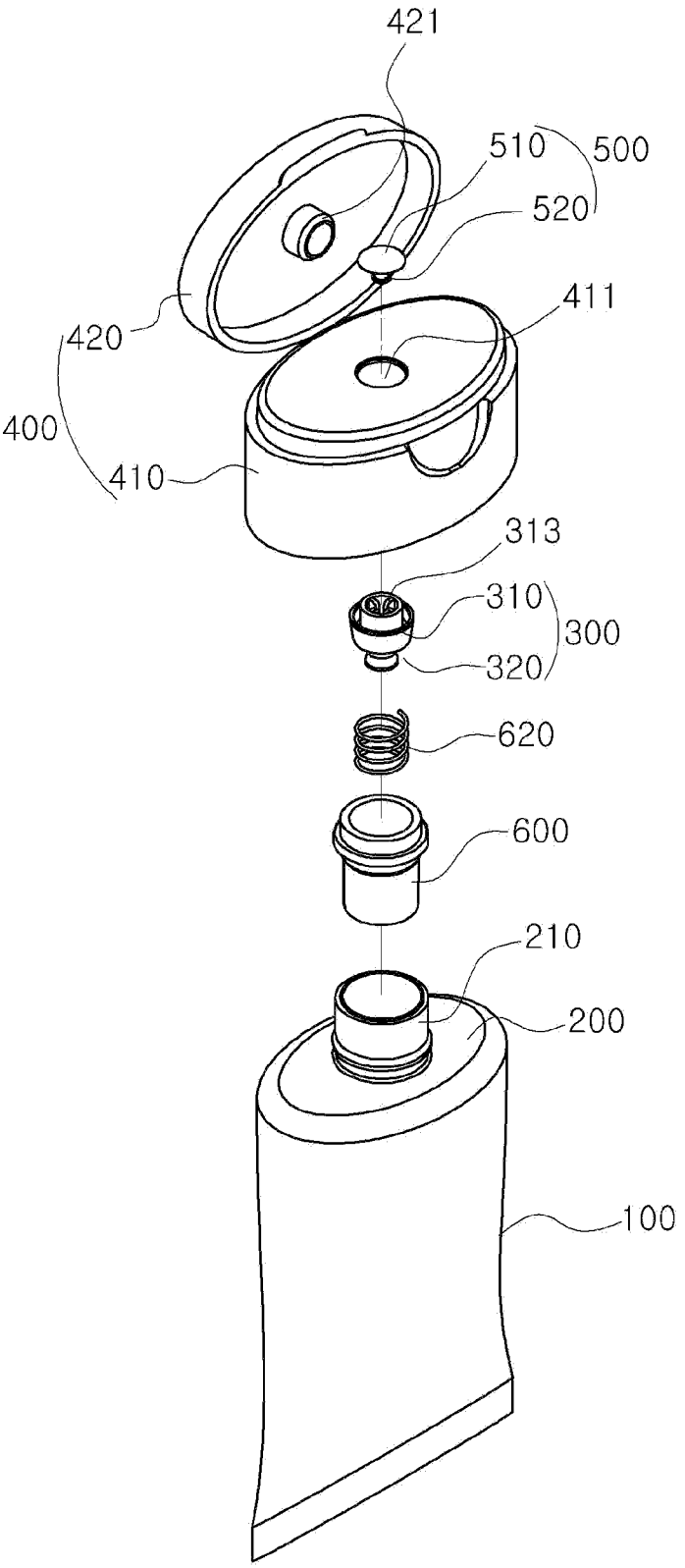
(57) **ABSTRACT**

This present invention relates to a tubular cosmetic container. The tubular container according to the present invention is characterized in that an upper end of a cap body is formed into a dish-shaped depression in which the depression becomes deeper toward the center, and a valve member is provided at a discharge hole formed at the center of the depression, and thus it is possible to prevent the re-suction of the discharged contents and to simply discharge and use the contents through the depression.

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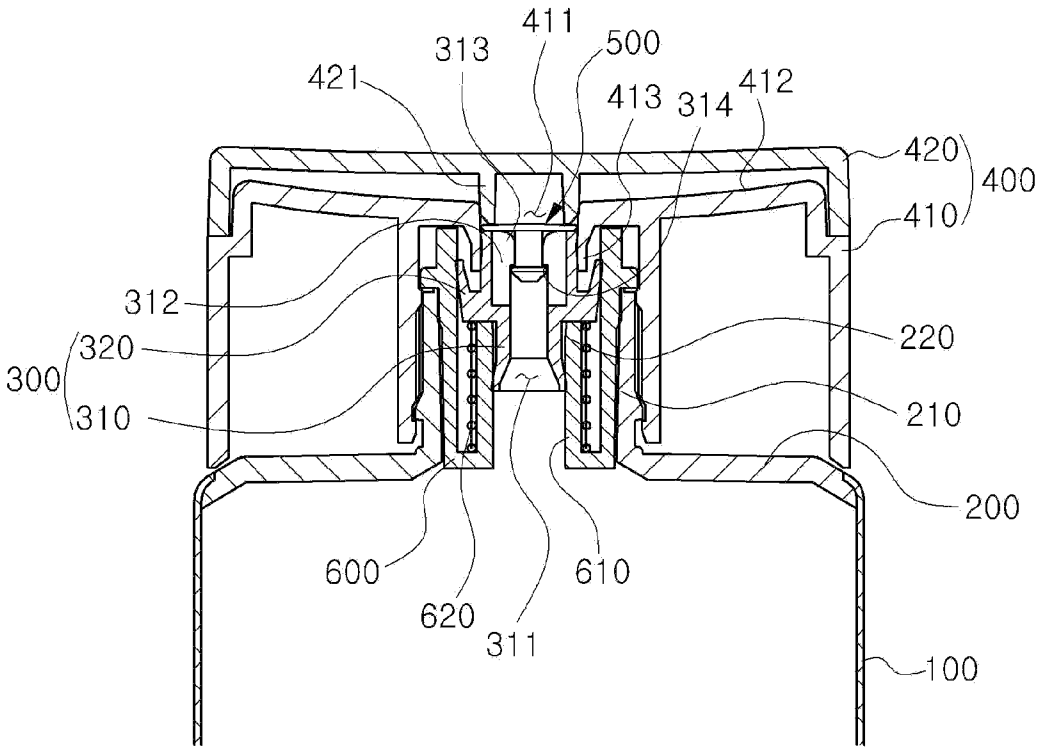
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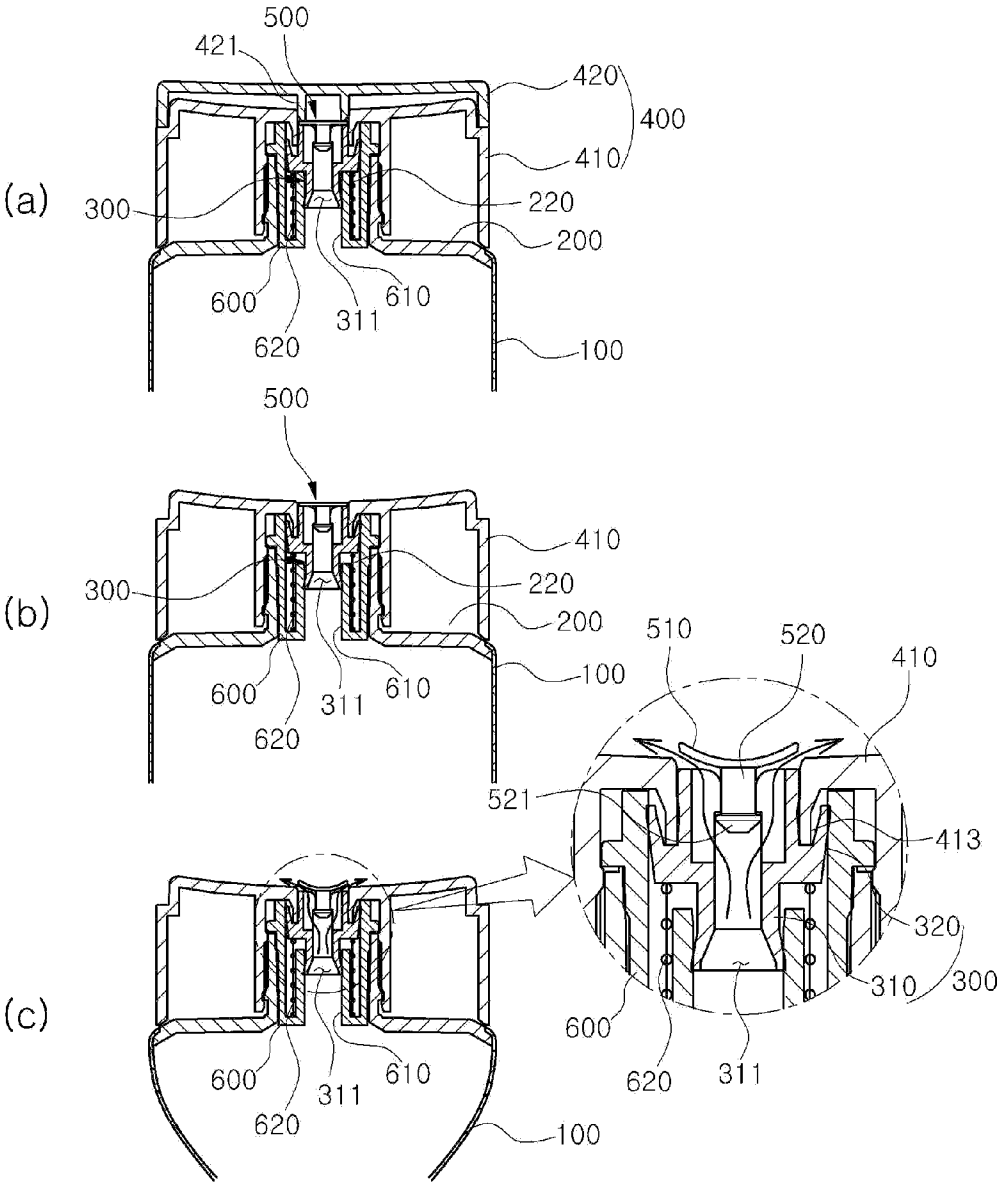
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TUBULAR COSMETICS CONTAINER

TECHNICAL FIELD

[0001] This present invention relates to a tubular cosmetic container. The tubular container according to the present invention is characterized in that an upper end of a cap body is formed into a dish-shaped depression in which the depression becomes deeper toward the center, and a valve member is provided at a discharge hole formed at the center of the depression, and thus it is possible to prevent the re-suction of the discharged contents and to simply discharge and use the contents through the depression.

BACKGROUND ART

[0002] Generally, a conventional tubular cosmetics container comprises a tubular body wherein the contents are held; a tube neck which is connected with the upper part of the said tubular body and, supporting the tubular body, forms the discharging hole on the said tubular body so that the contents can be discharged; and a cap which is connected with the said tube neck, surrounding it.

[0003] Tubular cosmetics containers like the above are used by pressing the tubular body usually with one hand and discharging the contents onto the palm or the back of the other hand. When the contents are almost used, users press the tubular body with two hands and discharge the contents. In this situation, however, the contents may fall down to the floor or onto the upper part of the tubular body. When a user takes off his/her hands to use the discharged contents, the discharged contents are likely to be suctioned back to the tube.

DETAILED DISCLOSURE

Technical Problem

[0004] This present invention has been made to solve the above-mentioned problems. The object of the present invention is to form a dish-shaped depression on the upper end of the cap body, wherein the depression becomes deeper toward the center, and, by installing the belt part on the discharging hole in the center of the depression, not only to prevent the discharged contents from suctioning back into the tube but also to make the contents discharged onto the depression with one hand and use it with ease.

Method to Solve the Problems

[0005] To solve the above-mentioned problems, the present invention, a tubular cosmetics container, according to the preferred embodiment of the present invention, has features in that the tubular cosmetics container comprises a tube body which contains contents; a tube neck which is connected to the upper part of the said tube body and forms a discharge part that let out the contents held inside the tube body; a lifting unit that is placed inside of the said discharge unit and forms the passage for the contents to flow, and rises by the pressure of the contents; a cap body which encircles the said tube neck and forms a discharge hole so that the contents are discharged, and constructs a dish-shaped depression, which becomes deeper toward the center; a one-touch cap which has a hinge joint with one side of the said cap body, to open and close the cover member; a valve member which covers the upper of the lifting unit, to open and close the discharge hole by the pressure of the contents when the tube body is pressed.

[0006] In addition, the said tube neck is characterized in that the tube neck extends into the inner part, protrudes upwards, forms supporting part that supports the said lifting unit.

[0007] Further, at the bottom, the lifting unit comprises a contents inflow hole wherein the contents flow in through the discharge member; at the top, a contents movement pipe that has a contents outflow hole, wherein the contents flowed in through the contents inflow hole is flowed out; a securing part which encircles the contents movement pipe and lands on the support part.

[0008] In addition, the contents movement pipe has features wherein a fixing projection is formed, protruded and separated at regular intervals from the inner wall, and then is combined with the bottom of the valve member, limiting the upward movement of the valve member.

[0009] In addition, the said cover member features a pressurizing protrusion which is formed inside the middle part, protruded downwards, and presses the upper part of the said valve member.

[0010] In addition, the said cap body features forming the rise limit projection which encircles the discharge hole at the top of the inside of the cap body, is protruded downwards, and limits the rise of the said lifting unit.

[0011] On the other hand, the tubular cosmetic container, according to another embodiment of the present invention, has feature in that the tubular cosmetic container comprises a tube body that contains the contents; a tube neck which is connected to the upper part of the tube body and forms the discharge part that lets out the contents held inside the tube body; a support body that is connected to the said discharge unit, forms hollowness, and equips an elastic body insertion part for the elastic body to be installed inside; a lift unit that is located inside of the said support body, forms the passage for the contents to flow, and descends when shutting the cover member and ascends by the elasticity of the elastic body when opening the cover member; a cap body which surrounds the said tube neck and forms a discharge hole so that the contents are discharged, and constructs a dish-shaped depression, which becomes deeper toward the center; a one-touch cap which has a hinge joint with one side of the said cap body, to open and close the cover member; a valve member which covers the upper of the lifting unit, to open and close the discharge hole by the pressure of the contents when the tube body is pressed.

[0012] In addition, in the lower part, the said lifting unit comprises a contents inflow hole wherein the contents flow in through the discharge member; at the top, a contents movement pipe that has a contents outflow hole wherein the contents flowed out through the contents inflow hole; a securing part which encircles the contents movement pipe and lands on the support part.

Effects of Invention

[0013] As stated above, the present invention has advantages in that a dish-shaped depression formed in upper end of a cap body becomes deeper toward the center, and installs a valve member on the center of the discharge unit, so that it is possible not only to prevent the discharged contents from being re-sucked in but also to discharge the contents easily through the dish-shaped depression.

BRIEF DESCRIPTION OF DRAWINGS

[0014] FIG. **1** is a disassembled perspective view illustrating the tubular cosmetics container according to a preferred embodiment of the present invention.

[0015] FIG. **2** is a cross sectional view illustrating the tubular cosmetics container according to a preferred embodiment of the present invention.

[0016] FIG. **3** is a use state view illustrating the tubular cosmetics container according to a preferred embodiment of the present invention.

[0017] FIG. **4** is a disassembled perspective view illustrating the tubular cosmetics container according to another embodiment of the present invention.

[0018] FIG. **5** is a cross-sectional view illustrating the tubular cosmetics container according to another embodiment of the present invention.

[0019] FIG. **6** is a use state illustrating the tubular cosmetics container according to another embodiment of the present invention.

BEST MODES FOR CARRYING OUT THE INVENTION

[0020] The present invention is described in detail below with reference. The same reference numerals shown in each drawing refer to the same elements.

[0021] FIG. **1** is a disassembled perspective view illustrating the tubular cosmetics container according to a preferred embodiment of the present invention, FIG. **2** is a perspective view illustrating the tubular cosmetics container according to a preferred embodiment of the present invention, and FIG. **3** is a use state view illustrating the tubular cosmetics container according to a preferred embodiment of the present invention

[0022] On reference to from FIG. **1** to FIG. **4**, the tubular cosmetics container according to a preferred embodiment of the present invention comprises the tube body **100**, the tube neck **200**, the lifting unit **300**, the one-touch cap **400**, and the valve member **500**.

[0023] The tube body **100**, holding the contents, comprises a soft tube, wherein the contents contained in the tube body **100** are discharged out by user's pressing the tube body.

[0024] The said tube neck **200** is connected to the said tube body, supports the tube body, and forms the discharging unit **210** wherein the contents filled in the tube body **100** flow out.

[0025] In the present invention, the said tube neck **200** extends into the lower inside of the discharging unit **210**, then makes protrusion upwards, and forms the supporting unit **220** that holds the lifting unit **300**, which will be described in the following. The said supporting unit **220** limits the downward movement of the lifting unit **300** when the lifting unit descends after ascending by the pressure of the contents.

[0026] The said lifting unit **300**, which is located inside of the said discharging unit **210** and has a structure in which the lifting unit ascends by the pressure of the flowing contents when the tube body **100** is pressed and then descends by the pressure of the pressurized protrusion **421** that is formed on the cover member **420**, comprises the contents movement tube **310** and the securing part **320**.

[0027] The said contents movement tube **310**, which forms a passage where the contents that are contained in the tube body **100** moves, comprises the contents inflow hole **311** formed on the lower part where the contents flows in through the discharging unit **210**, and the contents outflow hole **312** formed on the upper part where the contents flows out through the discharging unit **210**.

[0028] In the said contents movement pipe **310**, a fixing projection **313** is engaged with a supporting bar **520** of the valve member **500**, separated with regular distance and protruded from the inner wall of the said contents movement tube **310**, and limits the movement of the valve member **500**. It is preferred that, on the fixing projection **313**, a fixing protrusion **314** is formed at the point where a protrusion **521** of the valve member **500** is met and limits the upward movement of the valve member **500**.

[0029] The bottom of the said contents movement pipe **310** is inserted and ascends/descends inside the said supporting unit **220**. It is preferred that the diameter of the bottom should be wider and be touched closely to the inner wall of the supporting unit **220** in order to prevent the contents, which is supposed to move through the supporting unit **220**, from moving out of the contents movement pipe **310**.

[0030] The said securing part **320** has features wherein the securing part **320** stretches inside, encircling the said contents movement pipe **310**; thus when the lifting unit **300** ascends, the top part touches the protrusion of rise limit **413** of the cap body **410** and limits the rising range of the lifting unit **300**, and when the lifting unit **300** descends, the bottom part reaches safely on the supporting unit **220** and limits the descending range of the lifting unit **300**.

[0031] The said one-touch cap **400**, which encircles and is connected with the said tube neck **200**, comprises the cap body **410** and the cover member **420**.

[0032] The said cap body **410** comprises the discharging hole **411**, which discharges the contents in the middle of the top, and, in this invention, has features wherein the dish-shaped depression **412** on the top of the cap body **410** becomes deeper towards the middle where the discharging hole **411** is formed.

[0033] On the top of the said cap body **410** is formed the dish-shaped depression **412**, so that it is possible to discharge the contents into the dish-shaped depression **412** instead of the back of one's hand or the palm; therefore, even when the contents are used up and the tube body **100** is compressed by two hands, the contents can be discharged through the dish-shaped depression **412** and used by a user with ease.

[0034] On the other hand, encircling the upper area of the said cap body **410**, the protrusion of rise limit **413** is formed with downward protrusion; the said protrusion of rise limit presses the upper end of the securing part of the lifting unit **300**, and limits the rising of the lifting unit **300** when the lifting unit **300** ascends by the pressure when the contents are discharged.

[0035] The said cover member **420** is engaged with a hinged joint with the said cap body **410** and opens/closes the discharging hole **411**, and this invention has features wherein the said cover member **420** is equipped with the pressurized protrusion **421**, which presses the valve member **500**, in the inner middle where the said discharging hole **411** and the pressured protrusion are contacted.

[0036] The said pressured protrusion **421**, by pressing the valve member **500**, not only prevents the contents from being spilled to the outside through the said discharging hole **411** but seals the discharging hole **411** because of being faced with the inner circumferential surface of the discharging hole **411**.

[0037] The said valve member comprising the opening/closing tube **510** and the supporting bar **520** is engaged with

the lifting unit, covering its top, and opens/closes the discharging hole **411** by the pressure of the contents when the tube body **100** is pressed.

[0038] The said opening/closing tube **510** is secured on the top of the said contents movement pipe **310** and opens/closes the contents outflow hole **312** and the discharging hole **411**; in this present invention, the said opening/closing tube **510** is formed to make the ends folded and the contents discharged by the pressure of the contents which is discharged through the discharging hole **411**, with the ends folded; for better operation, it is preferred that the said opening/closing tube **510** should be made of elastic rubber.

[0039] The said opening/closing tube **510** is folded and returns to its original state, and can prevent the contents discharged onto the dish-shaped depression **412** from being suctioned back again.

[0040] The said supporting bar **520** is engaged with the bottom center of the said opening/closing tube **510** and the center where the fixing projection **313** of the contents movement pipe **310** is formed, supporting the opening/closing tube **510**; in the present invention, on the bottom of the support bar **520** is formed the protrusion **521** at the place where the fixing projection **313** and the fixing protrusion **314** are contacted, and fixes the valve member with the said fixing protrusion **314**, preventing the valve member **500** from being detached.

[0041] In the followings, referring FIG. **3** there are explanations of the using state of the tubular cosmetics container according to another preferred embodiment of the present invention.

[0042] Referring FIG. **3**, the tubular cosmetics container according to a preferred embodiment of the present invention, with the first cover member **420** closed, the pressurized protrusion **421** of the cover member **420** presses the valve member **500** and closes the discharging hole **411**, and at this moment the securing part **320** of the lifting unit **300** is located, securing on the supporting unit **220**.

[0043] Next, when the cover member **420** is opened with uniaxial joint at the one side, the discharging hole **411** of the valve member **500** remains closed; in turn, when the tube body **100** is pressed, the lifting unit which is secured on the support part ascends; then, at the moment when the top part of the securing part **320** contacts the protrusion of rise limit **413**, the opening/closing tube **510** of the valve member **500** is reversed upwards by the pressure of the contents, and the contents is discharged in the dish-shaped depression **412** of the cap body **410**.

[0044] On the other hand, when the pressure to the tube body **100** is released, the inside of the tube body **100** has a vacuum state and make the lifting unit **300** kept rising; then, when the cover member **420** is closed, the lifting unit **300** moves downwards by the pressure of the pressurized protrusion **421**.

[0045] In the following, referring to from FIG. **4** to FIG. **6**, there are explanations of the tubular cosmetics container according to another preferred embodiment of the present invention.

[0046] FIG. **4** is a disassembled perspective view illustrating the tubular cosmetics container according to another preferred embodiment of the present invention; FIG. **5** is a cross sectional view illustrating the tubular cosmetics container according to another preferred embodiment of the present invention; FIG. **6** is a using state illustrating the tubular cosmetics container according to another embodiment of the present invention

[0047] Referring to from FIG. **4** to FIG. **6**, the tubular cosmetics container according to another preferred embodiment of the present invention is characterized in that, replacing the supporting unit **220** that is above-mentioned in the preferred embodiment, the support body **600**, which supports the lifting unit **300**, is connected with the discharging unit **210** of the tube neck **200**.

[0048] The said support body **600** is engaged with the said discharging unit **210**, while forming a hollow space in order that the contents is discharged and the lower part of the said the contents movement pipe **310** is inserted, and comprises the elastic body insertion part **610** wherein the elastic body **620** is equipped; the said elastic body, which supports the end of the securing part **320** of the said lifting unit **300**, is contracted by the pressure of the securing part **320** when the cover member **420** is closed, and relaxed when the cover member **420** is opened, conveying the elasticity to the securing part **320** and, as a result, lifting the lifting unit **300**.

[0049] At this point, when the cover member **420** is closed, the said lifting unit **300** is secured on the top of the elastic body insertion part **610** and its downward movement is limited, while the upward movement is limited by the protrusion of rise limit **413** of the cap body **410** when rising by the elasticity of the elastic body **620** as the cover member **420** is opened.

[0050] In the following, referring to FIG. **6**, there are explanations of using state of the tubular cosmetics container according to another preferred embodiment of the present invention.

[0051] Referring to FIG. **6**, the tubular cosmetics container, according to another preferred embodiment of the present invention, when the first cover member is closed, the pressurized protrusion **421** of the cover member **420** presses the valve member and closes, and at that moment the securing part **320** of the lifting unit **300** is placed securely on the elastic body insertion part **610**.

[0052] Next, when the cover member **420** is opened with uniaxial joint at the one side, the lifting unit **300** rises by the elasticity of the elastic body **620**, by which the valve member **500** connected with the lifting unit **300** also rises and comes to be located parallel with the dish-shaped depression **412**, still keeping the discharging hole closed; at this moment, when the tube body **100** is pressed, as the opening/closing tube **510** of the valve member **500** is inverted upwards, the contents is discharged onto the dish-shaped depression **412** of the cap body **410**.

[0053] As the present invention may be embodied in several forms without departing from the spirit of essential characteristics thereof, it should also be understood that the above-described examples are not limited by any of the details of the foregoing description, unless otherwise specified, but rather should be construed broadly with its spirit and scope as defined in the appended claims, and therefore all changes and modifications that fall within the meets and bounds of the claims, or equivalences of such meets and bounds are therefore intended to be embrace by the appended claims.

Scopes of claims:

1. A tubular cosmetics container comprising:

a tube body which holds contents;

a tube neck which is connected with upper part of the said tube body and has a discharging part in which the contents in the tube body is discharged;

a lifting unit, located inside of the said discharging unit, which builds a passage where the contents moves and rises by the pressure of the contents;

a one-touch cap which includes:

a cap body that covers the said tube neck, to be connected with, and consists of a dish-shaped depression that gets deeper towards the center,

a cover member that is engaged with a hinged joint with the said cap body and opens/closes the discharging hole;

a valve member that covers the top end and is engaged with the lifting is unit, opening/closing the discharging hole by the pressure of the contents when the tube body is pressed.

2. The tubular cosmetics container of claim **1**, wherein the said tube neck comprises;

a support part that stretches into the inside of the discharge part and is formed with protrusion, supporting the said lifting unit.

3. The tubular cosmetics container of claim **2**, wherein the said tube neck comprises:

a contents inflow hole where the contents flows in through the discharge member at the bottom;

a contents movement pipe where the contents flows out through the discharge member on the top;

a securing part that encircles and is secured on the support part.

4. The tubular cosmetics container of claim **3**, wherein the contents movement pipe comprises a fixing projection which is formed with protrusion, separated at regular distance from the inner wall, and then is combined with the bottom of the valve member, limiting its upward movement.

5. The tubular cosmetics container of claim **1**, wherein the said cover member comprises a pressurized protrusion that is formed inside its middle part, protrudes downwards, and presses the upper end of the valve member.

6. The tubular cosmetics container of claim **1**, wherein the cap body comprises is a protrusion of rise limit that encircles the upper end of the cap body, protrudes downwards and limits the rise of the said lifting unit.

7. The tubular cosmetics container comprising:

a tube body which contains the contents;

a tube neck which is engaged with the upper part of the said tube body and forms a discharging unit where the contents is discharged;

a support unit which is engaged with the discharging unit, forming a hollow space, inside which an elastic body is installed;

a lifting unit which is located inside the said support body, forming a passage where the contents moves, and descends when the cover member opens, whereas it ascends when the cover member opens;

an one-touch cap which encircles and is connected with the said tube neck, further comprising:

a discharging hole where the contents are discharged;

a cap body which has a dish-shaped depression which becomes deeper towards the center of the cap body;

a cover member which is combined with a hinge joint at the one side of the cap body and opens/closes the said discharging hole;

a valve member which covers and is combined with the upper end of the said lifting unit, and opens/closes the discharging hole by the pressure of the contents when the tube body is pressed.

8. The tubular cosmetics container of claim **7**, comprising:

a contents inflow hole which is installed in the bottom part of the said lifting unit, wherein the contents flow in through the discharging unit;

a contents outflow hole which is installed in the top part of the said lifting unit, wherein the contents flow out through the discharging unit;

a securing part which encircles the said contents movement pipe and lands securely on the said insertion part.

9. The tubular cosmetics container of claim **8**, comprising a fixing projection that is formed, protruded and separated at regular distance from the inner wall, and then is combined with the bottom of the valve member, limiting the upward movement of the valve member.

10. The tubular cosmetics container of claim **7**, comprising a pressurized protrusion which is formed inside the middle part, protruded downwards, and presses the upper part of the said valve member.

11. The tubular cosmetics container of claim **7**, comprising a protrusion of rise limit on the top which encircles the discharge hole at the top of the inside of the cap body, is protruded downwards, and limits the rise of the said lifting unit.

* * * * *