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(54) A COSMETIC PACKAGING BOTTLE RESTRICTING BACKFLOW

RÜCKFLUSSBEGRENZENDE KOSMETISCHE VERPACKUNGSFLASCHE

BOUTEILLE D'EMBALLAGE DE PRODUIT COSMÉTIQUE LIMITANT LE REFLUX

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(73) Proprietor: **Guangzhou Candear Packing Products Co., Ltd**
Guangzhou 510000 (CN)

(72) Inventor: **Cai, Guoxiang**
Guangzhou, 510000 (CN)

(74) Representative: **Gale Gutierrez, Santiago**
Pasaje Uralita 9
08290 Cerdanyola del Vallés (Barcelona) (ES)

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Description

REFERENCE TO PRIOR APPLICATION

[0001] This application claims priority to Chinese Patent Application 202223284958.7, filed on December 06, 2022.

TECHNICAL FIELD

[0002] The invention relates to the field of cosmetic packaging bottles, and in particular, to a cosmetic packaging bottle restricting backflow.

TECHNICAL BACKGROUND

[0003] With the improvement of living standards, more and more people attach importance to skin care and are in need of more volume of cosmetics. There are usually lotion-like and viscous products. Many lotion-like and viscous contents using soft tube packaging bottles. In the usage, contents of cosmetics in the bottle are squeezed out. With the increase in demand for comfort in use, the bottle seat outlet of the soft tube packaging bottle is usually equipped with a massage head, and accessories such as heating and vibration are placed in the bottle seat to assist in massage absorption. Therefore, the bottle seat outlet has a long passage, and lotion from the massage head tends to flow back into the passage when used, and lotions may be sucked back into the bottle by the soft tube packaging bottle, resulting in contamination of the cosmetic lotion inside the bottle by microorganisms or bacteria.

[0004] It is also known, from the state of the art, as disclosed in the patent WO2016186748A1, a dispensing closure for a container of a fluent substance is disclosed. The closure includes a body having an inlet portion defining an inlet flow passage for receiving the fluent substance from the container and an elongate outlet portion defining an outlet flow passage for discharging the fluent substance. The closure further has a valve located within the body, across the inlet flow passage and spaced axially inwardly of outlet flow passage to define a chamber. The valve has a flexible, resilient valve head portion that has confronting, openable portions movable from a closed configuration to an open configuration when the valve head portion is subjected to a pressure differential acting across the valve head portion. However, said patent does not disclose all the relevant technical elements of the present invention.

SUMMARY

[0005] In order to overcome the aforementioned problems, the invention provides a cosmetic packaging bottle restricting backflow, with a one-way flow restriction function, so that the contents of the soft tube packaging bottle are squeezed in one direction and cannot flow back, preventing the contents from flowing back and causing contamination of the contents of the soft tube packaging bottle.

[0006] The technical solution adopted by the invention to solve the technical problems is: a cosmetic packaging bottle restricting backflow, according to claim 1.

[0007] Preferably, the side groove channel is a spiral structure. The spiral flow restriction channel makes contents enter from the side and exit from the upper part, which can limit the outflow rate of contents, to accurately use the squeeze volume, to prevent contents from splashing and spilling due to excessive force when squeezing, to avoid waste.

[0008] Preferably, the upper groove channel extends from the middle to the edge and is connected to the side groove channel.

[0009] Preferably, the upper part of the liquid discharge head is a liquid discharge column, and the inner cavity of the liquid discharge column forms the aforementioned liquid discharge cavity, and the liquid discharge cavity is connected to the outside of the liquid discharge column.

[0010] Preferably, the mouth of the soft tube packaging bottle is provided with a threaded holder, the bottom surface of the threaded holder is provided with a limit platform, a middle part of the limit platform is provided with an opening corresponding to the open concave cavity structure of the bottom surface of the flow restriction seat, the flow restriction seat and the liquid discharge head are placed inside the threaded holder, and the outer wall of the liquid discharge head is close to the inner wall of the threaded holder.

[0011] Preferably, there is a slot and a convex ring between the outer wall of the liquid discharge head and the inner wall of the threaded holder, and the slot and the convex ring are correspondingly clamped to each other.

[0012] Preferably, it also includes an outer cover, which is screwed to the threaded holder, and a raised plunger is placed in a middle part of the outer cover, and the plunger closes the upper end of the liquid discharge cavity after the outer cover is installed.

[0013] The beneficial effect of the invention is: a cosmetic packaging bottle restricting backflow, with a one-way flow restriction function, so that the contents of the soft tube packaging bottle can be squeezed in one direction and cannot flow back, to prevent the contents of the backflow of the soft tube packaging bottle from causing contamination of the contents. The non-return valve sheet has a one-way valve role, the middle is provided with a cross-shaped cutout. The non-return valve sheet is normally closed. When the contents are squeezed out, the non-return valve sheet squeezed by the contents will open upward, the contents are discharged. After the stopping of squeezing, the soft tube packaging bottle has a tendency to reset and will suck back the contents, the contents tend to flow back. At this time, the non-return valve sheet is sucked downward against the upper surface of the flow restriction seat to keep it closed and

prevent contents from flowing back.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The invention is further described hereinafter in conjunction with the accompanying drawings and embodiments.

FIG. 1 is a schematic diagram of a cross-sectional structure of a cosmetic packaging bottle restricting backflow in the invention;
FIG. 2 is an exploded view of a cosmetic packaging bottle restricting backflow in the invention;
FIG. 3 is a schematic diagram of a partially enlarged structure in FIG. 1 of a cosmetic packaging bottle restricting backflow in the invention;
FIG. 4 is a schematic diagram of the structure of a flow restriction seat of a cosmetic packaging bottle restricting backflow in the invention; and
FIG. 5 is a schematic diagram of the side view structure of the flow restriction seat of a cosmetic packaging bottle restricting backflow in the invention.

DETAILED DESCRIPTION OF EMBODIMENTS

[0015] The invention is now described in further details in conjunction with the accompanying drawings. These drawings are simplified schematic diagrams that illustrate the basic structure of the invention in a schematic manner only, and therefore show only the components related to the invention.

Description of embodiments

[0016] As shown in FIGS. 1 and 2, the cosmetic packaging bottle restricting backflow consists of a soft tube packaging bottle 1 and a liquid discharge head 2, and a non-return valve sheet 6 is installed in the liquid discharge head 2. The non-return valve sheet 6 has a one-way flow restriction function, so that the contents of the soft tube packaging bottle 1 are squeezed out in one direction and cannot flow back, preventing the contents from flowing back and causing contamination of the contents of the soft tube packaging bottle 1.

[0017] Refer to FIG. 2. A middle part of the non-return valve sheet 6 is provided with a cross-shaped cutout 61, the non-return valve sheet 6 is closed in the normal state, the non-return valve sheet 6 is squeezed by the contents to open upward and discharge the contents. The flow restriction seat 4 is placed on the mouth of the soft tube packaging bottle 1, and the non-return valve sheet 6 is attached to the upper part of the flow restriction seat 4, the flow restriction seat 4 is provided with a flow restriction channel, and the non-return valve sheet 6 covers the outlet of the flow restriction channel; the bottom of the liquid discharge head 2 has a concave cavity, and the concave cavity part of the liquid discharge head 2 is placed on the flow restriction seat 4, and the inner wall surface of the concave cavity of the liquid discharge head 2 is close to the outer side wall of the flow restriction seat 4. The top surface of the concave cavity of the liquid discharge head 2 is pressed against the circumference of the non-return valve sheet 6, and a liquid discharge cavity 21 is provided in a middle part of the liquid discharge head 2, and the cross-shaped cutout 61 of the non-return valve sheet 6 can be opened in the direction of the liquid discharge cavity 21. Among them, the outer diameter of the liquid discharge cavity 21 is larger than the flow restriction channel, and the cross-shaped cutout 61 of the non-return valve sheet 6 cannot be opened in the direction of the flow restriction channel, which has a one-way flow restriction effect.

[0018] In this embodiment, at least one section of the flow restriction channel of the flow restriction seat 4 is a non-linear channel. The process of the contents passing through the flow restriction channel needs to pass through a number of bends, which can slow down the speed of its outflow.

[0019] Specifically, by referring to FIGS. 4 and 5, the bottom of the flow restriction seat 4 is a concave cavity structure, and the flow restriction channel includes a through-port 41 placed in the side wall of the flow restriction seat 4, a side groove channel 42 placed between the outer side wall of the flow restriction seat 4 and the liquid discharge head, and an upper groove channel 43 placed in the upper surface of the flow restriction seat 4; the through-port 41, the side groove channel 42, and the upper groove channel 43 are connected to each other in turn.

[0020] In this embodiment, the side groove channel 42 is a spiral structure. The side groove channel 42 is a groove structure placed on the side wall of the flow restriction seat 4, which is combined with the inner wall surface of the concave cavity of the liquid discharge head 2 to form a complete threaded pipe type channel.

[0021] The upper groove channel 43 extends from the middle to the edge and is connected to the side groove channel 42. The width of the upper groove channel 43, in a groove structure, is much smaller than the outer diameter of the liquid discharge cavity 21. The width of the upper groove channel 43 is not wide enough to allow the cross-shaped cutout 61 of the non-return valve sheet 6 to open downward, and when the non-return valve sheet 6 is under suction, the cross-shaped cutout 61 presses downward against the upper surface of the flow restriction seat 4 in a closed state.

[0022] The non-return valve sheet 6 is made of silicone with a hardness of 70 degrees and good flexibility, and the cross-shaped cutout 61 opens and closes reliably.

[0023] The upper part of the liquid discharge head 2 is the liquid discharge column 5, and the inner cavity of the liquid discharge column 5 forms the aforementioned liquid discharge cavity 21, and the liquid discharge cavity 21 is connected to the outside of the liquid discharge column 5.

[0024] The mouth of the soft tube packaging bottle 1 is provided with a threaded holder 11, the bottom surface of the threaded holder 11 is provided with a limit platform 12, and a middle part of the limit platform 12 is provided with an opening 121 corresponding to the open concave cavity structure of the bottom surface of the flow restriction seat 4, and the opening 121 is connected to the flow restriction seat 4 and the soft tube packaging bottle.

[0025] Refer to FIG.3. The flow restriction seat 4 and the liquid discharge head 2 are placed inside the threaded holder 11, and the liquid discharge head 2 is placed on the flow restriction seat 4 and then fitted into the threaded holder 11, and the outer wall of the liquid discharge head 2 is tightly pressed against the inner wall of the threaded holder 11. In order to further stabilize the combination between the outer wall of the liquid discharge head 2 and the threaded holder 11, a convex ring 22 and a slot 12 are provided between the outer wall of the liquid discharge head 2 and the inner wall of the threaded holder 11. After the liquid discharge head 2 is installed in the threaded holder 11, the slot 12 and the convex ring 22 are correspondingly clamped to each other for a more stable installation, and the slot 12 and the convex ring 22 have an arc-shaped structure for easy installation.

[0026] Refer to FIG. 1. There is an outer cover 3 attached to the outside of the liquid discharge head 2, and the outer cover 3 is screwed to the threaded holder 11. A middle part of the outer cover 3 is provided with a raised plunger 31, and after the outer cover 3 is installed, the plunger 31 closes the outlet port at the upper end of the liquid discharge column 5.

[0027] In the detailed description of embodiments, before the non-return valve sheet 6 is used, the cross-shaped cutout 61 is in the bonding state, gas on both sides is sealed. In the first usage, the pressure in the content squeezing process flushes out the cross-shaped cutout 61, ending its bonding state.

[0028] When the contents are filled, the contents are filled from the bottom of the soft tube packaging bottle 1. The time required for the contents to enter the through-hole 41, the side groove channel 42, and then the upper groove channel 43 is greater than the time required for the entire cosmetic can to be completed, so the non-return valve sheet not 6 is opened, and its closed state can maximize the effective isolation of the air on the other side of the non-return valve sheet 6 to avoid direct contact between the cosmetic contents and the air and prevent microbial or bacterial contamination. It prevents microbial or bacterial contamination and effectively protects the quality of cosmetics.

[0029] Specifically, the groove channel 42 is a semi-circular groove, and the diameter of the groove channel 42 and the through-hole 41 is between 1.3 and 1.34 mm, forming a flow channel with a narrow diameter and a certain resistance. The threaded pipe-type channel formed between the groove channel 42 and the liquid discharge head 2 has more than two coils, with a total length of 50.4 mm. The length of the upper groove channel 43 is 5.09 mm, the length of the through-hole 41 is 2.07 mm, i.e., the total length of the flow restriction channel is 57.56 mm, the length of the threaded pipe channel is similar to the length of the soft tube packaging bottle 1, the contents are filled from the bottom of the soft tube packaging bottle 1, filling the whole soft tube packaging bottle 1 first, and then flowing into the threaded pipe channel. In the filling process, the time for the contents to enter the flow restriction channel and reach the non-return valve sheet 6 is much longer than the time to fill the whole soft tube packaging bottle 1, with enough time to adjust or stop filling, so the non-return valve sheet 6 is not open in the filling process, isolating the air on the other side, avoiding direct contact between the cosmetic contents and air, preventing microbial or bacterial contamination and effectively protecting the quality of cosmetics.

[0030] The side groove channel 42 is placed between the outer side wall of the flow restriction seat 4 and the liquid discharge head, and the upper groove channel 43 is placed on the upper surface of the flow restriction seat 4; the through-port 41, the side groove channel 42, and the upper groove channel 43 are connected to each other in turn.

[0031] A cosmetic packaging bottle restricting backflow described in the invention has a one-way flow restriction function, so that the contents of the soft tube packaging bottle 1 are extruded in one direction and cannot flow back, preventing the contents from flowing back and causing contamination of the contents of the soft tube packaging bottle 1. The non-return valve sheet 6 has a one-way valve role, the middle is provided with a cross-shaped cutout 61. The non-return valve sheet 6 is normally closed. When the contents are squeezed out, the non-return valve sheet 6 squeezed by the contents will open upward, the contents are discharged. After the stopping of squeezing, the soft tube packaging bottle 1 has a tendency to reset and will suck back the contents, the contents tend to flow back. At this time, the non-return valve sheet 6 is sucked downward against the upper surface of the flow restriction seat 4 to keep it closed and prevent the contents from flowing back. With a spiral flow restriction channel, the contents enter from the side and exit from the top, which can limit the outflow rate of the contents, to squeeze accurately and prevent the contents from splashing and spilling due to excessive force during squeezing, to avoid waste.

[0032] With the aforementioned ideal embodiment of the invention as the inspiration, the relevant staff can make various changes and modifications without deviating from the scope of the invention as disclosed in the appended claims.

Claims

1. A cosmetic packaging bottle (1) restricting backflow, including a soft tube packaging bottle (1) and a liquid discharge head (2), and also including a non-return

valve sheet (6), which is placed within the liquid discharge head (2), the non-return valve sheet (6) has a one-way flow restriction function, so that contents of the soft tube packaging bottle (1) are squeezed out in one direction and cannot flow back, a middle part of the non-return valve sheet (6) is provided with a cross-shaped cutout (61), the non-return valve sheet (6) is closed in the normal state, the non-return valve sheet (6) is squeezed by the contents to open upward to discharge contents, the mouth of the soft tube packaging bottle (1) is provided with a flow restriction seat (4), the non-return valve sheet (6) is attached to an upper part of the flow restriction seat (4), and the flow restriction seat (4) is provided with a flow restriction channel; the liquid discharge head (2) has a concave cavity at the bottom, the liquid discharge head (2) is capped on the flow restriction seat (4), pressed against the circumference of the non-return valve sheet (6), a middle part of the liquid discharge head (2) is provided with a liquid discharge cavity (21), and the cross-shaped cutout (61) of the non-return valve sheet (6) can be opened in the direction of the liquid discharge cavity (21), **characterised in that** the bottom of the flow restriction seat (4) is a concave cavity structure, the flow restriction channel includes a through-port (41) placed at the side wall of the flow restriction seat (4), a side groove channel (42) placed between an outer side wall of the flow restriction seat (4) and the liquid discharge head (2), and an upper groove channel (43) placed in an upper surface of the flow restriction seat (4); the through-port (41), side groove channel (42), and upper groove channel (43) are connected to each other in turn.

2. The cosmetic packaging bottle (1) restricting backflow according to claim 1, wherein: the side groove channel (42) is a spiral structure.

3. The cosmetic packaging bottle (1) restricting backflow according to claim 2, wherein: the upper groove channel (43) extends from the middle to the edge and is connected to the side groove channel (42).

4. The cosmetic packaging bottle (1) restricting backflow according to claim 3, wherein: the upper part of the liquid discharge head (2) is a liquid discharge column (5), the inner cavity of the liquid discharge column (5) forms the liquid discharge cavity (21), and the liquid discharge cavity (21) is connected to the outside of the liquid discharge column (5).

5. The cosmetic packaging bottle (1) restricting backflow according to claim 4, wherein: the mouth of the soft tube packaging bottle (1) is provided with a threaded holder (11), the bottom surface of the threaded holder (11) is provided with a limit platform (12), a middle part of the limit platform (12) is provided with an opening (121) corresponding to the open concave cavity structure of the bottom surface of the flow restriction seat (4), the flow restriction seat (4) and the liquid discharge head (2) are placed inside the threaded holder (11), and the outer wall of the liquid discharge head (2) is close to the inner wall of the threaded holder (11).

6. The cosmetic packaging bottle (1) restricting backflow according to claim 5, wherein: an outer wall of the liquid discharge head (2) and the inner wall of the threaded holder (11) are provided with a slot (12) and a convex ring (22), respectively, and the slot (12) and the convex ring (22) correspond to each other.

7. The cosmetic packaging bottle (1) restricting backflow according to claim 6, wherein: and also includes an outer cover (3), the outer cover (3) is screwed onto the threaded holder (11), and a raised plunger (31) is placed in a middle part of the outer cover (3), and the plunger (31) closes the upper end of the liquid discharge cavity (21) after the outer cover (3) is installed.

Patentansprüche

1. Eine Kosmetikverpackungsflasche (1), die einen Rückfluss einschränkt, umfassend eine Verpackungsflasche mit weichem Schlauch (1) und einen Flüssigkeitsauslasskopf (2) und außerdem umfassend ein Rückschlagventilblatt (6), das innerhalb des Flüssigkeitsauslasskopf (2) platziert ist, wobei das Rückschlagventilblatt (6) eine Einweg-Flussbeschränkungsfunktion hat, so dass der Inhalt der Verpackungsflasche mit weichem Schlauch (1) in eine Richtung herausgedrückt wird und nicht zurückfließen kann, wobei ein mittlerer Teil des Rückschlagventilblatts (6) mit einem kreuzförmigen Ausschnitt (61) versehen ist, wobei das Rückschlagventilblatt (6) im Normalzustand geschlossen ist, wobei das Rückschlagventilblatt (6) durch den Inhalt zusammengedrückt wird, um sich nach oben zu öffnen, um den Inhalt auszulassen, wobei die Öffnung der Verpackungsflasche mit weichem Schlauch (1) mit einem Durchflussbeschränkungssitz (4) versehen ist, wobei das Rückschlagventilblatt (6) an einem oberen Teil des Durchflussbeschränkungssitzes (4) angebracht ist und wobei der Durchflussbeschränkungssitz (4) mit einem Durchflussbeschränkungskanal versehen ist; der Flüssigkeitsauslasskopf (2) weist an der Unterseite eine konkave Aushöhlung auf, der Flüssigkeitsauslasskopf (2) ist auf dem Durchflussbeschränkungssitz (4) aufgesetzt und gegen den Umfang des Rückschlagventilblatts (6) gedrückt, ein Mittelteil des Flüssigkeitsauslasskopf (2) ist mit einer Flüssigkeitsauslassaushöhlung (21) versehen, und der kreuzförmige Ausschnitt (61)

des Rückschlagventilblatts (6) kann in Richtung der Flüssigkeitsauslassaushöhlung (21) geöffnet werden, **dadurch gekennzeichnet, dass** die Unterseite des Durchflussbeschränkungssitzes (4) eine konkave Aushöhlungsstruktur aufweist, der Durchflussbeschränkungskanal eine Durchgangsöffnung (41) umfasst, die an der Seitenwand des Durchflussbeschränkungssitzes (4) angeordnet ist, einen seitlichen Nutkanal (42), der zwischen einer äußeren Seitenwand des Durchflussbeschränkungssitzes (4) und dem Flüssigkeitsauslasskopf (2) angeordnet ist, und einen oberen Nutkanal (43), der in einer oberen Oberfläche des Durchflussbeschränkungssitzes (4) angeordnet ist; die Durchgangsöffnung (41), der seitliche Nutkanal (42) und der obere Nutkanal (43) sind wiederum miteinander verbunden.

2. Die rückflussbegrenzende Kosmetikverpackungsflasche (1) gemäß Anspruch 1, wobei: der seitliche Rillenkanal (42) eine Spiralstruktur aufweist.

3. Die rückflussbegrenzende Kosmetikverpackungsflasche (1) gemäß Anspruch 2, wobei: der obere Rillenkanal (43) von der Mitte bis zum Rand reicht und mit dem seitlichen Rillenkanal (42) verbunden ist.

4. Die rückflussbegrenzende Kosmetikverpackungsflasche (1) gemäß Anspruch 3, wobei: der obere Teil des Flüssigkeitsausstoßkopfes (2) eine Flüssigkeitsausstoßsäule (5) ist, der innere Hohlraum der Flüssigkeitsausstoßsäule (5) den Flüssigkeitsausstoßhohlraum (21) bildet und der Flüssigkeitsausstoßhohlraum (21) mit der Außenseite der Flüssigkeitsausstoßsäule (5) verbunden ist.

5. Die Kosmetikverpackungsflasche (1) mit Rückflussbeschränkung gemäß Anspruch 4, wobei: die Öffnung der Verpackungsflasche (1) mit weichem Schlauch mit einem Gewindehalter (11) versehen ist, die Bodenfläche des Gewindehalters (11) mit einer Begrenzungsplattform (12) versehen ist, ein mittlerer Teil der Begrenzungsplattform (12) mit einer Öffnung (121) versehen ist, die der offenen konkaven Hohlraumstruktur der Bodenfläche des Durchflussbeschränkungssitzes (4) entspricht, der Durchflussbeschränkungssitz (4) und der Flüssigkeitsauslasskopf (2) innerhalb des Gewindehalters (11) angeordnet sind und die Außenwand des Flüssigkeitsauslasskopf (2) nahe an der Innenwand des Gewindehalters (11) liegt.

6. Die Kosmetikverpackungsflasche (1) mit Rückflussbeschränkung gemäß Anspruch 5, wobei:eine Außenwand des Flüssigkeitsauslasskopf (2) und die Innenwand des Gewindehalters (11) jeweils mit einem Schlitz (12) und einem konvexen Ring (22) versehen sind und der Schlitz (12) und der konvexe Ring (22) einander entsprechen.

7. Die Kosmetikverpackungsflasche (1) mit Rückflussbeschränkung gemäß Anspruch 6, wobei:und außerdem eine Außenabdeckung (3) umfasst, die Außenabdeckung (3) auf den Gewindehalter (11) geschraubt ist und ein erhabener Kolben (31) in einem mittleren Teil der Außenabdeckung (3) platziert ist und der Kolben (31) das obere Ende des Flüssigkeitsauslasshohlraums (21) verschließt, nachdem die Außenabdeckung (3) installiert ist.

Revendications

1. Un flacon d'emballage cosmétique (1) limitant le reflux, comprenant un flacon d'emballage à tube souple (1) et une tête de décharge de liquide (2), et comprenant également une feuille de clapet anti-retour (6), qui est placée à l'intérieur de la tête de décharge de liquide (2), la feuille de clapet anti-retour (6) a une fonction de restriction de flux unidirectionnelle, de sorte que le contenu du flacon d'emballage à tube souple (1) est expulsé dans une direction et ne peut pas refluer, une partie médiane de la feuille de clapet anti-retour (6) est pourvue d'une découpe en forme de croix (61), la feuille de clapet anti-retour (6) est fermée dans l'état normal, la feuille de clapet anti-retour (6) est comprimée par le contenu pour s'ouvrir vers le haut pour évacuer le contenu, l'embouchure du flacon d'emballage à tube souple (1) est pourvue d'un siège de restriction de flux (4), la feuille de clapet anti-retour (6) est fixée à une partie supérieure du siège de restriction de flux (4), et le siège de restriction de flux (4) est pourvu d'un canal de restriction de flux ; la tête de décharge de liquide (2) présente une cavité concave au fond, la tête de décharge de liquide (2) est coiffée sur le siège de restriction de débit (4), pressée contre la circonférence de la feuille de clapet anti-retour (6), une partie médiane de la tête de décharge de liquide (2) est pourvue d'une cavité de décharge de liquide (21), et la découpe en forme de croix (61) de la feuille de clapet anti-retour (6) peut être ouverte en direction de la cavité de décharge de liquide (21), **caractérisée en ce que** le fond du siège de restriction de débit (4) est une structure de cavité concave, le canal de restriction de débit comprend un orifice traversant (41) placé sur la paroi latérale du siège de restriction de débit (4), un canal de rainure latéral (42) placé entre une paroi latérale extérieure du siège de restriction de débit (4) et la tête de décharge de liquide (2), et un canal de rainure supérieur (43) placé dans une surface supérieure du siège de restriction de débit (4) ; l'orifice traversant (41), le canal de rainure latéral (42) et le canal de rainure supérieur (43) sont reliés les uns aux autres à leur tour.

2. Flacon d'emballage cosmétique (1) limitant le reflux selon la revendication 1, dans lequel : le canal à rainure latérale (42) est une structure en spirale.

3. Flacon d'emballage cosmétique (1) limitant le reflux selon la revendication 2, dans lequel : le canal à rainure supérieure (43) s'étend du milieu vers le bord et est relié au canal à rainure latérale (42).

4. Flacon d'emballage cosmétique (1) limitant le reflux selon la revendication 3, dans lequel : la partie supérieure de la tête d'évacuation de liquide (2) est une colonne d'évacuation de liquide (5), la cavité intérieure de la colonne d'évacuation de liquide (5) forme la cavité d'évacuation de liquide (21), et la cavité d'évacuation de liquide (21) est reliée à l'extérieur de la colonne d'évacuation de liquide (5).

5. Flacon d'emballage cosmétique (1) limitant le reflux selon la revendication 4, dans lequel : l'embouchure du flacon d'emballage à tube souple (1) est munie d'un support fileté (11), la surface inférieure du support fileté (11) est munie d'une plate-forme de limitation (12), une partie médiane de la plate-forme de limitation (12) est munie d'une ouverture (121) correspondant à la structure de cavité concave ouverte de la surface inférieure du siège de limitation de débit (4), le siège de limitation de débit (4) et la tête de décharge de liquide (2) sont placés à l'intérieur du support fileté (11), et la paroi extérieure de la tête de décharge de liquide (2) est proche de la paroi intérieure du support fileté (11).

6. Flacon d'emballage cosmétique (1) limitant le reflux selon la revendication 5, dans lequel : une paroi extérieure de la tête de décharge de liquide (2) et la paroi intérieure du support fileté (11) sont pourvues d'une fente (12) et d'un anneau convexe (22), respectivement, et la fente (12) et l'anneau convexe (22) correspondent l'une à l'autre.

7. Flacon d'emballage cosmétique (1) limitant le reflux selon la revendication 6, dans lequel : et comprend également un couvercle extérieur (3), le couvercle extérieur (3) est vissé sur le support fileté (11), et un piston surélevé (31) est placé dans une partie médiane du couvercle extérieur (3), et le piston (31) ferme l'extrémité supérieure de la cavité de décharge de liquide (21) après l'installation du couvercle extérieur (3).

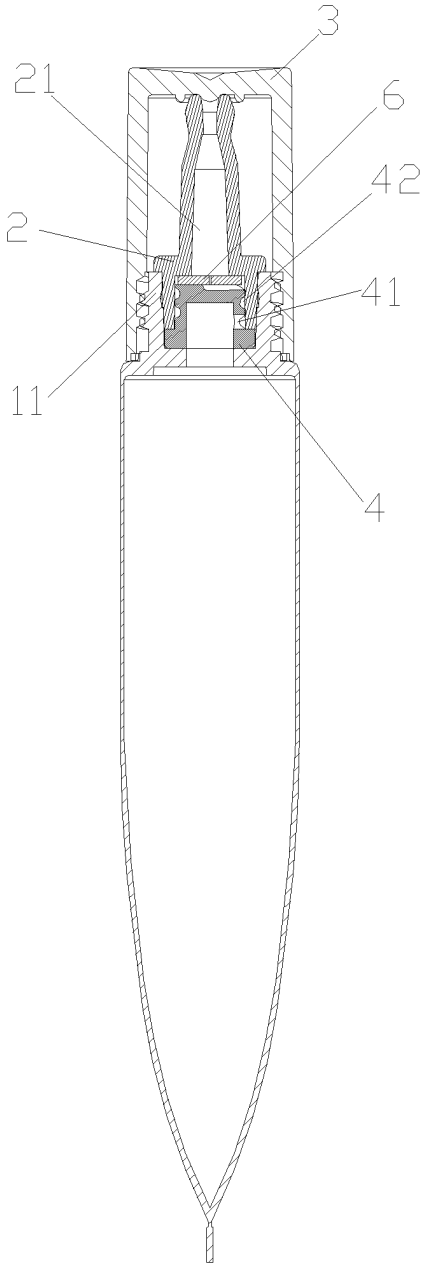

Fig. 1

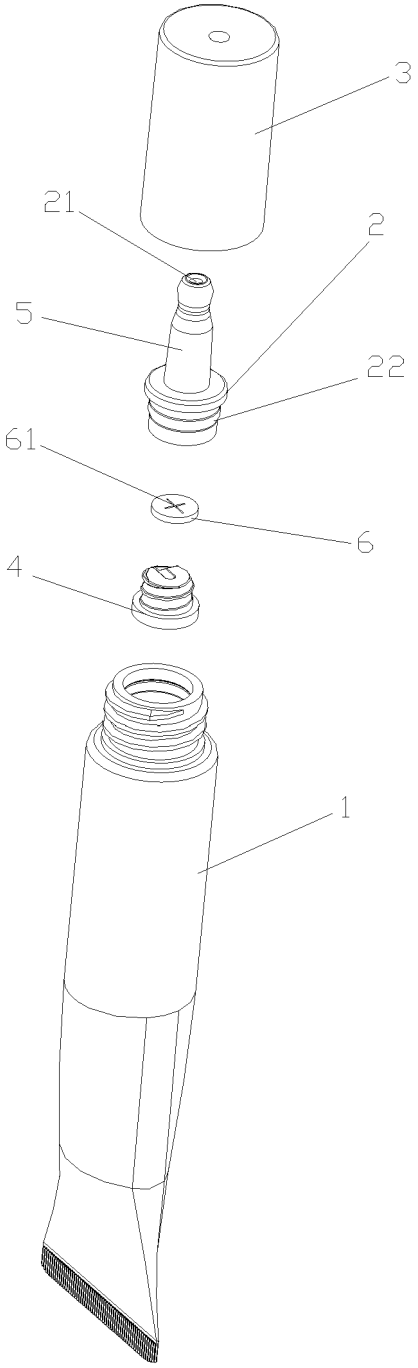

Fig. 2

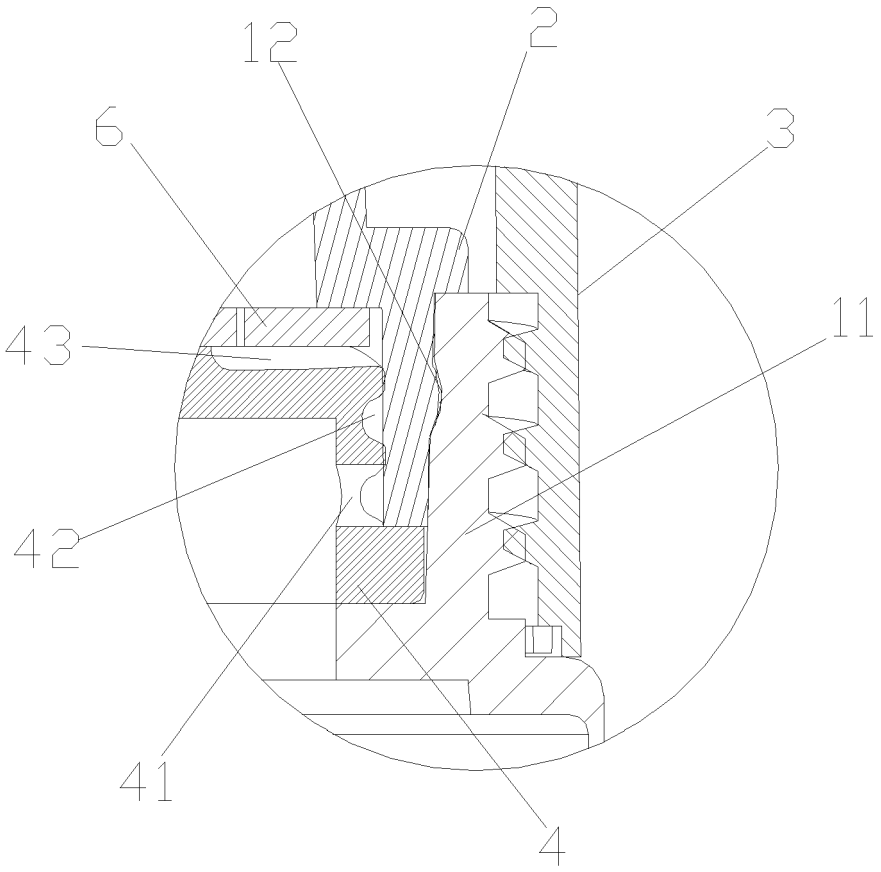

Fig. 3

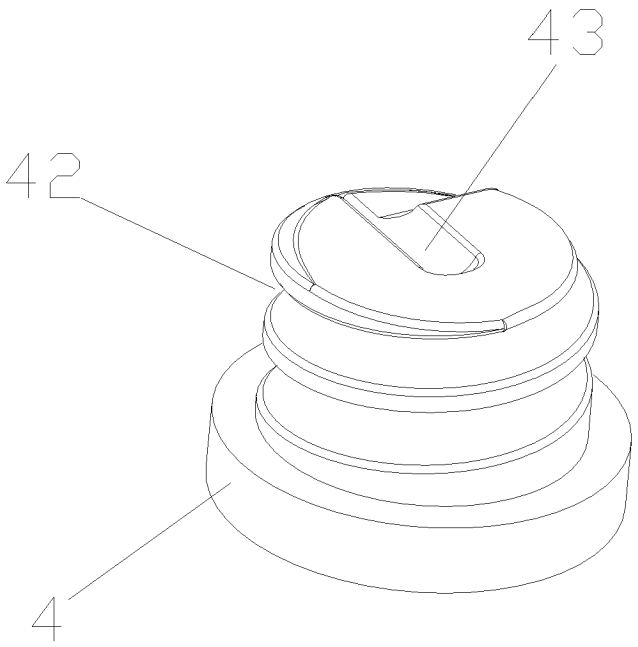

Fig. 4

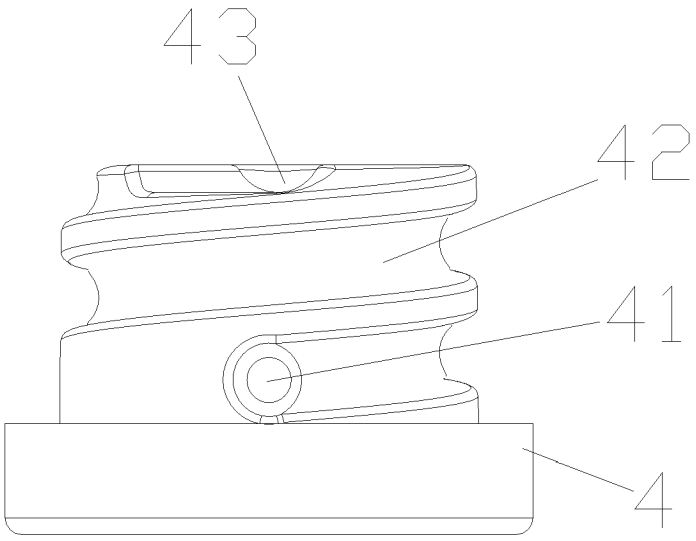

Fig. 5

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- CN 202223284958 **[0001]**
- WO 2016186748 A1 **[0004]**