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(54) **Composite cosmetic container**

Zusammengesetzte Kosmetikbehälter

Récipient pour produit cosmétique composite

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Description

BACKGROUND

[0001] The present invention relates to a container, and more particularly to a composite cosmetic container that is capable of containing multiple cosmetic products and is easy to operate.

[0002] A conventional cosmetic container has a first rotating tube, a second rotating tube, a seat and a vessel. The first rotating tube has an inner surface and two longitudinal grooves formed in the inner surface of the first rotating tube. The second rotating tube is rotatably mounted around the first rotating tube. The second rotating tube has an outer surface and two guide chutes formed through the outer surface of the second rotating tube. The seat has a body and two protrusions. The protrusions are mounted on an outer surface of the body. The protrusions are inserted into the longitudinal grooves and the guide chutes respectively. The vessel is mounted on the body. The vessel has a chamber and an outlet. The chamber is formed in the vessel to contain a cosmetic product. The outlet is formed in the vessel and is in communication with the chamber.

[0003] Users can rotate the first rotating tube, and then the first rotating tube is rotated with the second rotating tube. The protrusions of the seat are moved along the longitudinal grooves of the first rotating tube and the guide chutes of the second rotating tube, and then the seat drives the vessel to move upward or downward. When the vessel moves upward, the outlet of the vessel extends out, and the cosmetic product in the body can be dispensed easily.

[0004] The relative rotation between the first rotating tube and the second rotating tube can only drive a single vessel to move upward or downward, and the vessel only contains one cosmetic product. Therefore, the cosmetic container is not versatile in use.

[0005] To overcome the shortcomings, the present invention tends to provide a composite cosmetic container to mitigate or obviate the aforementioned problems.

[0006] The main objective of the invention is to provide a composite cosmetic container that is capable of containing multiple cosmetic products.

SUMMARY OF THE INVENTION

[0007] The composite cosmetic container according to the invention has a first sleeve, a driving assembly, multiple vessels and a second sleeve. The driving assembly is mounted in the first sleeve and has a first rotating tube, multiple seats and a second rotating tube. The first rotating tube is coactively mounted in the first sleeve and has an outer surface, an inner surface, an annular flange and multiple chutes. The annular flange is formed around the outer surface of the first rotating tube. The chutes are formed through the outer surface of the first rotating tube. The seats are moveably mounted in the first rotating tube. Each seat has an outer surface, a connecting surface, a guide element, a longitudinal track and multiple protrusions. The outer surface of the seat faces the inner surface of the first rotating tube. The connecting surface faces the connecting surface of another seat. The guide element is formed on the outer surface of the seat and protrudes into a corresponding one of the chutes of the first rotating tube. The longitudinal track is mounted on the connecting surface of the seat. The protrusions are formed on the connecting surface of the seat and protrude into the longitudinal track of another seat. The second rotating tube is rotatably mounted around the first rotating tube. The second rotating tube has an inner surface, an annular groove, multiple longitudinal grooves and a plate. The annular groove is formed in the inner surface and connected to the annular flange of the first rotating tube. The longitudinal grooves are formed in the inner surface of the second rotating tube and the guide elements of the seats respectively protrude into the longitudinal grooves. The plate is integrally formed in the inner surface of the second rotating tube and is located above the longitudinal grooves.

[0008] The vessels are respectively mounted in the seats of the driving assembly, and each vessel has a body, a chamber, a pressing head and a cap. The body is mounted in a corresponding one of the seats of the driving assembly. The pressing head is mounted on the body. The cap is mounted on the pressing head and has an outlet, and the cap is located above the plate.

[0009] The second sleeve is coactively mounted on the second rotating tube of the driving assembly.

[0010] The composite cosmetic container has multiple vessels to contain multiple cosmetic products. Therefore, multiple cosmetic products contained in the composite cosmetic container are available as increased options for the user to select for use. Besides, the first sleeve and the first rotating tube are rotated by the user to control the vessels to selectively move upward and selectively protrude out of the second sleeve. Thus, it is convenient to dispense the cosmetic products from the composite cosmetic container. Furthermore, the first sleeve and the first rotating tube are rotated by the user to control the vessels to selectively move downward, and the outlets of the vessels are selectively retracted in the second sleeve. So the composite cosmetic container provides easy control of the vessels to selectively move upward and downward by the relative rotation between the first sleeve and the second sleeve.

[0011] Other objects, advantages and novel features of the invention will become more apparent from the following detailed description when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] The invention will be elucidated on the basis of an exemplary embodiment shown in the attached drawings, in which:

Fig. 1 is a perspective view of a first embodiment of a composite cosmetic container in accordance with the present invention;

Fig. 2 is an exploded perspective view of the composite cosmetic container in Fig. 1;

Fig. 3 is a front view of the composite cosmetic container in Fig. 1;

Fig. 4 is a side view in partial section of the composite cosmetic container along line 4-4 in Fig. 3;

Fig. 5 is an enlarged top view in partial section of the composite cosmetic container along line 5-5 in Fig. 4;

Fig. 6 is a side view of the composite cosmetic container in Fig. 1;

Fig. 7 is a side view in partial section of the composite cosmetic container along line 7-7 in Fig. 6;

Fig. 8 is a front side view in partial section of the composite cosmetic container in Fig. 1 showing a first seat moved upward;

Fig. 9 is a side view in partial section of the composite cosmetic container in Fig. 1 showing a second seat moved downward;

Fig. 10 is a perspective view of the composite cosmetic container in Fig. 1 showing the vessels retracted in a second rotating tube;

Fig. 11 is a perspective view of a second embodiment of a composite cosmetic container in accordance with the present invention; and

Fig. 12 is an exploded perspective view of the composite cosmetic container in Fig. 11.

DETAILED DESCRIPTION OF THE INVENTION

[0013] With reference to Figs. 1, 2, 11 and 12, a composite cosmetic container in accordance with the present invention comprises a first sleeve 10, a driving assembly 1, multiple vessels 50 and a second sleeve 60.

[0014] The first sleeve 10 has a space and an opening. The space is formed in the first sleeve 10. The opening is formed in a top of the first sleeve 10 and is in communication with the space.

[0015] The driving assembly 1 is mounted in the first sleeve 10 and has a first rotating tube 20, multiple seats and a second rotating tube 40. The first rotating tube 20 is coactively mounted in the first sleeve 10 and is located in the space of the first sleeve 10. The first rotating tube 20 has an outer surface, an inner surface, an annular flange 21 and multiple chutes. The annular flange 21 is formed around the outer surface of the first rotating tube 20. The chutes are formed through the outer surface of the first rotating tube 20.

[0016] The seats are moveably mounted in the first rotating tube 20, and each seat has an outer surface, a connecting surface, a guide element 31, a longitudinal track 32 and multiple protrusions 33. The outer surface of the seat faces the inner surface of the first rotating tube 20. The connecting surface of the seat faces the connecting surface of another seat. The guide element 31 is formed on the outer surface of the seat and protrudes into a corresponding one of the chutes of the first rotating tube 20. The longitudinal track 32 is mounted on the connecting surface of the seat. The protrusions 33 are formed on the connecting surface of the seat and protrude into the longitudinal track 32 of another seat. The second rotating tube 40 is rotatably mounted around the first rotating tube 20, and has an inner surface, an annular groove 41, multiple longitudinal grooves 42 and a plate 43. The annular groove 41 is formed in the inner surface of the second rotating tube 40 and is connected to the annular flange 21 of the first rotating tube 20. The longitudinal grooves 42 are formed in the inner surface of the second rotating tube 40, and the guide elements 31 of the seats respectively protrude into the longitudinal grooves 42. The plate 43 is integrally formed in the inner surface of the second rotating tube 40 and is located above the longitudinal grooves 42. With reference to Fig. 2, each seat has a chamber and a top hole. The chamber is formed in the seat. The top hole is formed in a top of the seat and is in communication with the chamber. The second rotating tube 40 has multiple through holes 45 formed through the plate 43, and the through holes 45 face the top holes of the seats respectively.

[0017] With reference to Figs. 2 and 4, the vessels 50 are respectively mounted in the seats of the driving assembly 1. The vessels 50 are inserted through the through holes 45 of the second rotating tube 40 respectively and are inserted into the chambers of the seats. Each vessel 50 has a body 51, a chamber 54, a pressing head 52 and a cap 53. With reference to Fig. 5, the body 51 is mounted in a corresponding one of the seats of the driving assembly 1. The chamber 54 is formed in the body 51. With reference to Fig. 4, the pressing head 52 is mounted on the body 51. The cap 53 is mounted on the pressing head 52 and has an outlet 55, and the cap 53 is located above the plate 43. The vessels 50 can be vacuum vessels or press-type vessels. Furthermore, an outer diameter of the body 51 is smaller than a diameter of the through hole 45.

[0018] The second sleeve 60 is coactively mounted on the second rotating tube 40 of the driving assembly 1.

[0019] With reference to Fig. 2, the multiple chutes of the first rotating tube 20 include a first chute 22 and a second chute 22a. The first chute 22 has a slanting section 24, a first transverse section 25, a second transverse section 26 and a first passage 27. The slanting section 24 has a top end and a bottom end. The first transverse section 25 is connected to the top end of the slanting section 24 of the first chute 22. The second transverse section 26 is connected to the bottom end of the slanting section 24 of the first chute 22 and has a distal end. The first passage 27 is connected to the distal end of the second transverse section 26 of the first chute 22 and longitudinally extends to a top end of the first rotating tube 20. The second chute 22a has a slanting section 24, a first transverse section 25, a second transverse section 26 and a second passage 28. The slanting section 24 of the second chute 22a has a top end and a

bottom end. The first transverse section 25 of the second chute 22a is connected to the top end of the slanting section 24 of the second chute 22a and has a distal end. The second transverse section 26 of the second chute 22a is connected to the bottom end of the slanting section 24 of the second chute 22a. The second passage 28 is connected to the distal end of the first transverse section 25 of the second chute 22a and longitudinally extends to a top end of the first rotating tube 20, and is located at a position diametrically opposite to the first passage 27 of the first chute 22.The multiple seats of the driving assembly 1 include a first seat 30 and a second seat 30a. The first seat 30 has the guide element 31 as described, and the guide element 31 of the first seat 30 protrudes through the first chute22. The second seat 30a has the guide element 31 as described, and the guide element 31 of the second seat 30a protrudes through the second chute 22a.

[0020] With reference to Figs. 1, 2 and 5, the first rotating tube 20 has multiple first grooves 23 formed in the outer surface of the first rotating tube 20. The first sleeve 10 has multiple first ribs 11. The first ribs 11 are formed in an inner surface of the first sleeve 10 and respectively protrude into the first grooves 23 of the first rotating tube 20. With reference to Fig. 2, the second rotating tube 40 has multiple second grooves 44 formed in an outer surface of the second rotating tube 40.The second sleeve 60 has multiple second ribs 61. The second ribs 61 are formed in an inner surface of the second sleeve 60 and respectively protrude into the second grooves 44 of the second rotating tube 40. Furthermore, the first sleeve 10 and the second sleeve 60 are hollow cylinders.

[0021] With reference to Figs. 11 and 12, in the second embodiment, the first rotating tube 20 has a first chute 22 and a second chute 22a. The first chute 22 has a slanting section 24, a first transverse section 25, a second transverse section 26 and a first passage 27. The slanting section 24 has a top end and a bottom end. The first transverse section 25 is connected to the top end of the slanting section 24 of the first chute 22. The second transverse section 26 is connected to the bottom end of the slanting section 24 of the first chute 22. The first passage 27 is connected to the slanting section 24 of the first chute 22 and longitudinally extends to a top end of the first rotating tube 20. The second chute 22a has a slanting section 24, a first transverse section 25, a second transverse section 26 and the second passage 28. The slanting section 24 has a top end and a bottom end. The first transverse section 25 is connected to the top end of the slanting section 24 of the second chute 22a. The second transverse section 26 is connected to the bottom end of the slanting section 24 of the second chute 22a. The second passage 28 is connected to the second transverse section 26 of the second chute 22a and longitudinally extends to a top end of the first rotating tube 20, and is diametrically opposite to the first passage 27 of the first chute 22. In addition, the first sleeve 10 and the second sleeve 60 are hollow rectangular prisms.

[0022] With reference to Fig. 10, when multiple cosmetic products respectively stored in the vessels 50 are not yet dispensed, the caps 53 of the vessels 50 are retracted and hidden in the second rotating tube 40, and the outlets 55 of the caps 53 are retracted and hidden in the second rotating tube 40. Moreover, the guide element 31 of the first seat 30 is located in the second transverse section 26 of the first chute 22. The guide element 31 of the second seat 30a is located in the second transverse section 26 of the second chute 22a.

[0023] With reference to Figs. 2 to 4, the first sleeve 10 is rotated in a clockwise rotation to drive the first rotating tube 20 to rotate. With reference to Fig. 8, the guide element 31 of the first seat 30 moves from the second transverse section 26 of the first chute 22 to the first transverse section 25 of the first chute 22. In the meanwhile, the guide element 31 of the first seat 30 moves upward along a corresponding one of the longitudinal grooves 42 of the second rotating tube 40. With reference to Fig. 9, the guide element 31 of the second seat 30a moves to the distal end of the second transverse section 26 of the second chute 22a simultaneously. During the upward movement of the first seat 30, the guide element 31 of the second seat 30a remains moving in the second transverse section 26 of the second chute 22a. Therefore, the second seat 30a does not move upward or downward. With reference to Figs. 4 and 7, the outlet 55 of one of the vessels 50 mounted in the first seat 30 is exposed out of the second sleeve 60. The outlet 55 of the vessel 50 mounted in the second seat 30a is hidden in the second sleeve 60.

[0024] Furthermore, the first sleeve 10 is rotated in an anticlockwise rotation. The guide element 31 of the first seat 30 moves from the first transverse section 25 of the first chute 22 to the slanting section 24 of the first chute 22, and the guide element 31 of the first seat 30 moves downward along a corresponding one of the longitudinal grooves 42 of the second rotating tube 40. The guide element 31 of the first seat 30 keeps on moving to the second transverse section 26 of the first chute 22. At the same time, the guide element 31 of the second seat 30a moves from the distal end of the second transverse section 26 of the second chute 22a to a bottom end of the slanting section 24 of the second chute 22a. The caps 53 of the vessels 50 mounted in the first seat 30 and the second seat 30a are retracted into the second rotating tube 40. As the first sleeve 10 keeps rotating in the anticlockwise rotation, the guide element 31 of the first seat 30 moves to the distal end of the second transverse section 26 of the first chute 22. In the meanwhile, the guide element 31 of the second seat 30a moves from the bottom end of the slanting section 24 of the second chute 22a to the first transverse section 25 of the second chute 22a, and the second seat 30a moves upward along a corresponding one of the longitudinal grooves 42 of the second rotating tube 40. Therefore, the outlet 55 of the vessel 50 mounted in the second seat 30a is exposed out of the second sleeve 60. The outlet 55 of the vessel

50 mounted in the first seat 30 is hidden in the second sleeve 60.

[0025] The composite cosmetic container has multiple vessels 50 to contain multiple cosmetic products, such as lotions or perfumes. Users can rotate the first sleeve 10 to select one of the vessels 50 to move upward for conveniently dispensing the cosmetic product contained in the selected vessel 50. In addition, the outer diameter of the body 51 is smaller than the diameter of the through hole 45. Therefore, the vessels 50 are easy to be changed for replacement.

[0026] Accordingly, the composite cosmetic container has multiple vessels 50 to contain multiple cosmetic products, so the options of the cosmetic products stored therein are increased. Besides, the composite cosmetic container facilitates easy control of the vessels 50 to selectively move upward or downward by the relative rotation between the first sleeve 10 and the second sleeve 60.

[0027] Even though numerous characteristics and advantages of the present invention have been set forth in the foregoing description, together with details of the structure and function of the invention, the disclosure is illustrative only, and changes may be made in detail, especially in matters of shape, size, and arrangement of parts within the principles of the invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.

Claims

1. A composite cosmetic container, wherein the composite cosmetic container comprises:

a first sleeve (10);
a driving assembly (1) mounted in the first sleeve (10) and having

a first rotating tube (20) coactively mounted in the first sleeve (10) and having

an outer surface;
an inner surface;
an annular flange (21) formed around the outer surface of the first rotating tube (20); and
multiple chutes formed through the outer surface of the first rotating tube (20);

multiple seats moveably mounted in the first rotating tube (20) and each seat having

an outer surface facing the inner surface of the first rotating tube (20);
a connecting surface facing the connecting surface of another seat;
a guide element (31) formed on the outer surface of the seat and protruding into a corresponding one of the chutes of the first rotating tube (20);
a longitudinal track (32) mounted on the connecting surface of the seat; and
multiple protrusions (33) formed on the connecting surface of the seat and protruding into the longitudinal track (32) of another seat; and

a second rotating tube (40) rotatably mounted around the first rotating tube (20) and having

an inner surface;
an annular groove (41) formed in the inner surface and connected to the annular flange (21) of the first rotating tube (20);
multiple longitudinal grooves (42) formed in the inner surface of the second rotating tube (40), and the guide elements (31) of the seats respectively protruding into the longitudinal grooves (42); and
a plate (43) integrally formed in the inner surface of the second rotating tube (40) and located above the longitudinal grooves (42);

multiple vessels (50) respectively mounted in the seats of the driving assembly (1) and each vessel (50) having

a body (51) mounted in a corresponding one of the seats of the driving assembly (1);
a chamber (54) formed in the body (51);
a pressing head (52) mounted on the body (51); and
a cap (53) mounted on the pressing head (52) and having an outlet (55), and the cap (53) located above the plate (43); and

a second sleeve (60) coactively mounted on the second rotating tube (40) of the driving assembly (1).

2. The composite cosmetic container as claimed in claim 1, wherein
the multiple chutes of the first rotating tube (20) include

a first chute (22) having

a slanting section (24) having a top end and a bottom end;
a first transverse section (25) connected to

the top end of the slanting section (24) of the first chute (22);
a second transverse section (26) connected to the bottom end of the slanting section (24) of the first chute (22) and having a distal end; and
a first passage (27) connected to the distal end of the second transverse section (26) of the first chute (22) and longitudinally extending to a top end of the first rotating tube (20);

a second chute (22a) having

a slanting section (24) having a top end and a bottom end;
a first transverse section (25) connected to the top end of the slanting section (24) of the second chute (22a) and having a distal end;
a second transverse section (26) connected to the bottom end of the slanting section (24) of the second chute (22a); and
a second passage (28) connected to the distal end of the first transverse section (25) of the second chute (22a), longitudinally extending to a top end of the first rotating tube (20), and located at a position diametrically opposite to the first passage (27) of the first chute (22); and

the multiple seats of the driving assembly (1) include

a first seat (30) having the guide element (31), and the guide element (31) of the first seat (30) protruding through the first chute (22); and
a second seat (30a) having the guide element (31), and the guide element (31) of the second seat (30a) protruding through the second chute (22a).

3. The composite cosmetic container as claimed in claim 1 or 2, wherein
the first rotating tube (20) has

multiple first grooves (23) formed in the outer surface of the first rotating tube (20); and

the first sleeve (10) has

multiple first ribs (11) formed in an inner surface of the first sleeve (10) and respectively protruding into the first grooves (23) of the first rotating tube (20).

4. The composite cosmetic container as claimed in any one of claims 1 to 3, wherein
the second rotating tube (40) has

multiple second grooves (44) formed in an outer surface of the second rotating tube (40); and

the second sleeve (60) has

multiple second ribs (61) formed in an inner surface of the second sleeve (60) and respectively protruding into the second grooves (44) of the second rotating tube (40).

5. The composite cosmetic container as claimed in claim 4, wherein the first sleeve (20) and the second sleeve (60) are hollow cylinders.

6. The composite cosmetic container as claimed in claim 1, wherein
the multiple chutes of the first rotating tube (20) include

a first chute (22) having

a slanting section (24) having a top end and a bottom end;
a first transverse section (25) connected to the top end of the slanting section (24) of the first chute (22);
a second transverse section (26) connected to the bottom end of the slanting section (24) of the first chute (22); and
a first passage (27) connected to the slanting section (24) of the first chute (22) and longitudinally extending to a top end of the first rotating tube (20);

a second chute (22a) having

a slanting section (24) having a top end and a bottom end;
a first transverse section (25) connected to the top end of the slanting section (24) of the second chute (22a);
a second transverse section (26) connected to the bottom end of the slanting section (24) of the second chute (22a); and
a second passage (28) connected to the second transverse section (26) of the second chute (22a) and longitudinally extending to a top end of the first rotating tube (20), and the second passage (28) being diametrically opposite to the first passage (27) of the first chute (22); and

the multiple seats of the driving assembly (1) include

a first seat (30) having the guide element (31), and the guide element (31) of the first seat (30) protruding out the first chute (22); and
a second seat (30a) having the guide element (31), and the guide element (31) of the second seat (30a) protruding out the second chute (22a).

7. The composite cosmetic container as claimed in claim 6, wherein the first sleeve (10) and the second sleeve (60) are hollow rectangular prisms.

Patentansprüche

1. Ein kosmetischer Kombibehälter, wobei der kosmetische Kombibehälter umfasst:

eine erste Aufsteckhülse (10);
eine Austriebsbaugruppe (1), die in der ersten Aufsteckhülse (10) befestigt ist und folgendes aufweist:

ein erstes sich drehendes Röhrchen (20), das in der ersten Aufsteckhülse (10) in mit dieser zusammenwirkender Weise befestigt ist, und

eine äußere Oberfläche;
eine innere Oberfläche;
einen ringförmigen Flansch (21), der um die äußere Oberfläche des ersten sich drehenden Röhrchens (20) ausgebildet ist; und
mehrere rinnenförmige Vertiefungen, die über die äußere Oberfläche des ersten sich drehenden Röhrchens (20) ausgebildet sind, aufweist;

mehrere Einsätze, die in dem ersten sich drehenden Röhrchen (20) entfernbar angebracht sind, wobei jeder Einsatz

eine äußere Oberfläche, die der inneren Oberfläche des ersten sich drehenden Röhrchens (20) zugewandt ist;
eine Kontaktfläche, die der Kontaktfläche eines weiteren Einsatzes zugewandt ist;
ein Führungselement (31), das an der äußeren Oberfläche des Einsatzes ausgebildet ist und sich in eine entsprechende der rinnenförmigen Vertiefungen des ersten sich drehenden Röhrchens (20) hinein erstreckt;
eine Längsführung (32), die an der Kontaktfläche des Einsatzes angebracht ist, und
mehrere Erhebungen (33), die auf der Kontaktfläche des Einsatzes ausgebildet sind und sich in die Längsführung (32) eines weiteren Einsatzes hinein erstrecken,
aufweist; und

ein zweites sich drehendes Röhrchen (40), das um das erste sich drehende Röhrchen (20) drehbar angebracht ist und

eine innere Oberfläche;
eine ringförmige Rille (41), die in der inneren Oberfläche ausgebildet ist und mit dem ringförmigen Flansch (21) des ersten sich drehenden Röhrchens (20) verbunden ist; mehrere Längsrillen (42), die in der inneren Oberfläche des zweiten sich drehenden Röhrchens (40) ausgebildet sind, wobei sich die Führungselemente (31) der jeweils Einsätze in die Längsrillen (42) hinein erstrecken, und
eine Platte (43), die in der inneren Oberfläche des zweiten sich drehenden Röhrchens (40) in einem Stück ausgebildet ist und oberhalb der Längsrillen (42) angeordnet ist, aufweist;

mehrere Gefäße (50), die jeweils in den Einsätzen der Austriebsbaugruppe (1) befestigt sind, und jedes Gefäß (50)

einen Korpus (51), der in einem der entsprechenden Einsätze der Austriebsbaugruppe (1) befestigt ist,
eine Kammer (54), die in dem Korpus (51) ausgebildet ist; einen Druckkopf (52), der auf dem Korpus (51) befestigt ist; und
eine Kappe (53), die auf dem Druckkopf (52) angebracht ist und eine Austrittsöffnung (55) aufweist, wobei die Kappe (53) oberhalb der Platte (43) angeordnet ist, aufweist, und

eine zweite Aufsteckhülse (60), die auf dem zweiten sich drehenden Röhrchen (40) der Austriebsbaugruppe (1) mit dieser zusammenwirkend angebracht ist.

2. Der kosmetische Kombibehälter wie in Anspruch 1 beansprucht, wobei die mehrfachen rinnenförmigen Vertiefungen des ersten sich drehenden Röhrchens (20) umfassen:

eine erste rinnenförmige Vertiefung (22) mit

einem geneigten Abschnitt (24), der ein oberes Ende und ein unteres Ende aufweist;
einem ersten querverlaufenden Abschnitt (25), der mit dem oberen Ende des geneigten Abschnitts (24) der ersten rinnenförmigen Vertiefung (22) verbunden ist;
einem zweiten querverlaufenden Bereich (26), der mit dem unteren Ende des geneigten Abschnitts (24) der ersten rinnenförmigen Vertiefung (22) verbunden ist und ein entfernt liegendes Ende aufweist, und
einem ersten Durchgang (27), der mit dem entfernt liegenden Ende des zweiten querverlaufenden Abschnitts (26) der ersten rinnenförmigen Vertiefung (22) verbunden ist und sich in Längsrichtung auf ein oberes Ende des ersten sich drehenden Röhrchens (20) hin erstreckt;

eine zweite rinnenförmige Vertiefung (22a) mit

einem geneigten Abschnitt (24), der ein oberes Ende und ein unteres Ende aufweist;
einem ersten querverlaufenden Abschnitt (25), der mit dem oberen Ende des geneigten Abschnitts (24) der zweiten rinnenförmigen Vertiefung (22a) verbunden ist und ein entfernt liegendes Ende aufweist;
einem zweiten querverlaufenden Bereich (26), der mit dem unteren Ende des geneigten Bereiches (24) der zweiten rinnenförmigen Vertiefung (22a) verbunden ist, und
einem zweiten Durchgang (28), der mit dem entfernt liegenden Ende des ersten querverlaufenden Abschnitts (25) der zweiten rinnenförmigen Vertiefung (22a) verbunden ist, der sich in Längsrichtung auf ein oberes Ende des ersten sich drehenden Röhrchens (20) hin erstreckt, und an einer Position angeordnet ist, die dem ersten Durchgang (27) der ersten rinnenförmigen Vertiefung (22) diametral gegenüber liegt; und

die mehreren Einsätze der Austriebsbaugruppe (1) folgendes umfassen:

einen ersten Einsatz (30) mit dem Führungselement (31),
wobei das Führungselement (31) des ersten Einsatzes (30) sich durch die erste rinnenförmige Vertiefung (22) erstreckt, und
einen zweiten Einsatz (30a) mit dem Führungselement (31),
wobei das Führungselement (31) des zweiten Einsatzes (30a) sich durch die zweite rinnenförmige Vertiefung (22a) erstreckt.

3. Der kosmetische Kombibehälter wie in Anspruch 1 oder 2 beansprucht, wobei
das erste sich drehende Röhrchen (20)

mehrere erste Rillen (23), die in der äußeren Oberfläche des ersten sich drehenden Röhrchens (20) ausgebildet sind, aufweist; und

die erste Aufsteckhülse (10)

mehrere erste Rippen (11), die an einer inneren Oberfläche der ersten Aufsteckhülse (10) ausgebildet sind und sich jeweils in die ersten Rillen (23) des ersten sich drehenden Röhrchens (20) erstrecken, aufweist.

4. Der kosmetische Kombibehälter wie in einem der Ansprüche 1 bis 3 beansprucht, wobei
das zweite sich drehende Röhrchen (40)

mehrere zweite Rillen (44), die in einer äußeren Oberfläche des zweiten sich drehenden Röhrchens (40) ausgebildet sind, aufweist; und

die zweite Aufsteckhülse (60)

mehrere zweite Rippen (61), die in einer inneren Oberfläche der zweiten Aufsteckhülse (60) ausgebildet sind und sich jeweils in die zweiten Rillen (44) des zweiten sich drehenden Röhrchens (40) erstrecken, aufweist.

5. Der kosmetische Kombibehälter wie in Anspruch 4 beansprucht, wobei die erste Aufsteckhülse (10) und die zweite Aufsteckhülse (60) hohle Zylinder sind.

6. Der kosmetische Kombibehälter wie in Anspruch 1 beansprucht, wobei die mehreren rinnenförmigen Vertiefungen des ersten sich
drehenden Röhrchens (20) folgendes aufweisen:

eine erste rinnenförmige Vertiefung (22) mit

einem geneigten Abschnitt (24) mit einem oberen Ende und einem unteren Ende;
einem ersten querverlaufenden Bereich (25), der mit dem oberen Ende des geneigten Abschnitts (24) der ersten rinnenförmigen Vertiefung (22) verbunden ist;
einem zweiten querverlaufenden Abschnitt (26), der mit dem unteren Ende des geneigten Abschnitts (24) der ersten rinnenförmigen Vertiefung (22) verbunden ist, und einem ersten Durchgang (27), der mit dem geneigten Abschnitt (24) der ersten rinnenförmigen Vertiefung (22) verbunden ist und sich in Längsrichtung auf ein oberes Ende des ersten sich drehenden Röhrchens (20)

hin erstreckt;

eine zweite rinnenförmigen Vertiefung (22a) mit

einem geneigten Abschnitt (24) mit einem oberen Ende und einem unteren Ende;
einem ersten querverlaufenden Abschnitt (25), der mit dem oberen Ende des geneigten Abschnitts (24) der zweiten rinnenförmigen Vertiefung (22a) verbunden ist;
einem zweiten querverlaufenden Abschnitt (26), der mit dem unteren Ende des geneigten Abschnitts (24) der zweiten rinnenförmigen Vertiefung (22a) verbunden ist, und
einem zweiten Durchgang (28), der mit dem zweiten querverlaufenden Abschnitt (26) der zweiten rinnenförmigen Vertiefung (22a) verbunden ist und sich in Längsrichtung auf ein oberes Ende des ersten sich drehenden Röhrchens (20) hin erstreckt, und der zweite Durchgang (28) dem ersten Durchgang (27) der ersten rinnenförmigen Vertiefung (22) diametral gegenüberliegt, und

die mehreren Einsätze der Austriebsbaugruppe (1)

einen ersten Einsatz (30) mit dem Führungselement (31), wobei das Führungselement (31) des ersten Einsatzes (30) sich aus der ersten rinnenförmigen Vertiefung (22) erstreckt, und
einen zweiten Einsatz (30a) mit dem Führungselement (31),
wobei das Führungselement (31) des zweiten Einsatzes (30a) sich aus der zweiten rinnenförmigen Vertiefung (22a) erstreckt,
umfassen.

7. Der kosmetische Kombibehälter wie in Anspruch 6 beansprucht, wobei die erste Aufsatzhülse (10) und die zweite Aufsatzhülse (60) hohle rechteckige Prismen sind.

Revendications

1. Récipient pour produit cosmétique composite dans lequel le récipient pour produit cosmétique composite comprend:

un premier manchon (10);
un ensemble d'entraînement (1) monté dans le premier manchon (10) et ayant:

un premier tube rotatif (20) monté de manière coactive dans le premier manchon (10) et ayant:

une surface externe;
une surface interne;
une bride annulaire (21) formée autour de la surface externe du premier tube rotatif (20); et
plusieurs goulottes formées à travers la surface externe du premier tube rotatif (20);

plusieurs sièges montés de manière mobile dans le premier tube rotatif (20) et chaque siège ayant:

une surface externe faisant face à la surface interne du premier tube rotatif (20);
une surface de raccordement faisant face à la surface de raccordement d'un autre siège;
un élément de guidage (31) formé sur la surface externe du siège et faisant saillie dans une goulotte correspondante des goulottes du premier tube rotatif (20);
un rail longitudinal (32) monté sur la surface de raccordement du siège; et
plusieurs saillies (33) formées sur la surface de raccordement du siège et faisant saillie dans le rail longitudinal (32) d'un autre siège; et

un second tube rotatif (40) monté de manière rotative autour du premier tube rotatif (20) et ayant:

une surface interne;
une rainure annulaire (41) formée dans la surface interne et raccordée à la bride annulaire (21) du premier tube rotatif (20);
plusieurs rainures longitudinales (42) formées dans la surface interne du second tube rotatif (40), et les éléments de guidage (31) des sièges faisant respectivement saillie dans les rainures longitudinales (42); et
une plaque (43) formée de manière solidaire dans la surface interne du second tube rotatif (40) et positionnée au-dessus des rainures longitudinales (42);

plusieurs récipients (50) respectivement montés dans les sièges de l'ensemble d'entraînement (1) et chaque récipient (50) ayant:

un corps (51) monté dans un siège correspondant des sièges de l'ensemble d'entraî-

nement (1) ;
une chambre (54) formée dans le corps (51);
une tête de pression (52) montée sur le corps (51); et
un capuchon (53) monté sur la tête de pression (52) et ayant une sortie (55), et le capuchon (53) étant positionné au-dessus de la plaque (43); et
un second manchon (60) monté de manière coactive sur le second tube rotatif (40) de l'ensemble d'entraînement (1).

2. Récipient pour produit cosmétique composite selon la revendication 1, dans lequel:

la pluralité de goulottes du premier tube rotatif (20) comprend:

une première goulotte (22) ayant:

une section inclinée (24) ayant une extrémité supérieure et une extrémité inférieure;
une première section transversale (25) raccordée à l'extrémité supérieure de la section inclinée (24) de la première goulotte (22);
une seconde section transversale (26) raccordée à l'extrémité inférieure de la section inclinée (24) de la première goulotte (22) et ayant une extrémité distale; et
un premier passage (27) raccordé à l'extrémité distale de la seconde région transversale (26) de la première goulotte (22) et s'étendant longitudinalement vers une extrémité supérieure du premier tube rotatif (20);

une seconde goulotte (22a) ayant:

une section inclinée (24) ayant une extrémité supérieure et une extrémité inférieure;
une première section transversale (25) raccordée à l'extrémité supérieure de la section inclinée (24) de la seconde goulotte (22a) et ayant une extrémité distale;
une seconde section transversale (26) raccordée à l'extrémité inférieure de la section inclinée (24) de la seconde goulotte (22a); et
un second passage (28) raccordé à l'extrémité distale de la première section transversale (25) de la seconde goulotte (22a), s'étendant longitudinalement vers une extrémité supérieure du premier tube rotatif (20), et positionné dans une position diamétralement opposée au premier passage (27) de la première goulotte (22); et

la pluralité de sièges de l'ensemble d'entraînement (1) comprend:

un premier siège (30) ayant l'élément de guidage (31), et l'élément de guidage (31) du premier siège (30) faisant saillie à travers la première goulotte (22); et
un second siège (30a) ayant l'élément de guidage (31), et l'élément de guidage (31) du second siège (30a) faisant saillie à travers la seconde goulotte (22a).

3. Récipient pour produit cosmétique composite selon la revendication 1 ou 2, dans lequel:

le premier tube rotatif (20) a:

plusieurs premières rainures (23) formées dans la surface externe du premier tube rotatif (20); et

le premier manchon (10) a:

une pluralité de premières nervures (11) formées dans une surface interne du premier manchon (10) et faisant respectivement saillie dans les premières rainures (23) du premier tube rotatif (20).

4. Récipient pour produit cosmétique composite selon l'une quelconque des revendications 1 à 3, dans lequel:

le second tube rotatif (40) a:

une pluralité de secondes rainures (44) formées dans une surface externe du second tube rotatif (40); et

le second manchon (60) a:

une pluralité de secondes rainures (61) formées dans une surface interne du second manchon (60) et faisant respectivement saillie dans les secondes rainures (44) du second tube rotatif (40).

5. Récipient pour produit cosmétique composite selon la revendication 4, dans lequel le premier manchon (20) et le second manchon (60) sont des cylindres creux.

6. Récipient pour produit cosmétique composite selon la revendication 1, dans lequel:

la pluralité de goulottes du premier tube rotatif (20) comprend:

une première goulotte (22) ayant:

une section inclinée (24) ayant une extrémité supérieure et une extrémité inférieure;
une première section transversale (25) raccordée à l'extrémité supérieure de la section inclinée (24) de la première goulotte (22);
une seconde section transversale (26) raccordée à l'extrémité inférieure de la section inclinée (24) de la première goulotte (22); et
un premier passage (27) raccordé à la section inclinée (24) de la première goulotte (22) et s'étendant longitudinalement vers une extrémité supérieure du premier tube rotatif (20);

une seconde goulotte (22a) ayant:

une section inclinée (24) ayant une extrémité supérieure et une extrémité inférieure;
une première section transversale (25) raccordée à l'extrémité supérieure de la section inclinée (24) de la seconde goulotte (22a);
une seconde section transversale (26) raccordée à l'extrémité inférieure de la section inclinée (24) de la seconde goulotte (22a); et
un second passage (28) raccordé à la seconde section transversale (26) de la seconde goulotte (22a) et s'étendant longitudinalement vers une extrémité supérieure du premier tube rotatif (20), et le second passage (28) étant diamétralement opposé au premier passage (27) de la première goulotte (22); et

la pluralité de sièges de l'ensemble d'entraînement (1) comprend:

un premier siège (30) ayant l'élément de guidage (31), et l'élément de guidage (31) du premier siège (30) faisant saillie de la première goulotte (22); et
un second siège (30a) ayant l'élément de guidage (31), et l'élément de guidage (31) du second siège (30a) faisant saillie de la seconde goulotte (22a).

7. Récipient pour produit cosmétique composite selon la revendication 6, dans lequel le premier manchon (10) et le second manchon (60) sont des prismes rectangulaires creux.

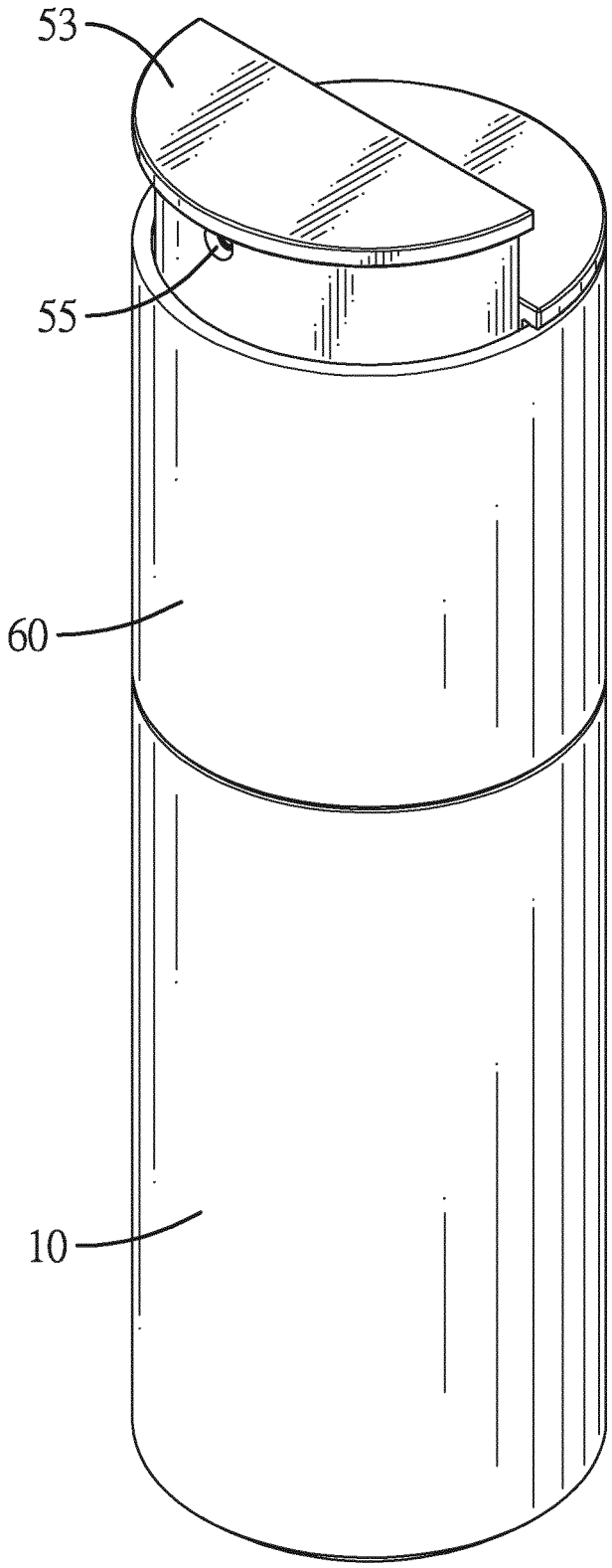

FIG. 1

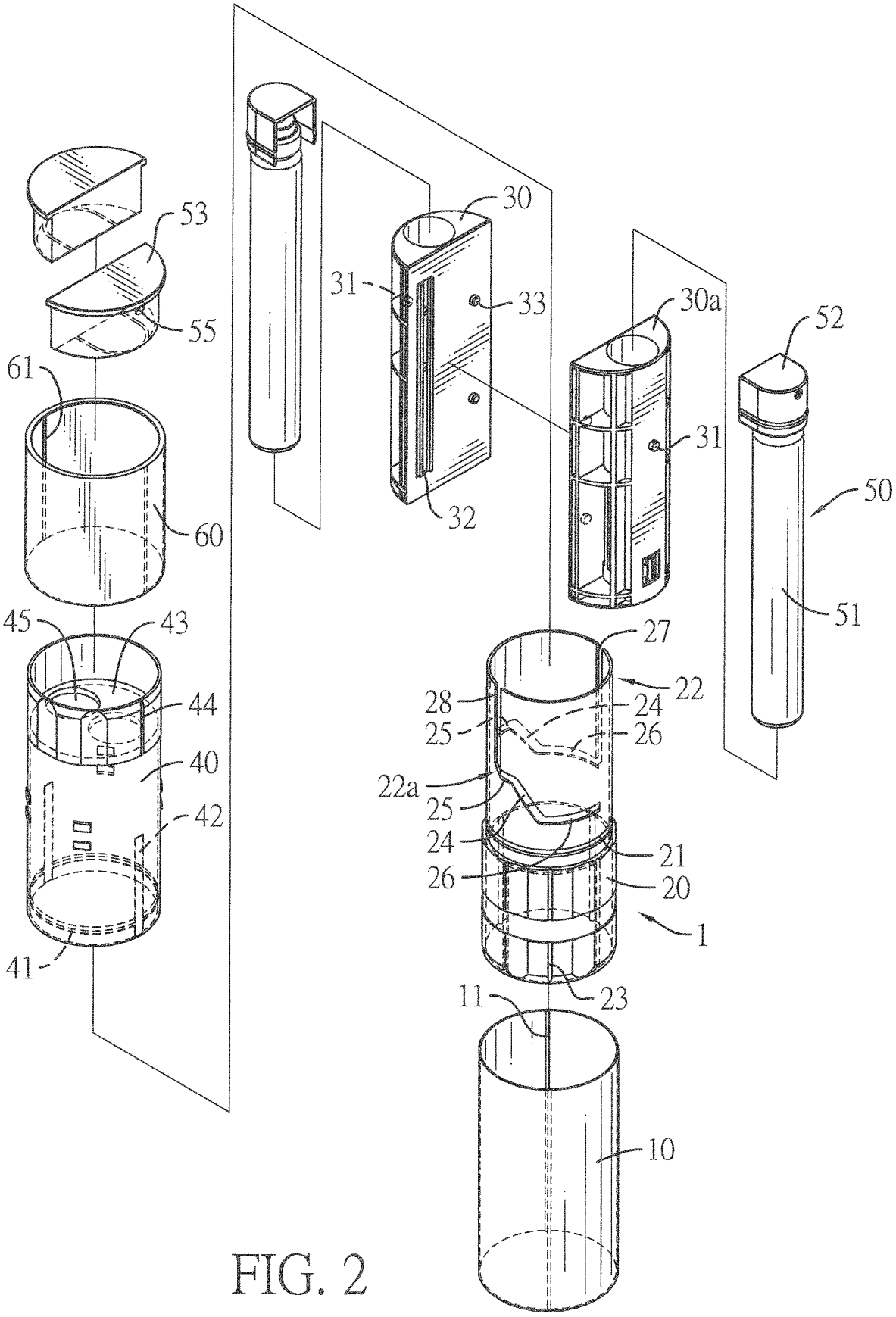
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FIG. 2

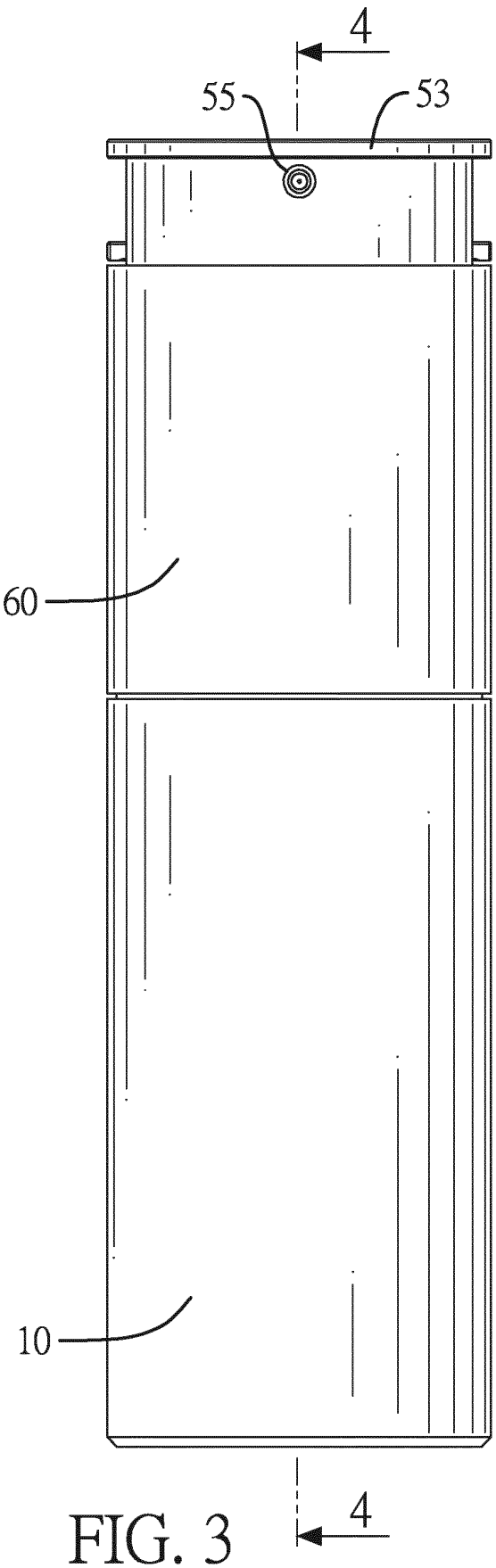

FIG. 3

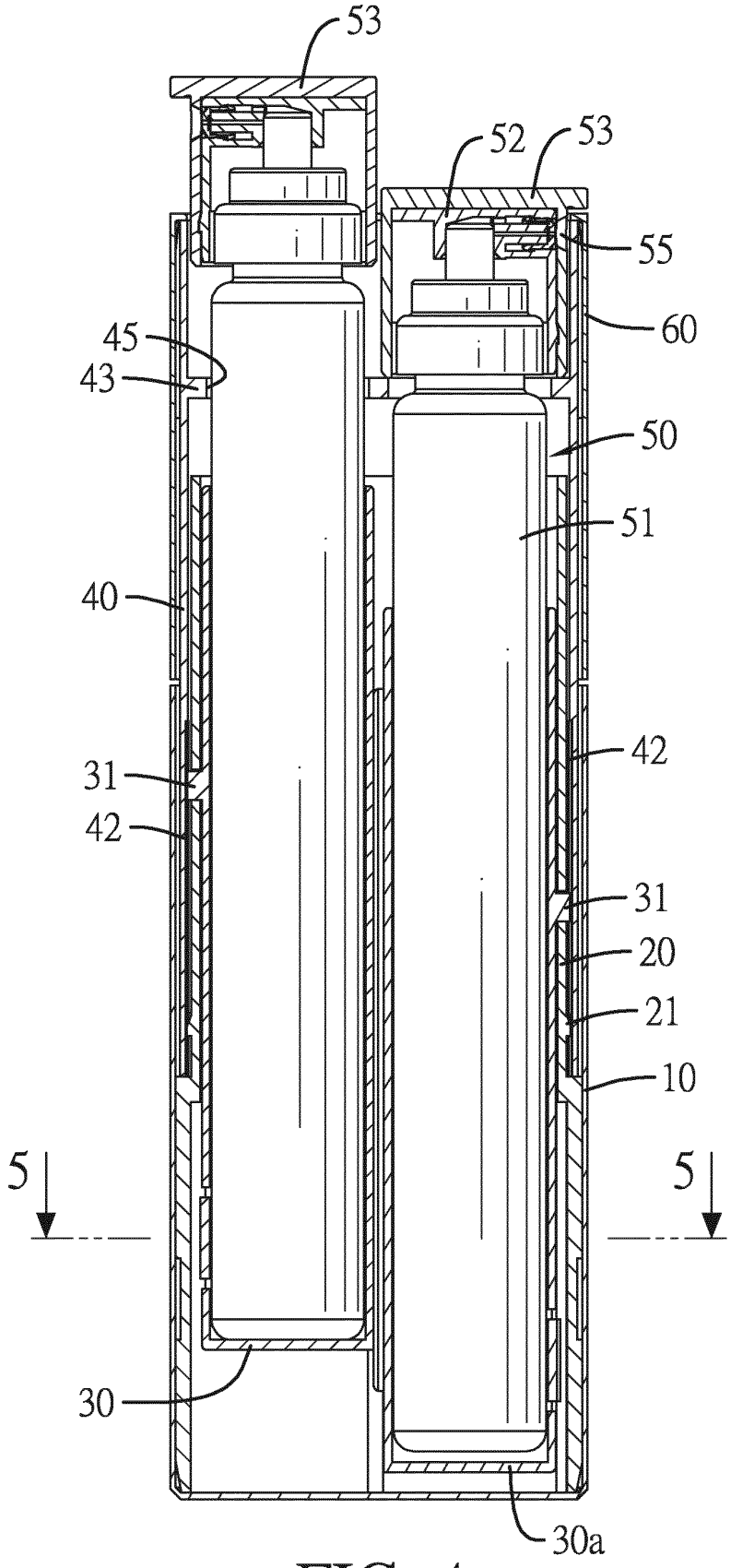

FIG. 4

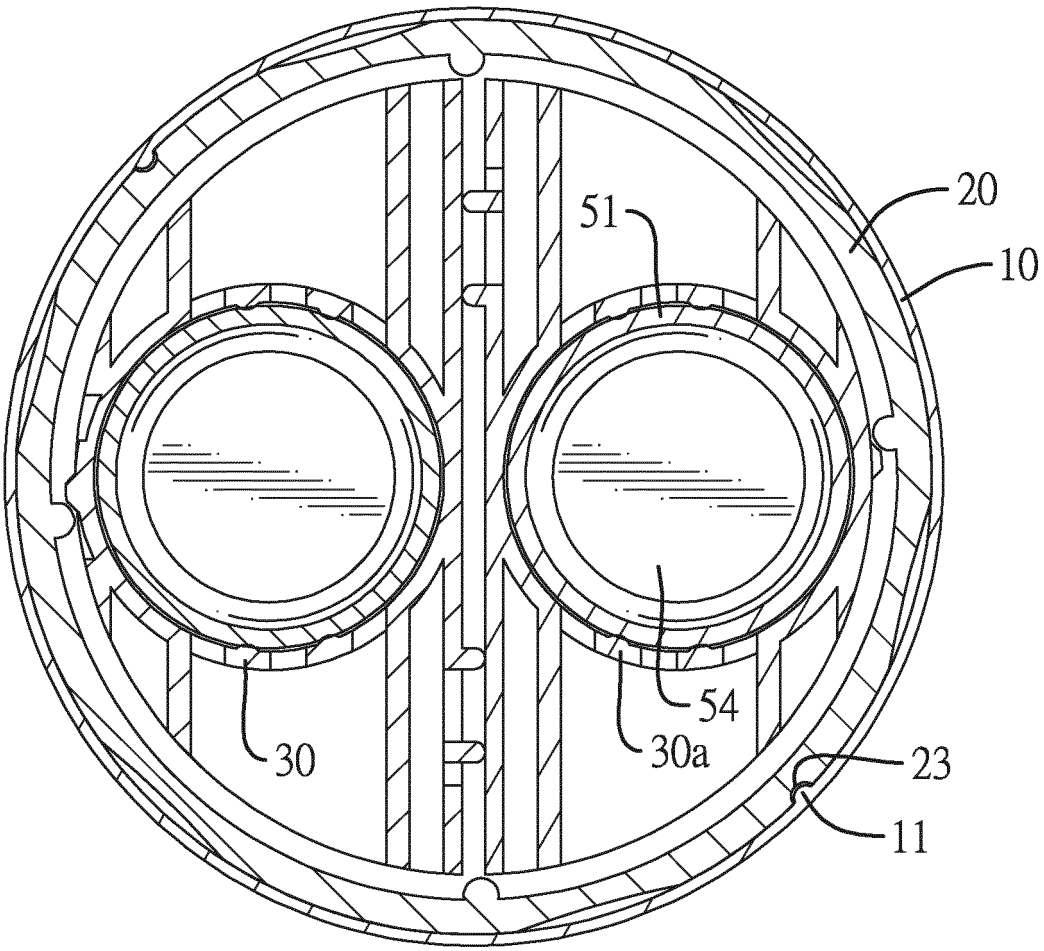

FIG. 5

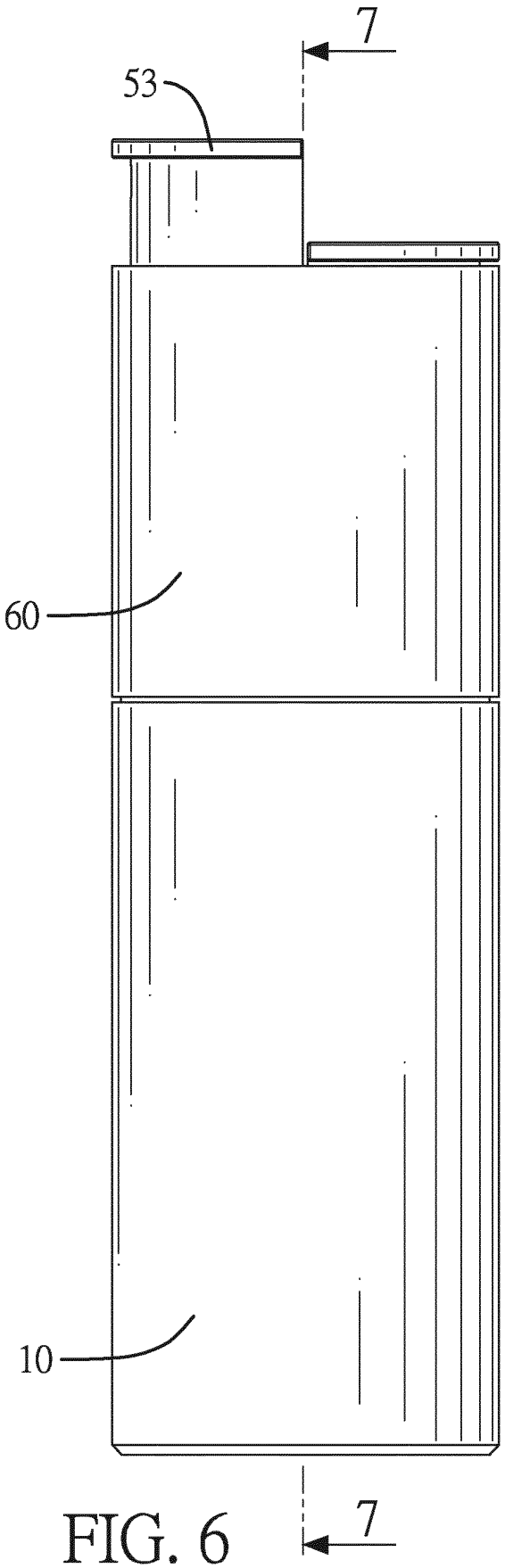

FIG. 6

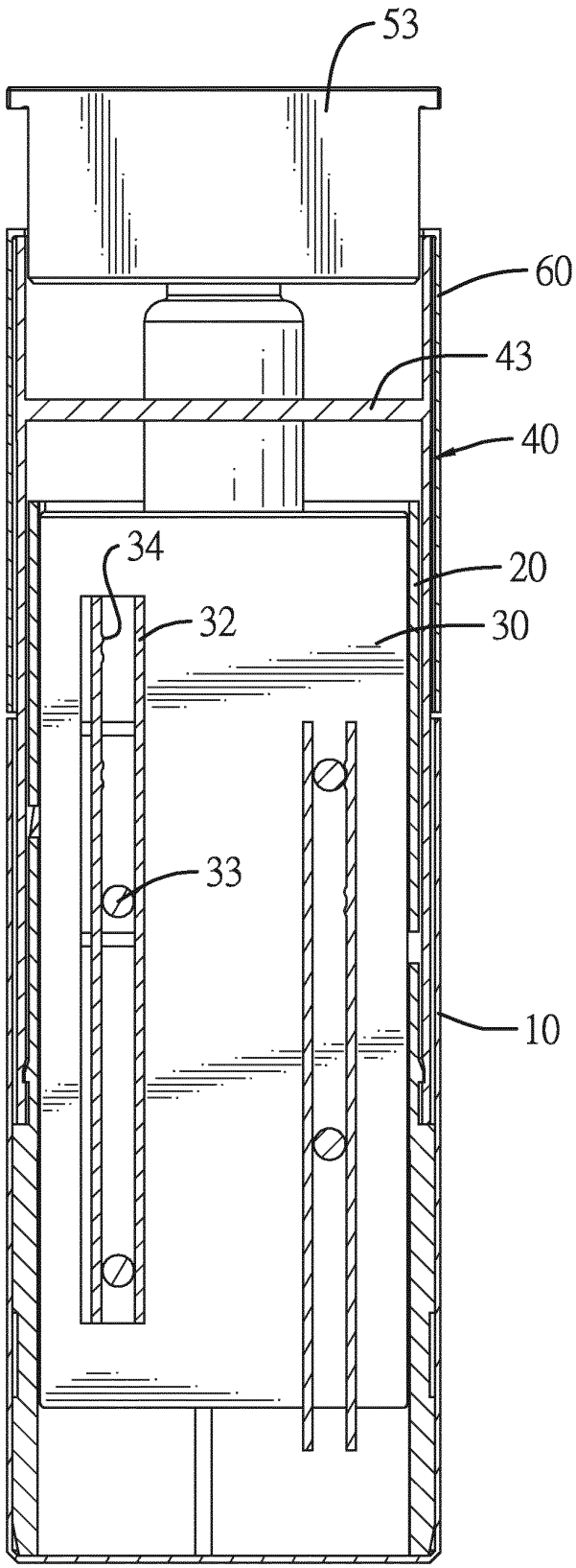

FIG. 7

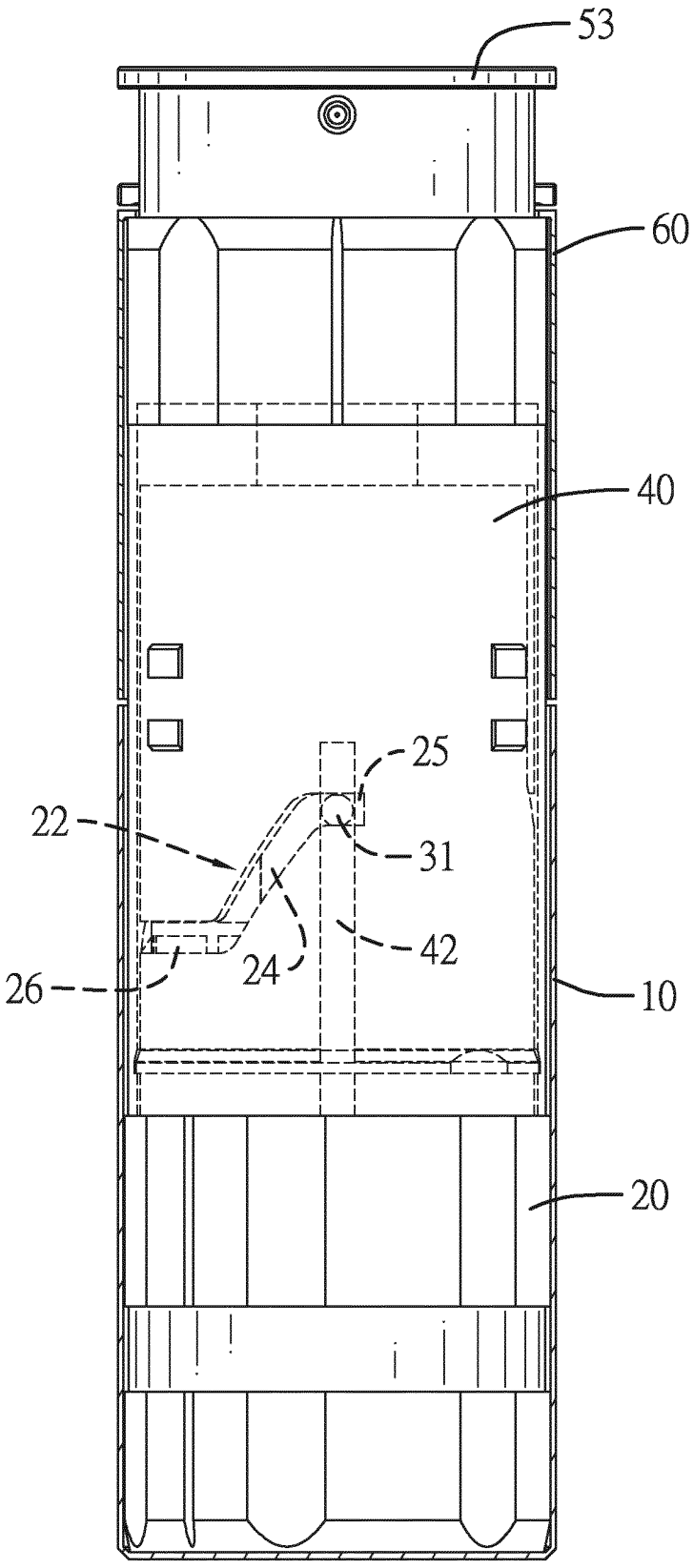

FIG. 8

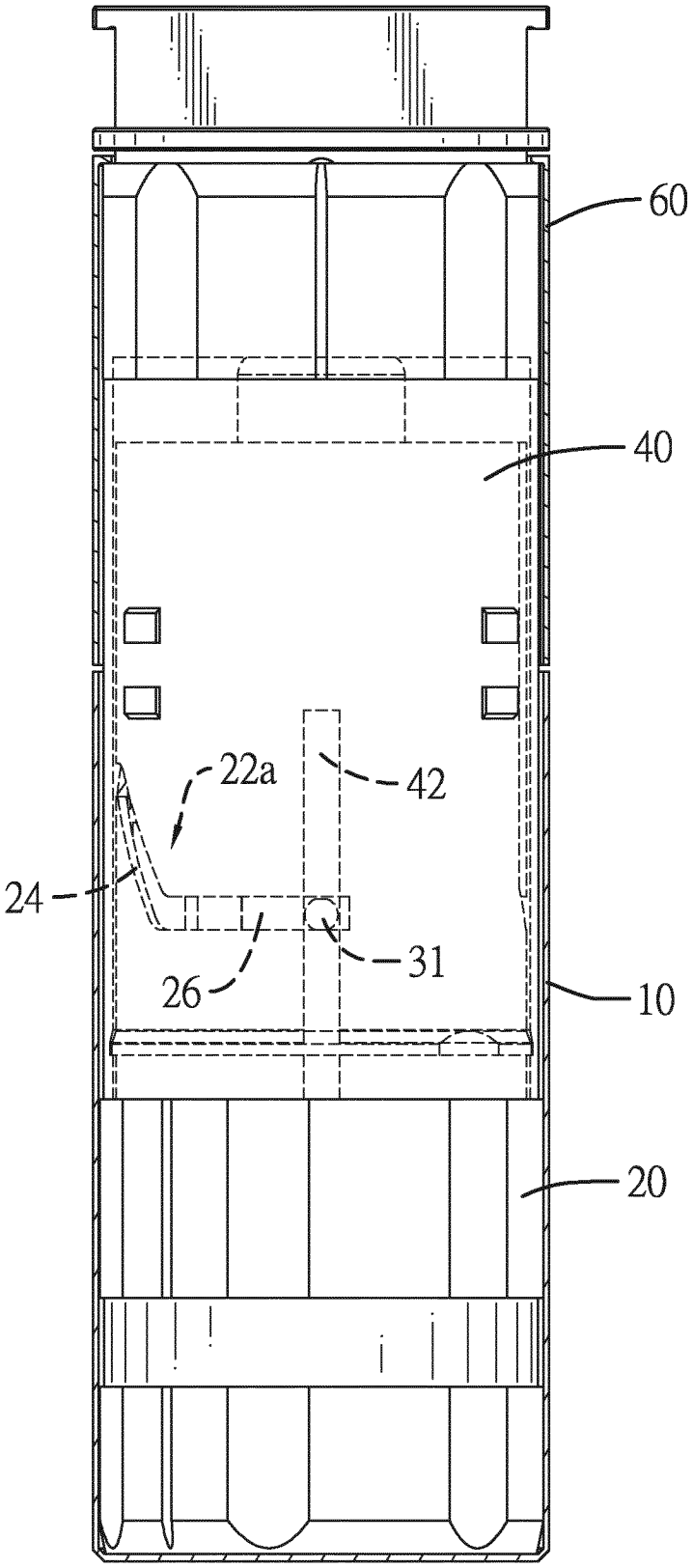

FIG. 9

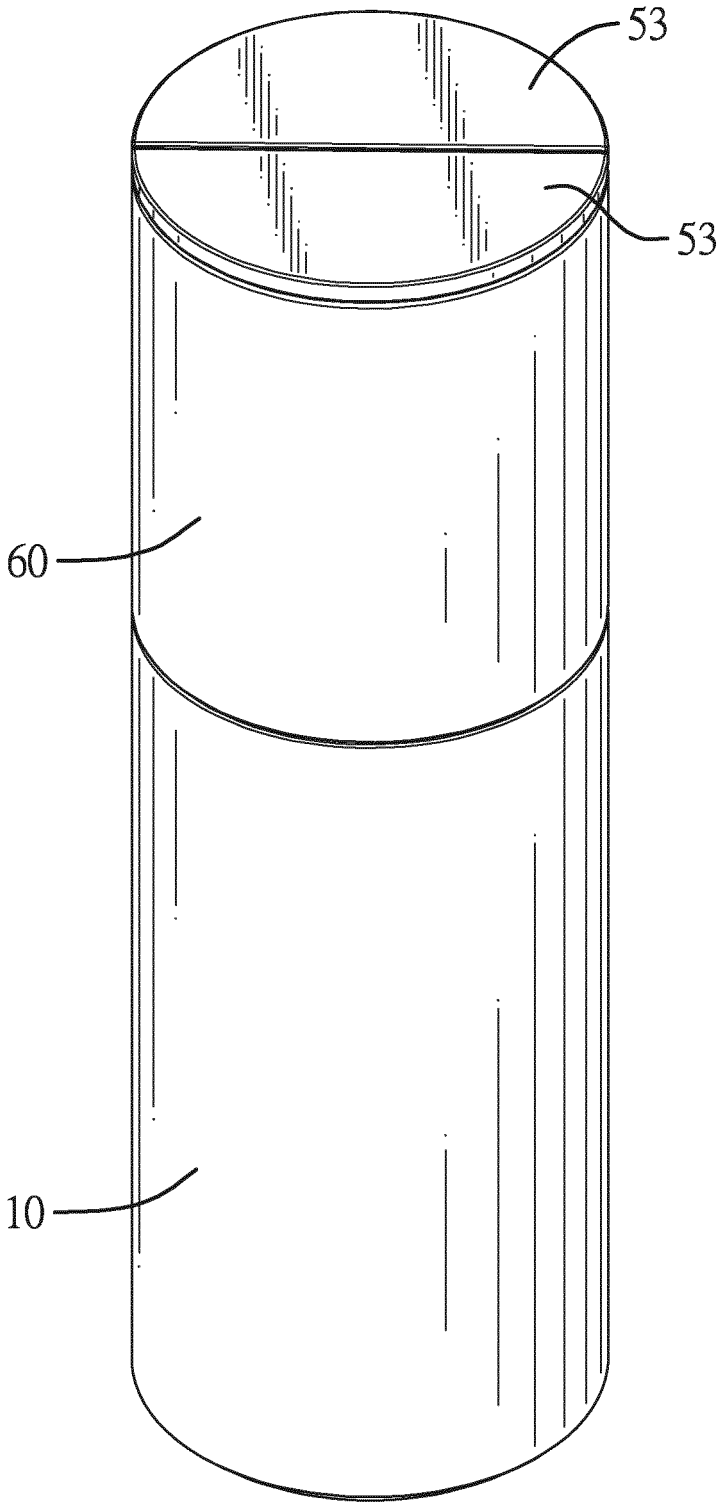

FIG. 10

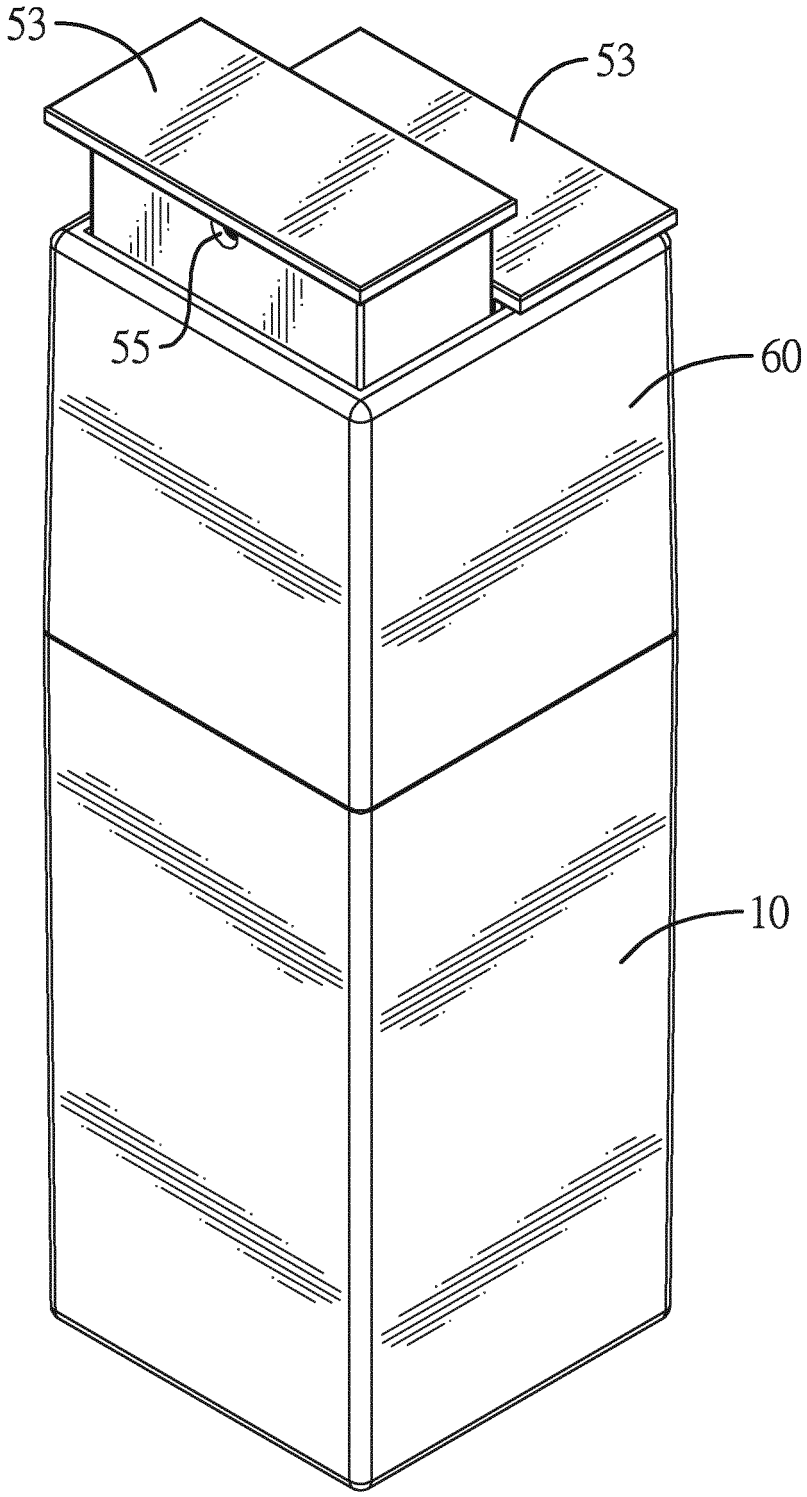

FIG. 11

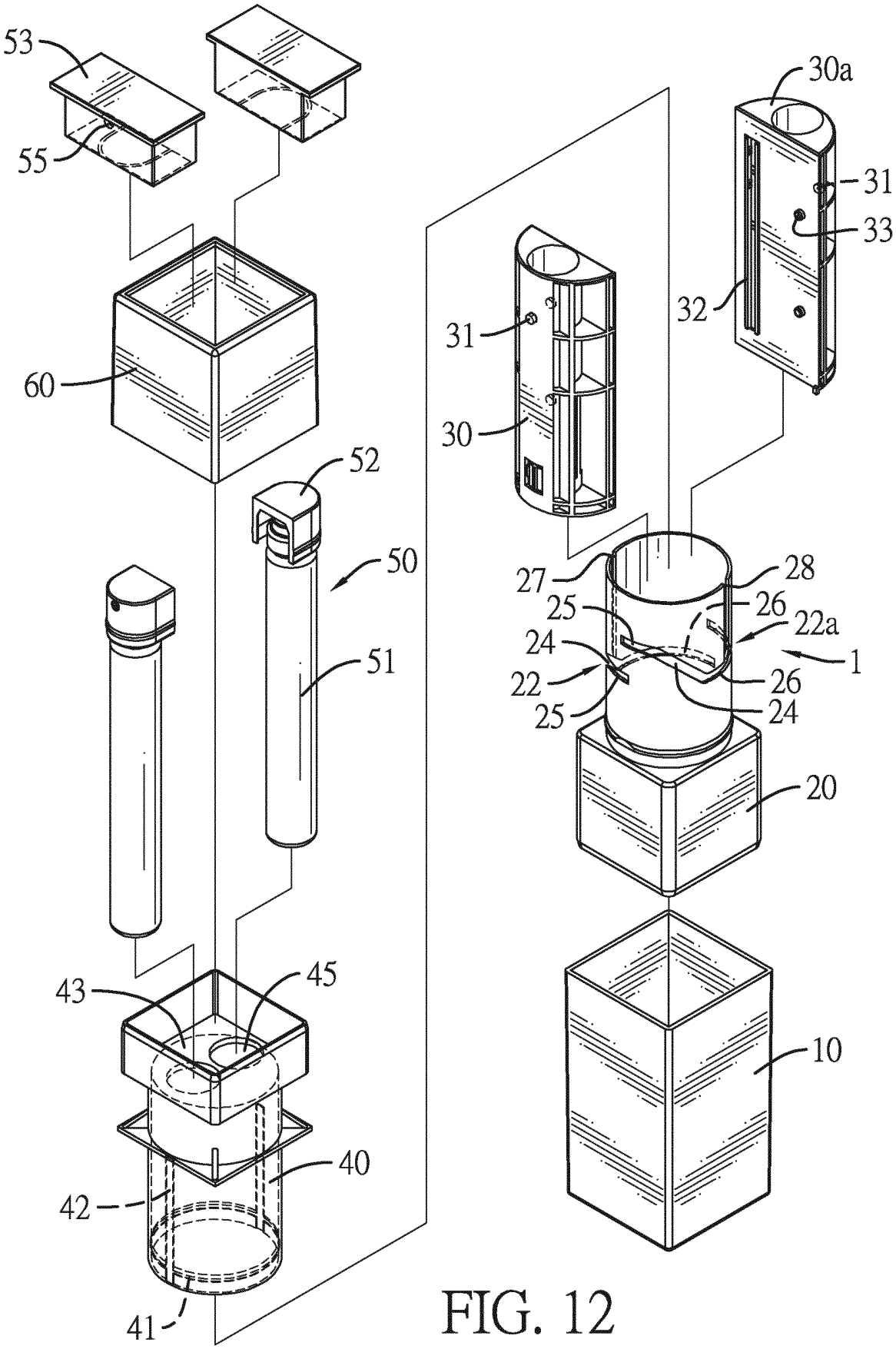
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FIG. 12