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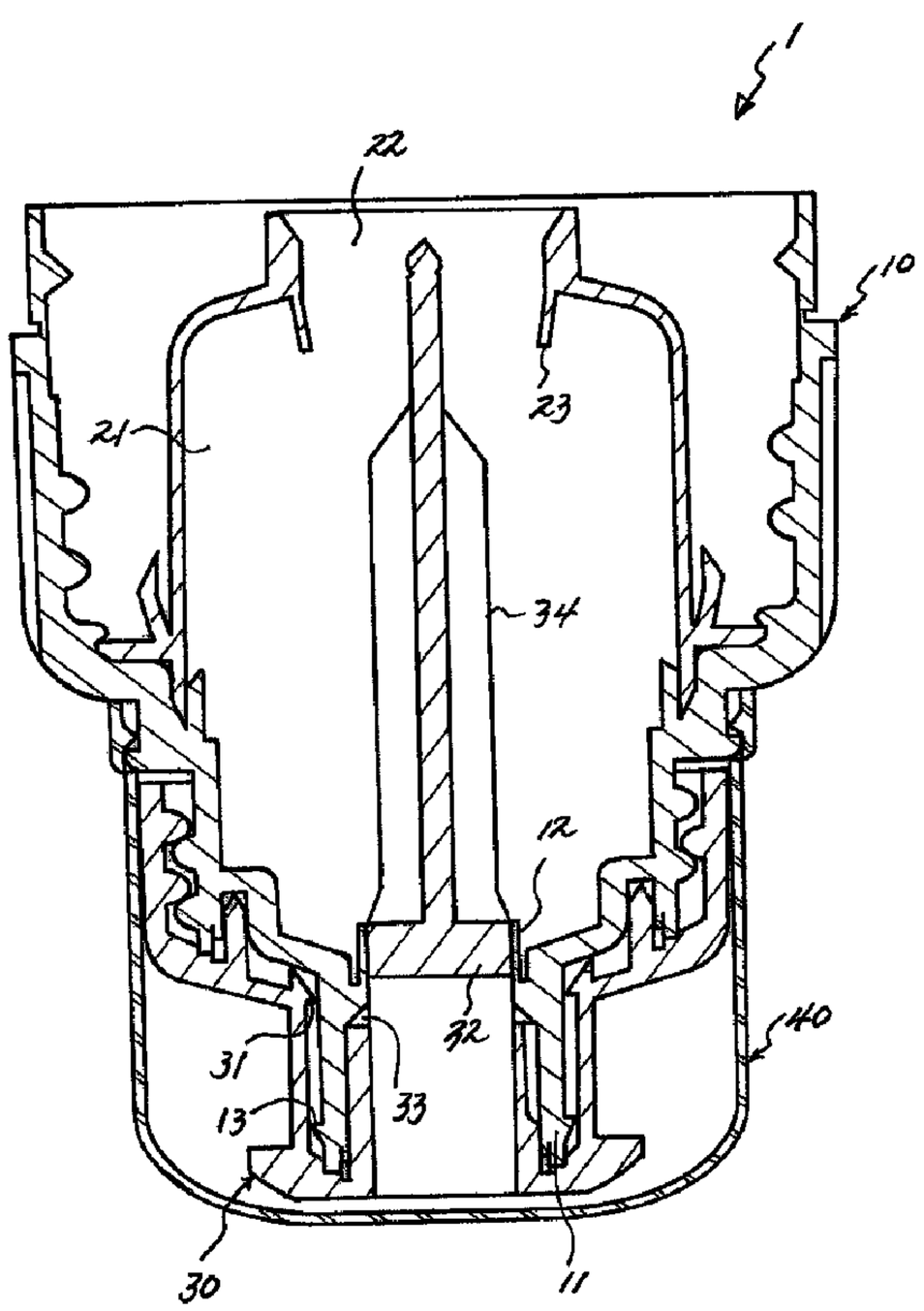
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(54) Titre : ENSEMBLE COIFFE AVEC CHAMBRE DE STOCKAGE POUR MATERIAU SECONDAIRE AVEC ELEMENT DE TRAVAIL MOBILE

(54) Title: CAP ASSEMBLY HAVING STORAGE CHAMBER FOR SECONDARY MATERIAL WITH MOVABLE WORKING MEMBER



(57) Abrégé/Abstract:
The storage chamber for secondary material applicable to the discharging direction of contents stored in the container consists of body with storage space and inseparable operating section mounted around the globe. If above operating section moves up,

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(57) Abrégé(suite)/Abstract(continued):
opening and closing hole made or formed in the storage space of storage is opened and contents stored in the storage space is dropped and mixed with contents stored in the container. The mixed contents are discharged via a vent mounted on the top of operating section. A vent is not opened until the operating section is opened, and closing section of opening and closing hole is provided so that the opening and closing hole may not be not clogged after being opened.

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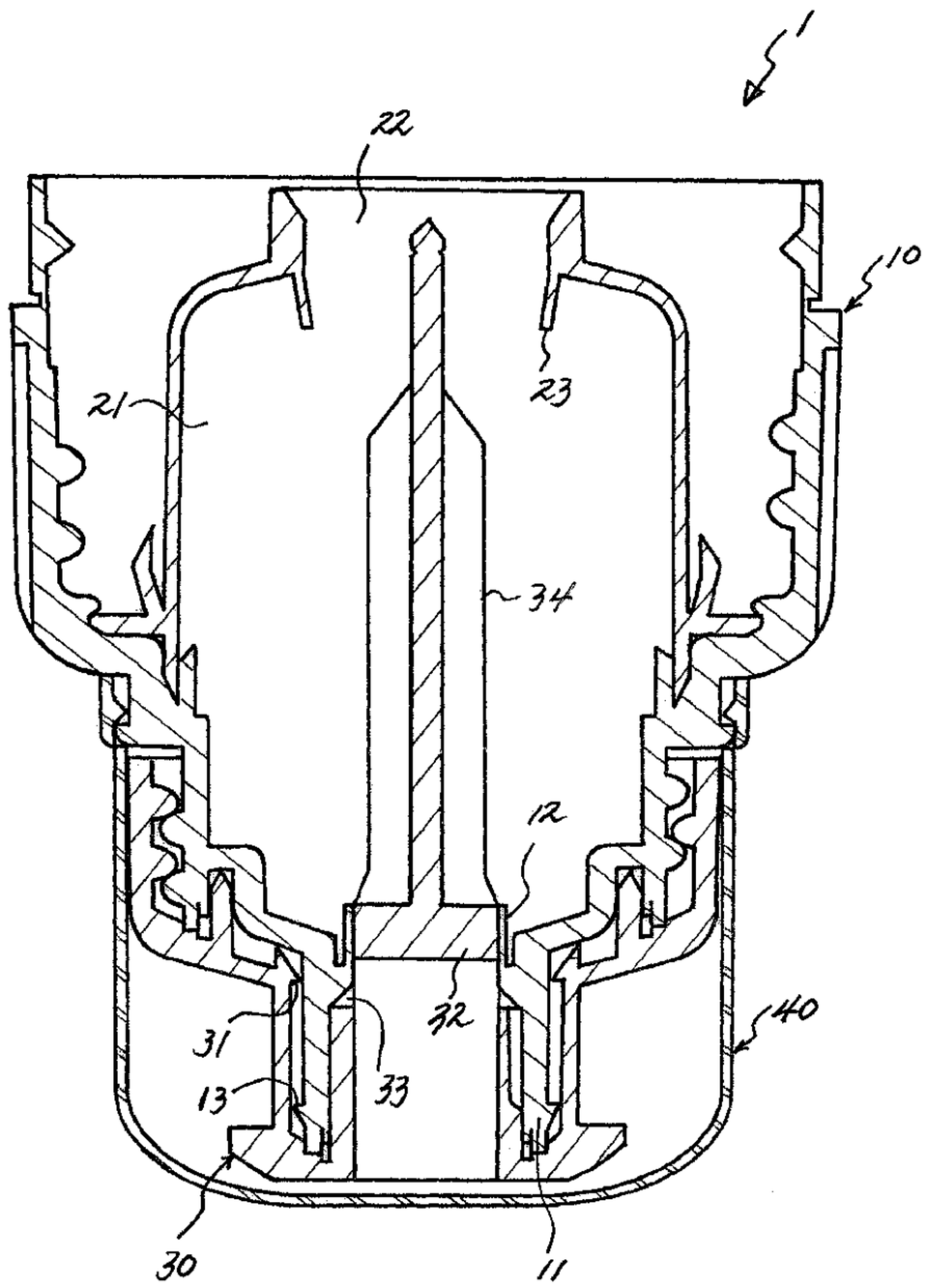
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(54) Title: STORAGE CHAMBER FOR SECONDARY MATERIAL



(57) Abstract: The storage chamber for secondary material applicable to the discharging direction of contents stored in the container consists of body with storage space and inseparable operating section mounted around the globe. If above operating section moves up, opening and closing hole made or formed in the storage space of storage is opened and contents stored in the storage space is dropped and mixed with contents stored in the container. The mixed contents are discharged via a vent mounted on the top of operating section. A vent is not opened until the operating section is opened, and closing section of opening and closing hole is provided so that the opening and closing hole may not be not clogged after being opened.

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TITLE

CAP ASSEMBLY HAVING STORAGE CHAMBER FOR SECONDARY MATERIAL WITH MOVABLE WORKING MEMBER

TECHNICAL FIELD

This invention is on the storage chamber for secondary material. In detail, this invention is on the structure of storage chamber required for effectively mixing the concentrate and water or concentrate and general beverage or granule and water or powder and water.

This invention may be used for the diverse purposes to improve the mixing efficiency of different materials such as medical, pharmaceutical, cosmetic and industrial purposes.

Background Technologies

Additional space is required in the container for mixing the powder or concentrate with the liquid beverage stored in the container.

The structures intended to mix other materials in these containers have been invented through the US Patent No. 6,962,254, US Patent No. 6,230,884 and US Patent No. 6,854,595.

However, this structure has not been popularized because it shows some problems in terms of function, mixing efficiency, adaptability to production line and use convenience.

The technology (PCT/EP2002/004523:2002. 01. 17) invented or developed by a joint venture organized among an American company, German company and Austrian company and another technology invented or developed by a Japanese company are highlighted in the global market. However, the technology invented or developed by a Japanese company is commercialized for the first time in the world.

However, the technology (JP-P-2001-00185428:2001. 06. 19) invented or developed by a Japanese company shows a problem. In other words, the part forming a part of opening section drops in the container and children may swallow this dropped part, so the container neck of new form focused on preventing the separation of exhaust device is developed. However, this neck is inapplicable to the existing container, so this new container neck has some problem as well.

Also, the invention, recorded via an US Patent No. 2003-72850, shows some problems in terms of airtight, operating efficiency, or when manufacturing the mold and filling the content.

Detailed Descriptions of Invention

Technical Problems

The purpose of this invention is to enable the people to easily drink the beverage via an operating section mounted on this invention.

Another purpose of this invention is to provide the storage chamber for secondary material promising the use convenience by allowing the contents stored in the storage space to be dropped and mixed in the container.

Other purpose of this invention is to enable the contents stored in the storage space to be easily mixed by preventing the closing section of opening and closing hole from being closed after being opened.

Other purpose of this invention is to prevent the refill of poisonous substances or foreign substances in the storage space of reception section by designing the closing section not to be closed again after the closing section is separated from the reception section.

How to Technically Solve the Problems

Storage chamber for secondary material, invented or developed by this invention under the intention of accomplishing above goals, consists of body combined or adhered to the direction where the contents stored in the container is discharged, storage (storage space of contents). The

contents stored in this storage are opened when the operating section moves up and down and then dropped and mixed with contents stored in the container.

The structure for mixing the different materials developed or invented by this invention is combined, attached and adhered to the direction where the contents stored in the container are discharged. Above storage for mixing the different materials consists of body with storage and opening and closing hole to open and close the contents stored in the storage space mounted on the bottom of storage.

Above opening and closing hole is closed by the operating section combined or connected to the globe of body and closing section of opening and closing hole connected to the operating section, and if the operating section moves up, opening and closing hole is opened and contents mixed in the container are discharged via a vent operated when the operating section moves up. This storage chamber for secondary material is characterized by its above components.

Also, if above operating section is closed, closing section of opening and closing hole does not close the opening and closing hole because of removal rack, so it remains opened.

Expected Effects

This invention enables its users to easily drop and mix the different materials only by opening the operating section after storing the powder and granule or concentrate in the additional storage space separated from the contents stored in the container.

Also, this invention enables its users to conveniently drink the beverage via an operating section.

Also, the closing section of opening and closing hole is not opened again after it is opened, so it is not available to fill any foreign substance in the storage or change the contents.

BRIEF DESCRIPTION OF THE DRAWINGS

The figures 1 thru 6 show the desirable operations of this invention.

The figure 1 shows the appearance of this invention when the opening and closing hole is opened.

The figure 2 shows the appearance of this invention when the storage space is filled with the contents via an opened hole.

The figure 3 shows that the opening and closing hole is closed by the closing section after filling the storage space with contents.

The figure 4 shows that the storage chamber for secondary material

is combined with the container.

The figure 5 shows that the contents, stored in the storage space of receiving section, are dropped and mixed in the container when moving up the operating section.

The figure 6 shows that the operating & closing section opens the opening and closing hole after being caught by the removal rack when returning the operating section to its original position under the condition shown in the figure 5.

The figures 7 thru 23 show the other operations of this invention.

The figure 7 shows that the storage space is filled with the contents via an opening and closing hole.

The figure 8 shows that the closing section is assembled in the opening and closing hole.

The figure 9 shows that the operating section is used after being lifted.

The figure 10 shows that the operating section is closed again.

The figure 11 shows an example when the closing section of opening and closing hole is transformed.

The figure 12 shows the other operations of closing section of opening and closing hole.

The figures 13 thru 17 show an example when the operating section is transformed.

The figures 18 thru 20 show an example when the closing section of opening and closing is transformed.

The figure 21 shows another example when the operating section is transformed.

The figures 22 and 23 show the other example when the operating section is transformed.

The figures 24 thru 27 show the other operations of storage chamber for secondary material.

The figure 24 shows the sectional view.

The figure 25 shows that the operating section is lifted.

The figure 26 shows that the operating section returns to its original position.

The figure 27 shows that the operating section is lifted again.

The figures 28 thru 32 show the 4th operation of storage chamber for secondary material.

The figure 28 shows that closing section of operating section is opened.

The figure 29 shows that the closing section of operating section is

assembled.

The figure 30 shows that the opening and closing hole is opened.

The figure 31 shows that the opening and closing hole is opened when the operating section returns to its original position.

The figure 32 shows that the operating section is opened under condition specified in the figure 31.

The figures 33 thru 42 show the 5th operation of this invention.

The figure 33 shows the sectional view of area where the operating section is assembled.

The figure 34 is a sectional view showing the globe of body

The figure 35 is a sectional view showing the important parts of opening section.

The figure 36 shows that the connecting rod is connected to the operating section.

The figure 37 shows an example when the operating section is transformed.

The figure 38 shows another example when the operating section is transformed.

The figure 39 shows an example when the closing section of opening and closing hole is transformed.

The figure 40 shows another example of transformed closing section of opening and closing hole.

The figure 41 shows another example when the operating section is transformed.

The figure 42 shows other example when the operating section is transformed.

The figures 43 thru 51 show the 6th operation of this invention.

The figure 43 shows that the closing section of opening and closing hole is opened.

The figure 44 shows that the operating section is closed under the condition specified in the figure 43.

The figure 45 shows an example when the operating section is transformed.

The figure 46 shows an example when the closing section of opening and closing hole is transformed.

The figure 47 shows an operating state of closing section of opening and closing hole.

The figure 48 shows an example when the operating section is transformed.

The figure 49 shows another example when the operating section is

transformed.

The figure 50 shows other example when the operating section is transformed.

The figure 51 shows other example when the operating section is transformed.

The figure 52 shows the 7th operation of storage chamber for secondary material. Also, this figure shows that the cover is assembled in the operating section.

The figure 53 shows the 8th operation of this invention. Also, this figure shows that the air inlet is fixed to the cover.

BEST MODE FOR CARRYING OUT THE INVENTION

The operation examples of this invention recommended according to enclosed drawings or figures are as follows:

The figure 1 shows a recommended operation example of this invention. The storage of this invention (1) is combined in the container by the screws or one-touch method or adhesives. You may optionally separate the storage (1) from the container (100).

Fix the receiving section (20) with storage space (21) and opening and closing hole (22) to the body (11) through the assembling process and fix the globe (11) and closing section (12) on the top of body(10) and

then assemble the operating section (30) playing the role of closing the opening and closing hole (22) of receiving section (20) around the globe (11).

Above operating section (30) is selectively opened and closed either by being rotated or lifted on the globe (11). The figure 1 shows the recommended opening and closing example when lifted. The globe catching jaw (13) and operating section catching jaw (31) play the role of preventing the operating section (30) from being separated from the globe (11) within the specific range.

Also, above storage (1) enables the closing side of operating section (32) to contact the closing side of globe (12) via a boring section (14) when the operating section (30) is assembled in the body (10). Position the closing section of opening and closing hole (35) on the bottom of extension section (34) extended from the closing side (32) of operating section. However, position the closing section of opening and closing hole (35) in the opening and closing hole (22) so that the perfect airtight may be guaranteed for the contents stored in the storage space (21) of receiving section (20).

It is available to assemble the cover (40) on the top of operating section (30) after filling the contents in the storage space (21) via a

boring section (14) of above body (10).

Place the vent (33) on the top of closing side (32) of operating section so that the storage space (21) may be connected to the exterior area when the operating section (30) moves up.

The storage (1) of this invention enables the closing side (32) of operating section to be separated from the closing side of globe (12) when the operating section (30) is separated from the globe (1) of body(10) if the operating section (30) moves up.

If you apply the pressure against the container (100) with inclined, contents stored in the container (100) are discharged via an opening and closing hole (22) and vent (33).

On the other hand, closing section of opening and closing hole (35) is separated from the opening and closing hole (22) and then contents stored in the storage space (21) are mixed with contents stored in the container (100) after being dropped when above operating section (30) moves up.

As the recommended example, the figure 2 shows that the contents are filled via a opening and closing hole (22) under the condition specified in the figure 1.

If the closing section of opening and closing hole (35) is assembled in

the opening and closing hole (22) under the condition specified in the figure 2, closing section of opening and closing hole (35) is combined around the extension section (34).

The figure 4 shows that the assembled storage is completely fixed to the container.

The figure 5 shows that the contents stored in the storage space (21) are dropped and mixed in the container (100) via a opening and closing hole (22) when the operating section (30) is lifted.

The figure 6 shows that the operating closing section (36) is separated by the removal rack (23) mounted on the top of opening and closing hole (22) of receiving section (20) and then opening and closing hole (22) is opened again when the operating section (30) moves down again.

The contents mixed in the container (100) are discharged via a vent (33) operated when the operating section (30) is opened, and if you move down the operating section (30), closing side (32) of operating section contacts the closing side of globe (12), so the vent (33) is closed.

As shown in the figures 7, as other operating (figure 7 thru 23), closing side (32) of operating section designed as the wing type is installed on the bottom of vent (33) for the reinforcement of airtight. The

closing side of opening and closing hole (35) is installed around the interior or exterior hole of extension section (34) as shown in the figure 8.

The figure 8 shows that the contents are filled via an opening and closing hole (22) and closing section of opening and closing hole (35) is assembled around the extension section (34) under the condition specified in the figure 7.

The figure 9 shows that the closing section of opening and closing hole (35) is separated from the opening and closing hole (22) when the operating section (30) is lifted under the condition specified in the figure 8. At this time, the contents stored in the storage space (21) are dropped and mixed in the container (100) via an opening and closing hole (22), and if the operating section (30) is moved down under above condition, closing section of opening and closing hole (35) is caught by the removal rack (23), so the opening and closing hole (22) is opened because the closing section of opening and closing hole (35) is tightly fastened on the extension section (34) as shown in the figure 10.

The figure 11 shows that the extension section (34) of operating section (30) may be assembled in the closing section of opening and closing hole (35) after the closing section of opening and closing hole

(35) is assembled in the opening and closing hole (22).

The figure 12 shows that the closing section of opening and closing hole (35) may be diversely transformed like the figure 11.

The figure 13 shows that the check valve (50) is assembled on the top of vent (33) to prevent the contents from being discharged via a vent (33). The figure 14 shows that the check valve (50) is opened by the water pressure of contents to be discharged via a vent (33).

The figure 15 shows that the check valve (50) is assembled in the operating section (30) as another operation.

The figure 16 shows that the contents may be filled in the storage space (21) via a filling hole (37) mounted on the operating section (30) and above filling hole (37) may be completely sealed by an additional cap (60).

The figure 17 shows that the filling hole (37) is completely sealed by the cap (41) mounted on the cover (40) and this cover (40) is opened because the perforated line is damaged when the cover (40) is opened.

The figures 18 thru 20 show another example of transformation. In other words, these figures show that the closing section of opening and closing hole (35) assembled to the extension section (34) stays in the opening and closing hole when the operating section (30) is pulled

upward and this closing section (35) closing the opening and closing hole (22) is separated from the opening and closing hole (22) when the operating section (30) moves down and then the contents stored in the storage space (21) are dropped via an opening and closing hole (22) as shown in the figure 18.

For this technical format, closing section of opening and closing hole (35) stays when the extension section (34) is pulled upward and moves down accordingly when the extension section (34) moves down by being jammed in the extension section (34).

As shown in the figure 21, a vent (33) is made or formed on the top of operating section (30). This vent is closed by the closing section of vent (15) made or formed on the globe (11), and if above operating section (30) moves up, a vent (33) is separated from the closing section of vent (15) and then the contents stored in the storage space (21) are discharged via a vent (33).

The figure 22 shows that the closing side of operating section (32) is assembled in the closed side of globe (12) for the airtight.

The figure 23 shows that the catching jaw (24) is installed on the bottom jaw of opening and closing hole (22) to prevent the closing section of opening and closing hole (35) assembled in the opening and

closing hole (22) from being moved down.

The figures 24 thru 27 show that the opening and closing hole (22) is not closed when the closing section of opening and closing hole (35) moves up and down. The closing section of opening and closing hole (35) is designed to be operated in the extension section (34) for this function.

In detail, some spatial clearance is formed when the closing section of opening and closing hole (35) is assembled in the extension section (34) as shown in the figure 24, and if the operating section (30) moves up, closing section of opening and closing hole (35) moves up accordingly as shown in the figure 25, and if the operating section (30) moves down under above condition, closing section of opening and closing hole (35) is caught by the removal rack (23), so it does not move down any more as shown in the figure 26.

If the operating section (30) moves down any further under above condition, space is getting narrow and then opening and closing hole is not closed because the closing section of opening and closing hole (35) is jammed in the extension section as shown in the figure 26, and if you pull the operating section (30) upward under above condition, closing section of opening and closing hole (35) moves up together with the operating section, so the opening and closing hole (22) is widely opened.

The figures 28 thru 32 show that the cap (60) is designed to close the filling hole (37) as shown in the figure 28.

The extension section (34) extended downward is positioned based on the filling hole (37) located in the center of operating section (30) as shown in the figure 29. However, the flexible closing section of opening and closing hole (35) with movable member is assembled around the opening and closing hole (22) in above extension section.

If you pull the operating section (30) upward under the condition specified in the figure 29, closing section of opening and closing hole (35) is separated from the opening and closing hole (22) as shown in the figure 30, and if you move down the operating section (30) under above condition, closing section of opening and closing hole (35) is caught by the removal rack, so it is pushed upward in the extension section (34) and opens the opening and closing hole (22).

The figure 32 shows that the closing section of opening and closing hole (35) moves up when the operating section (30) is pulled upward under the condition specified in the figure 31.

The figure 33 shows that the extension section (34) is assembled in the operating section (30).

The figure 37 shows that the additionally manufactured extension

section (34) is assembled in the closing side of globe (12) located inside the globe (11) as shown in the figure 34.

If the operating section (30) with insertion section (38), shown in the figure 35, is assembled after the contents are filled via a filling hole (37) under the condition specified in the figure 37, insertion section (38) is fixed to the top of extension section (34) as shown in the figure 36.

As shown in the figure 38, extension section (34) may be assembled after being inserted in the insertion section (38).

The figure 39 shows that the closing section of opening and closing hole (35) is assembled in the extension section (34) so that the this section (35) may be operated smoothly and jaw is mounted so that the closing section of opening and closing hole (35) may not be pushed upward and separated from the opening and closing hole (22) when the fine pressure is applied to the container.

The figure 40 shows that the closing side of globe (12), where the extension section (34) is assembled, may be diversely transformed.

The figure 41 shows that the top of globe (11) is designed to close the vent (33) as an example of transformed vent.

The figure 42 shows the components of vent (33) and cap (60). In other words, this figure shows that the contents are filled via a filling

hole before the cap (60) is assembled and then cap (60) is closed after the contents are filled for the airtight. Also, this figure shows that vents (33) more than one must be positioned around the cap (60).

The figures 43 and 44 show an example when this invention is transformed.

The figure 43 shows that the closing section of opening and closing hole (35) is designed to close the opening and closing hole (22) and enable the pulling projection (39) made or formed on the bottom of closing side of operating section (32) to pull the catching projection (35) when the operating section (30) moves up. Also, this figure shows that the contents stored in the storage space (21) are dropped via an opening and closing hole (22) and closing section of opening and closing hole (35) stays in the interior wall of globe(11) and only the operating section (30) moves down for the mixing process as shown in the figure 44.

If the operating section (30) is lifted under the condition specified in above figure 44, closing section of opening and closing hole (35) does not move and only the operating section (30) moves up and vent (33) is operated when the closing side of operating section (32) is separated from the closing section of globe (12) and then mixed contents are discharged via a vent (33).

As previously stated, opening and closing hole (22) is opened and contents are dropped and mixed when the operating section (30) is opened after moving up, and the contents do not flow via a vent (33) when the operating section (30) moves down again under this condition.

The figures 43 and 44 show that the technical specification is changed not to allow the closing section of opening and closing hole (35) to move down after moving up.

The figure 45 shows other transformations of operating section (30). In other words, this figure shows that the closing section of globe (12) is designed as the wing type for improving the airtight when the operating section (30) is combined to the globe (11). Also, this figure shows that an air inlet (39') is provided in the form of hole or slot to prevent the occurrence of pressure in the storage space (21) by placing the air inlet (39') in the closing section of opening and closing hole (39) when the operating section moves up and down.

The figure 46 shows that the jaw or projection is installed so that the closing section of opening and closing hole (35) doesn't flow down under the natural condition after being fixed to the interior wall of globe (11).

The figure 47 shows that the elastic hole (350) and closing section of opening and closing hole (35) are not allowed to move down after

moving up along the globe (11) to enable the closing section of opening and closing hole (35) to smoothly operate after being combined or connected to the globe (11). In other words, this figure shows that a projection (351) is installed to prevent the elastic hole (350) and closing section of opening and closing hole (35) from moving down after being caught by the catching rack mounted on the interior wall of globe (11).

The figure 48 shows that the vent (33) is made on the top of operating section (30) and top of globe (11) plays the role of opening and closing the vent (33).

The figure 49 shows that the closing section of opening and closing hole (35) is tightly jammed in the closing slot of opening and closing hole (22) for the airtight purpose.

The figure 50 shows that the closing section of opening and closing hole (35) does not move and only the operating section moves down if the closing section of opening and closing hole (35) is opened and operating section (30) is closed when the operating section (30) rotates.

The process showing how the storage (1) consisting of diverse components operates may be construed as a kind of common sense. In other words, how the operating section (30) rotates is a kind of common and anyone who has common knowledge in this field may easily

analogize the process, so the diverse transformations are not suggested as an example.

The figure 51 shows that the operating section (30) is allowed to rotate within specific level and lift the closing section of opening and closing hole (35).

The operating section (30) moves up and down by the screw thread of globe (11) and separation preventing jaw mounted on the operating section (30) prevents the operating section (30) from being separated from the globe (11).

The figure 52 shows another operation of this invention. In other words, this figure shows that the cover (40) designed as the hinge type is connected to the operating section (30) of storage (1) via a connector (43).

The figure 53 shows another transformation of cover. This figure shows that the elastic part (44) is installed in the air inlet (45) so that the children's airway may not be clogged even when the children swallow the cover (40).

If the cover (40) is assembled in the operating section (30), air inlet (45) is closed because the top of operating section (30) is influenced by the elastic part (44), and if the cover (40) is opened, elastic part (44)

returns to its original position by its restoring force and closes the air inlet (45), so the children's airway is not clogged even when the children swallow the cover (40).

[134] Also, air inlet (45) is closed when the cover (40) is installed in the operating section (30), so it prevents the foreign substance from being stuck to the operating section (30).

INDUSTRIAL APPLICABILITY

This invention is on structure of storage chamber required for effectively mixing the concentrate and water or concentrate and general beverage or granule and water or powder and water. This invention may be used for the diverse purposes to improve the mixing efficiency of different materials such as medical, pharmaceutical, cosmetic and industrial purposes.

The opening and closing hole is not opened and closed again after this hole is opened, so this invention may be effectively applied to the dairy products and powder products to improve the mixing efficiency.

Also, opening and closing hole is not closed once it is opened, so this invention may be safely used for the children's beverage.

CLAIMS

1. The storage chamber for secondary material applicable to the discharging direction of contents stored in the container consists of body with storage space and inseparable operating section mounted around the globe.

Above inseparable operating section is connected to the closing section of opening and closing hole designed to close the opening and closing hole made or formed on the bottom of storage space of storage via an extension section when assembled in the globe of body.

The closing section of opening and closing hole is opened when above operating section moves up, and if the operating section is closed, closing section of opening and closing hole is not allowed to close the opening and closing hole.

The storage chamber for secondary material with inseparable operating section is characterized by its vent designed to discharge the contents stored in the container when the operating section moves up.

2. The easily collapsible blow molded container of claim 1, The boring section used for filling the different materials in the storage is located in the center of above operating section. If the operating section is assembled after filling the different materials via a boring section,

closing side of operating section is closed, so the vent made in the operating section is clogged without being connected to the storage space of storage. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

3. The easily collapsible blow molded container of claim 2, If above operating section moves up, closing side of operating section is separated from the closing side of globe and vent of operating section is connected to the storage space of storage. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

4. The easily collapsible blow molded container of claim 1, This storage chamber for secondary material with inseparable operating section is characterized by its closing section of opening and closing hole designed to be assembled in the extension section.

5. The easily collapsible blow molded container of claim 1, The removal rack mounted in the opening and closing hole pushes the closing section of opening and closing hole upward, so the closing section of opening and closing hole does not close the opening and closing hole when above operating section moves up and down.

This storage chamber for secondary material with inseparable

operating section is characterized by its above components.

6. Above operating section, stated in above clause 1, is combined or connected to the globe of body. Above body is designed to open and close by being rotated or moved up and down. Above operating section is operated after moving within specific distance instead of being completely separated from the globe. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

7. The easily collapsible blow molded container of claim 1, The closing section of opening and closing hole does not move in the opening and closing hole when above operating section moves up. Instead, the opening and closing hole is opened because the closing section of opening and closing hole is pushed downward in the opening and closing hole when the operating section moves down. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

8. The easily collapsible blow molded container of claim 1, A vent is made or formed on the top of above operating section. Above vent is closed by the top of globe and opened when the operating section moves up and then connected to the storage space of storage. This storage

chamber for secondary material with inseparable operating section is characterized by its above components.

9. The easily collapsible blow molded container of claim 1, A catching rack is made or formed on the interior wall of opening and closing hole so that the closing section of opening and closing hole does not move down by itself after being fixed to the opening and closing hole. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

10. The easily collapsible blow molded container of claim 1, The closing section of opening and closing hole, located in the opening and closing hole, moves up when the operating section moves up and stays until the operating section moves up and down not to close the opening and closing hole because the closing section of opening and closing hole is designed to be pushed upward as much as designated clearance. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

11. The easily collapsible blow molded container of claim 1, This storage chamber for secondary material with inseparable operating section is characterized by its extension section fixed to the operating section.

12. The easily collapsible blow molded container of claim 11, Above extension section is additionally manufactured and then assembled to the operating section. The filling section is located in the center of above extension section. The filling section is closed by additional cap after the different materials are filled via a filling section. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

13. The easily collapsible blow molded container of claim 1, Above closing section of opening and closing hole is assembled around the bottom of extension section in the form of ring. This section opens the opening and closing hole by moving up when the operating section moves up. This section does not close the opening and closing hole when the operating section moves down because it is caught by the removal rack. Instead, this section is pushed up. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

14. The easily collapsible blow molded container of claim 1, Above extension section is additionally manufactured and then connected to the center of globe, and if the globe with extension section is combined with the operating section, operating section and extension section is

combined into a single piece, and if the operating section is lifted, closing section of opening and closing hole is separated from the opening and closing hole and then contents stored in the storage space are dropped via an opening and closing hole. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

15. The easily collapsible blow molded container of claim 13, This storage chamber for secondary material with inseparable operating section is characterized by its closing section of opening and closing hole made of flexible resin.

16. The storage chamber for secondary material applicable to the discharging direction of contents stored in the container consists of body with storage space and inseparable operating section mounted around the globe.

Above inseparable operating section is connected to the closing section of opening and closing hole designed to close the opening and closing hole made or formed on the bottom of storage space of storage via an extension section when assembled in the globe of body.

The closing section of opening and closing hole is opened when above operating section moves up, and if the operating section is closed,

closing section of opening and closing hole is not allowed to close the opening and closing hole.

The storage chamber for secondary material with inseparable operating section is characterized by its vent designed to discharge the contents stored in the container when the operating section moves up.

17. The easily collapsible blow molded container of claim 16, If above operating section moves up, closing side of operating section is separated from the closing side of globe and vent of operating section is connected to the storage space of storage. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

18. The easily collapsible blow molded container of claim 16, the pulling projection of operating section is caught by the catching projection, so the closing section of opening and closing hole moves up when the operating section moves up. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

19. The easily collapsible blow molded container of claim 16, the closing section of opening and closing hole coheres to the interior wall of globe, so the closing section of opening and closing hole does not

close the opening and closing hole when above operating section moves up and down.

This storage chamber for secondary material with inseparable operating section is characterized by its above components.

20. The easily collapsible blow molded container of claim 16, above operating section is combined or connected to the globe of body. Above body is designed to open and close by being rotated or moved up and down. Above operating section is operated after moving within specific distance instead of being completely separated from the globe. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

21. The easily collapsible blow molded container of claim 16, air is supplied to the storage space when the operating section moves up. Either the hole or slot is made or formed on the catching projection made on above operating section so that the contents stored in the storage space may be smoothly discharged via a vent. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

22. The easily collapsible blow molded container of claim 16, a jaw is made on the opening and closing hole, or jaw or projection is made on

the interior wall of opening and closing hole so that the closing section of opening and closing hole does not move down by itself after being fixed to the opening and closing hole. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

23. The easily collapsible blow molded container of claim 16, the closing section of opening and closing hole, located in the opening and closing hole, moves up when the operating section moves up and stays until the operating section moves up and down not to close the opening and closing hole because the closing section of opening and closing hole is designed to be pushed upward as much as designated clearance. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

24. The easily collapsible blow molded container of claim 16, elastic hole is made or formed on the closing section of opening and closing hole so that the closing section of opening and closing hole may be smoothly operated in the globe after being combined or connected to the globe. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

25. The easily collapsible blow molded container of claim 16, the

resistance projection is made or formed on above closing section of opening and closing hole so that this section does not move down after moving up even when the operating section moves down after being assembled in the globe. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

26. The easily collapsible blow molded container of claim 16, a vent is made or formed on the top of above operating section and above vent is separated from the storage space of storage by the top of globe. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

27. The easily collapsible blow molded container of claim 16, this storage chamber for secondary material with inseparable operating section is characterized by its closing section of opening and closing hole designed to close the opening and closing hole.

28. The easily collapsible blow molded container of claim 16, this storage chamber for secondary material with inseparable operating section is characterized by its hinge type cover mounted on the operating section.

29. The easily collapsible blow molded container of claim 16, an air

inlet is made or formed on the protecting cover mounted on the operating section so that the airway of human body may not be clogged. However, the elastic part closes the hole, where the air is supplied, if the cover is assembled in the operation section, and if the cover is separated from the operating section, air inlet is made or formed when the elastic part is recovered by its restoring force. This storage chamber for secondary material with inseparable operating section is characterized by its above components.

FIG.1

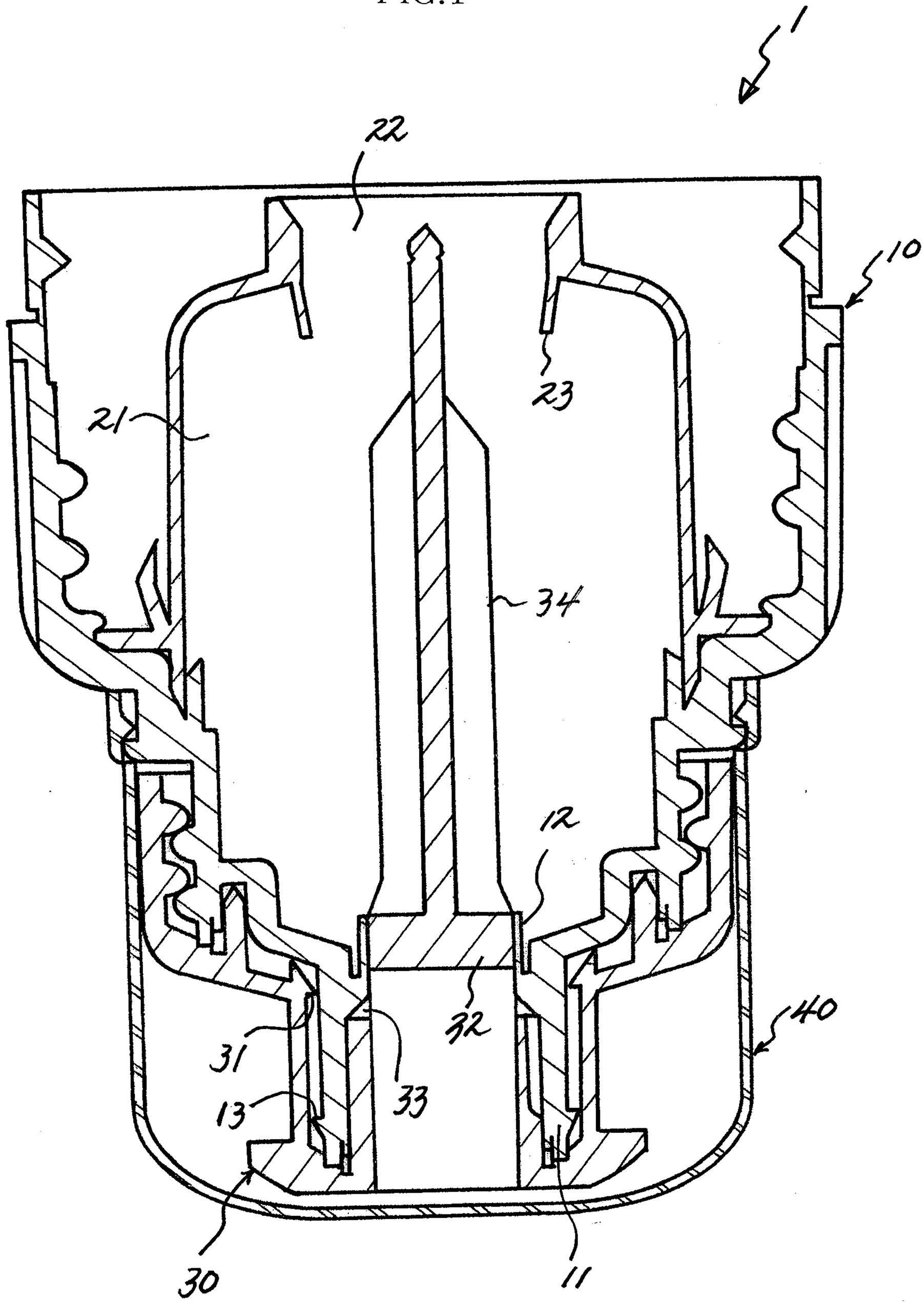


FIG.2

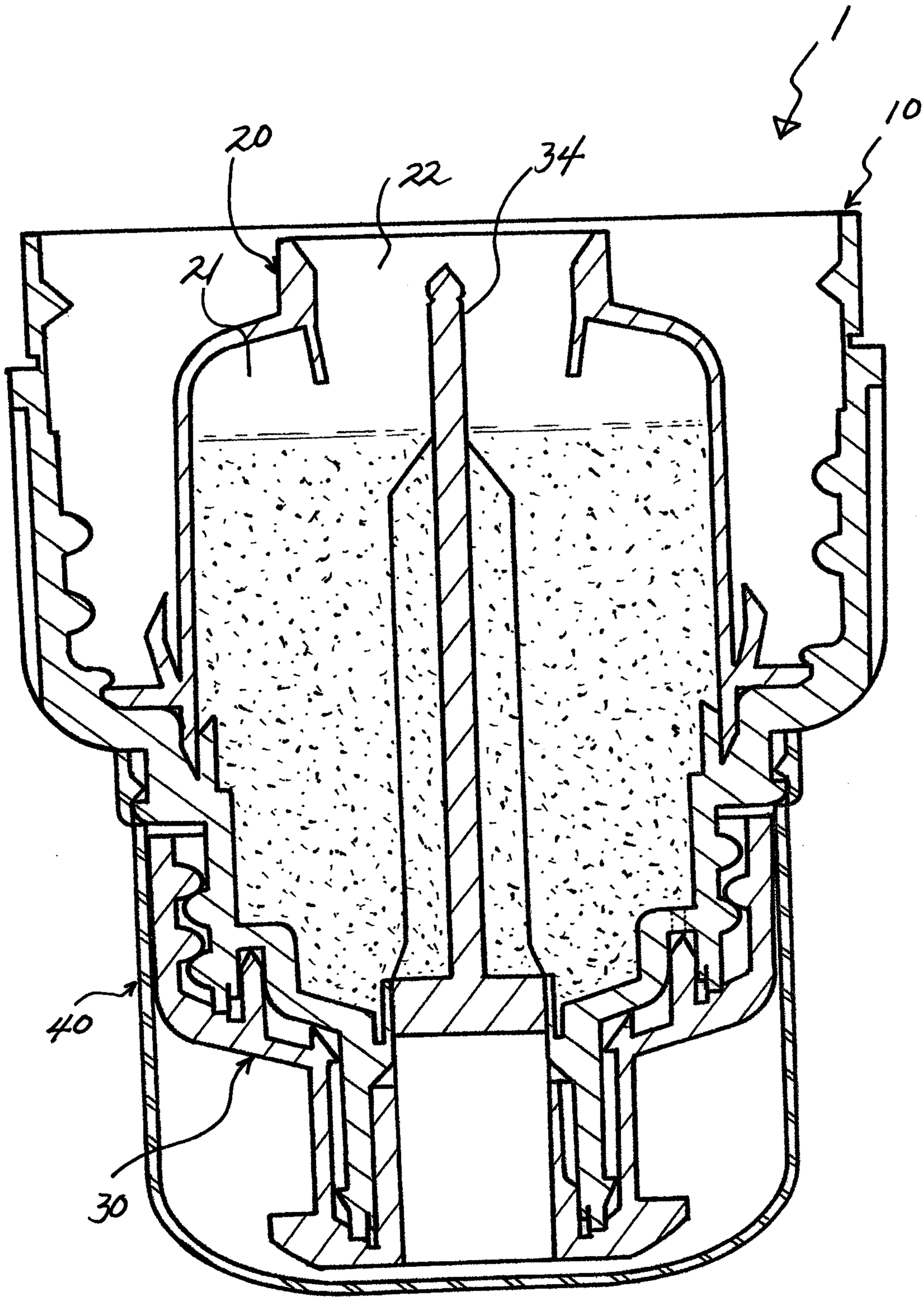


FIG.3

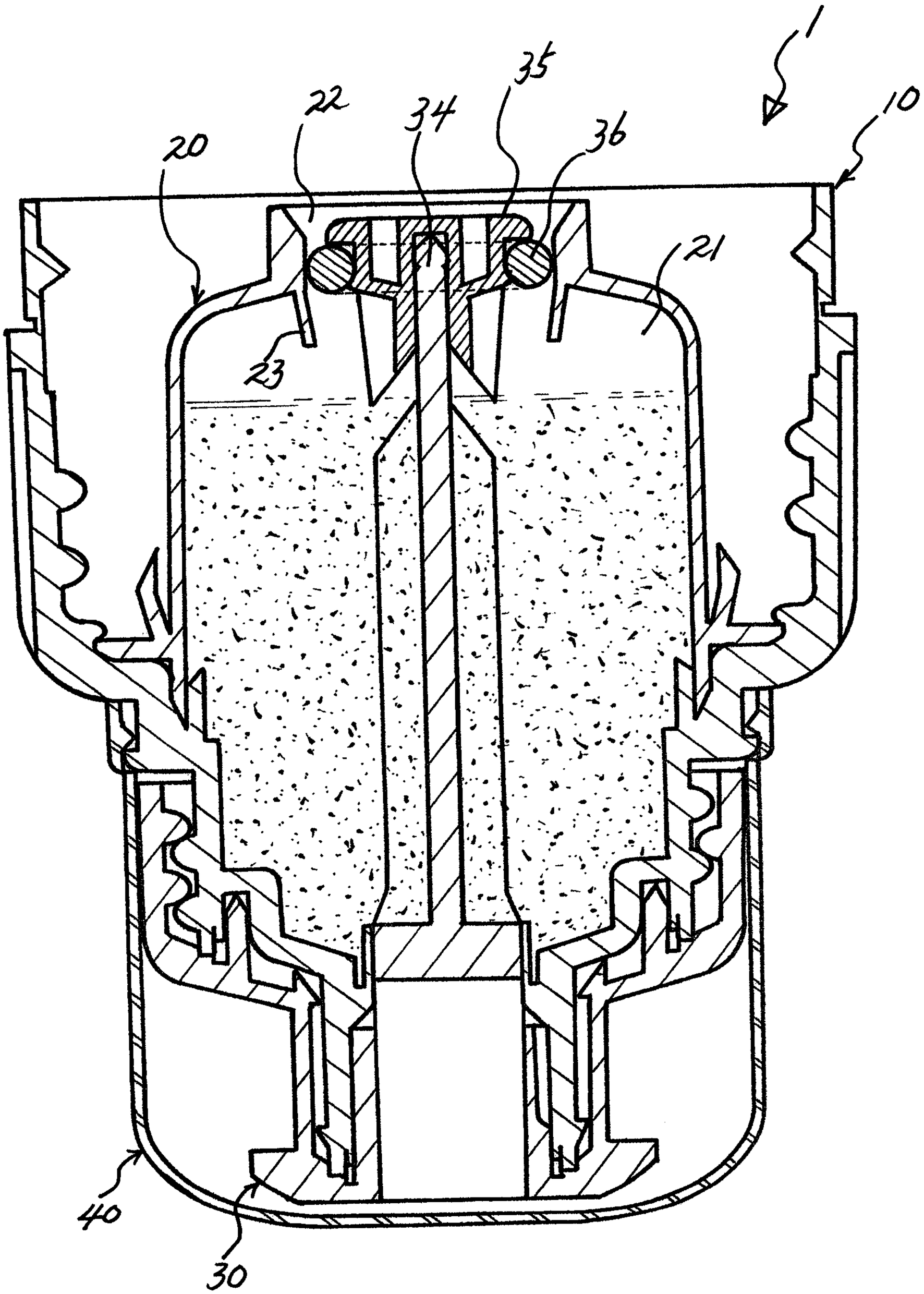


FIG.4

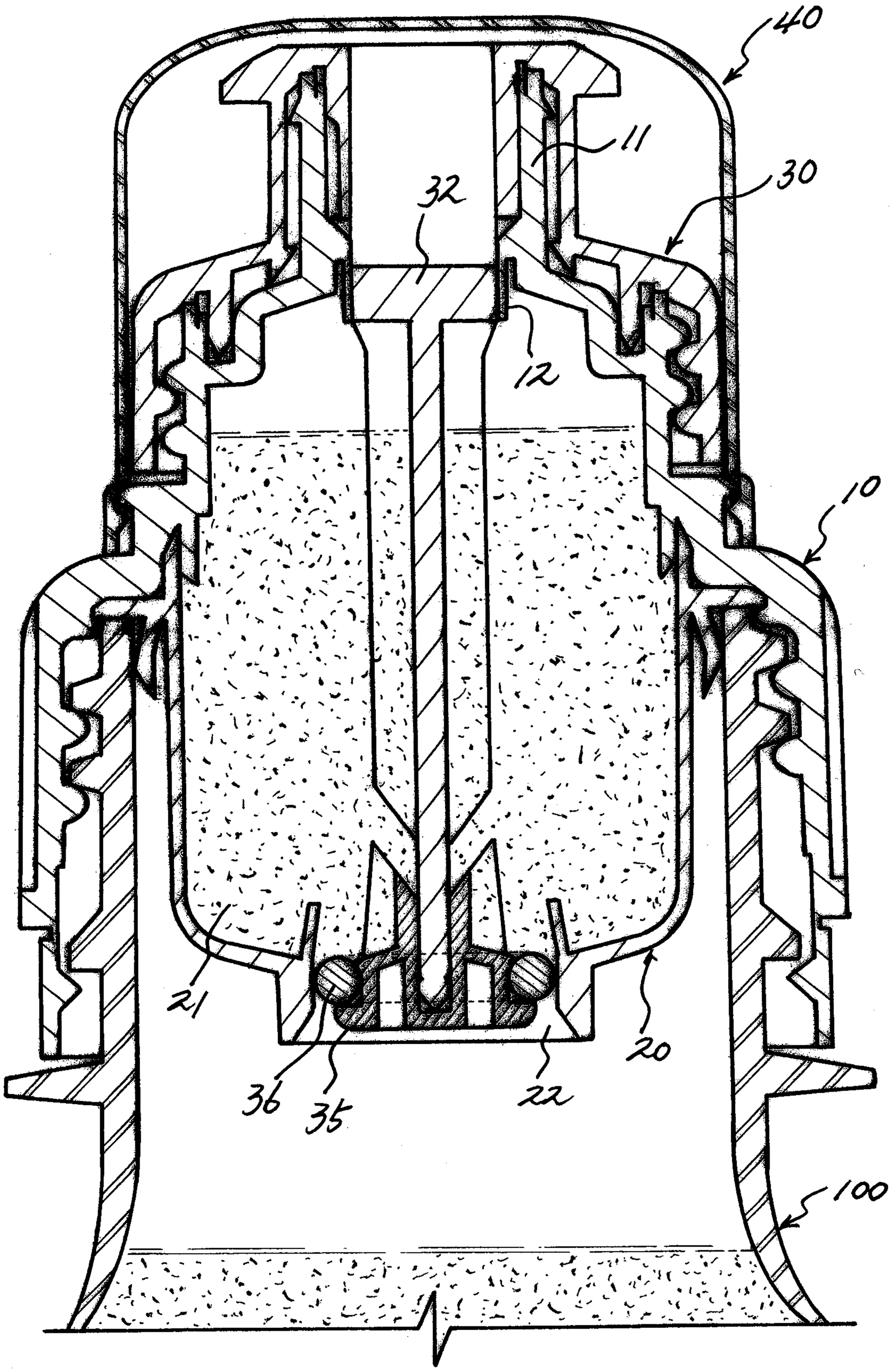


FIG.5

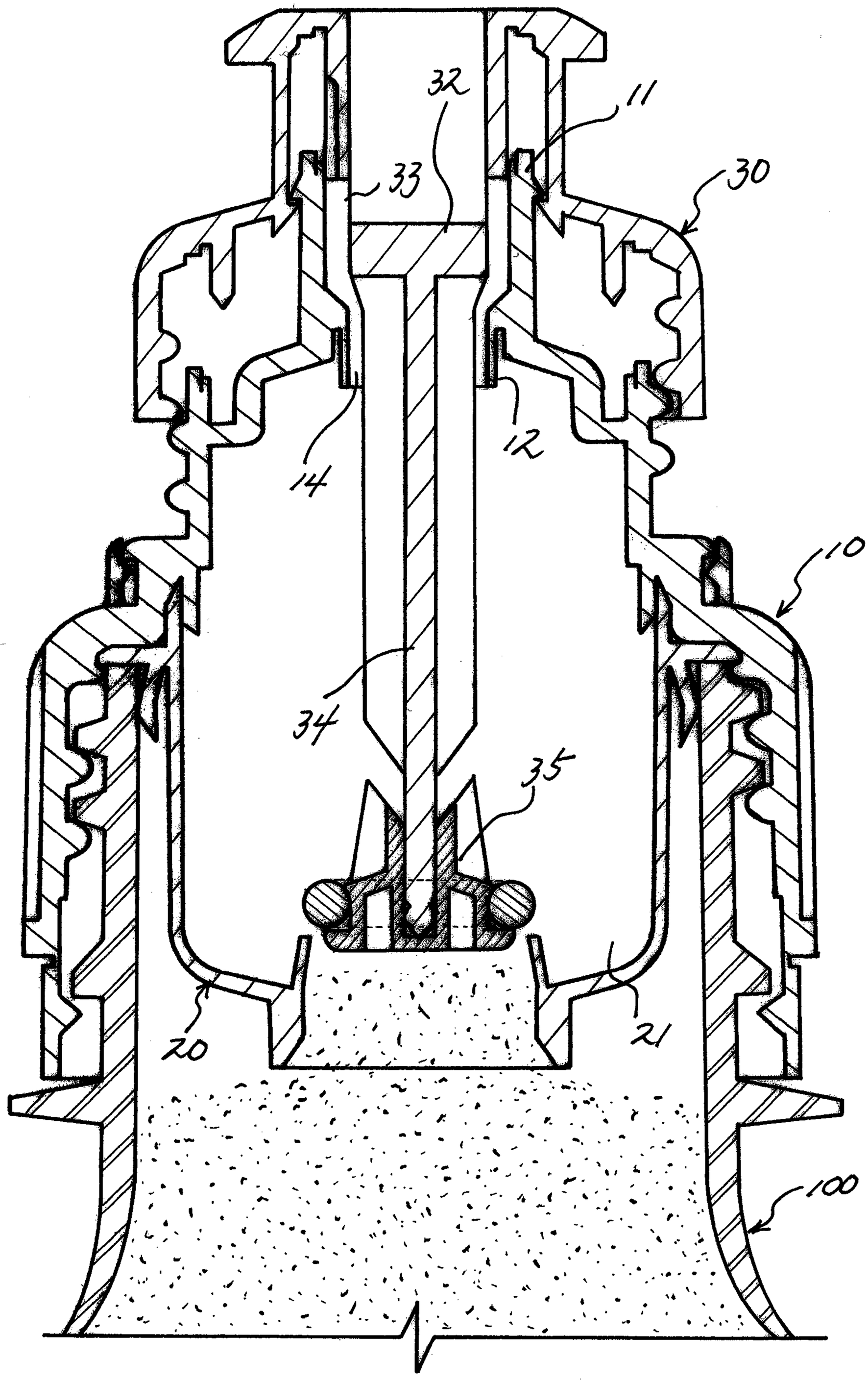


FIG.6

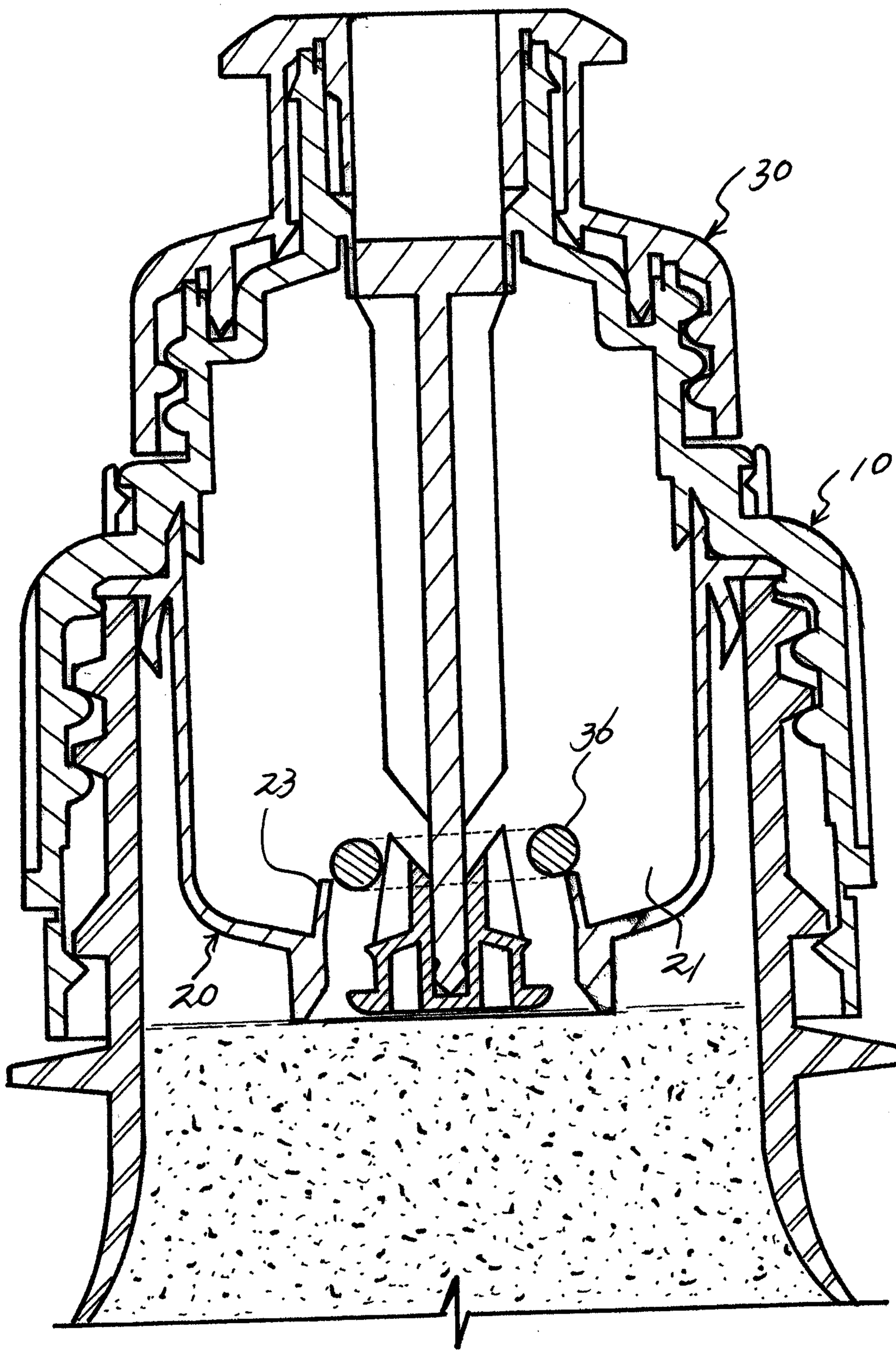


FIG.7

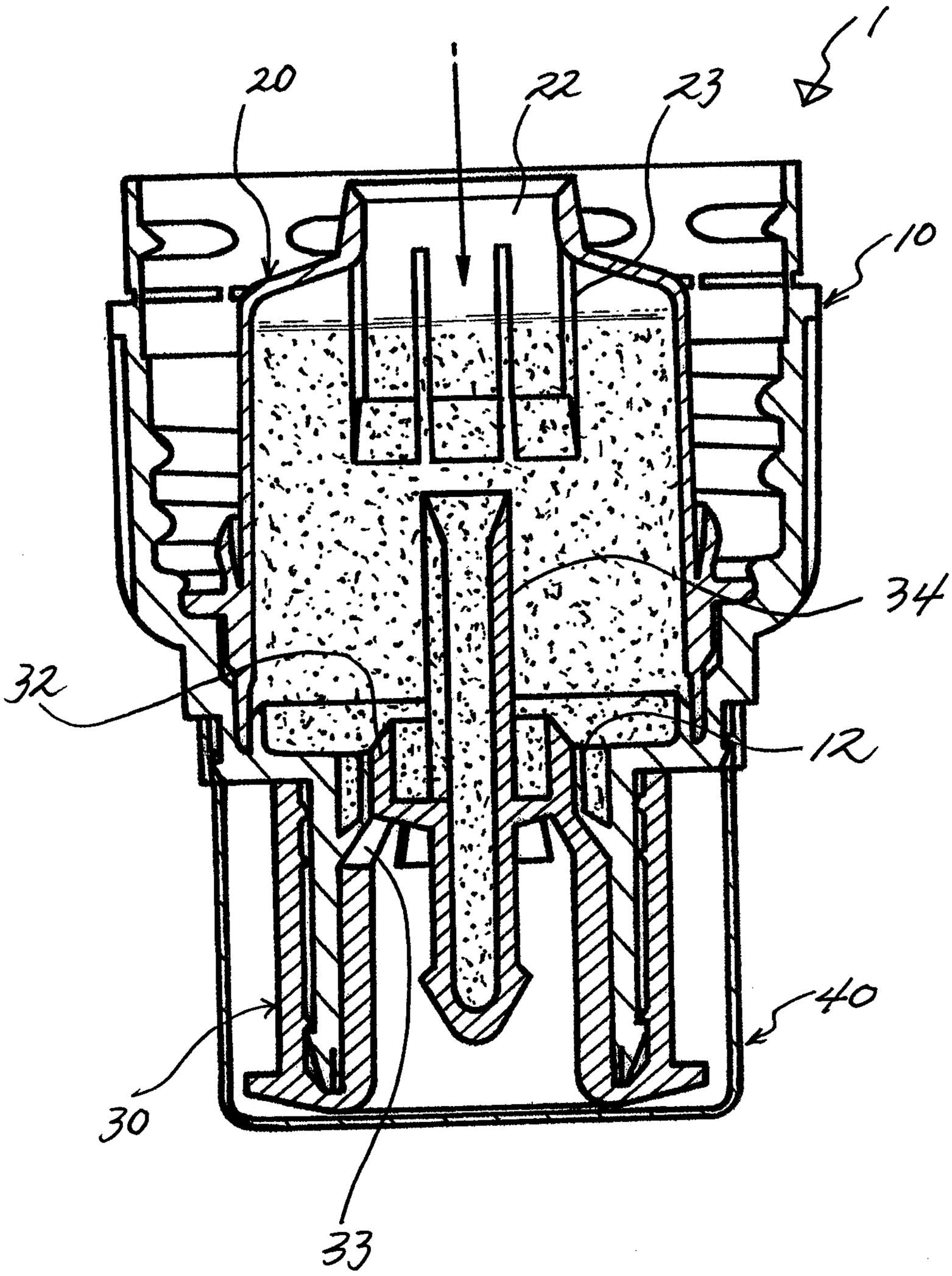


FIG.8

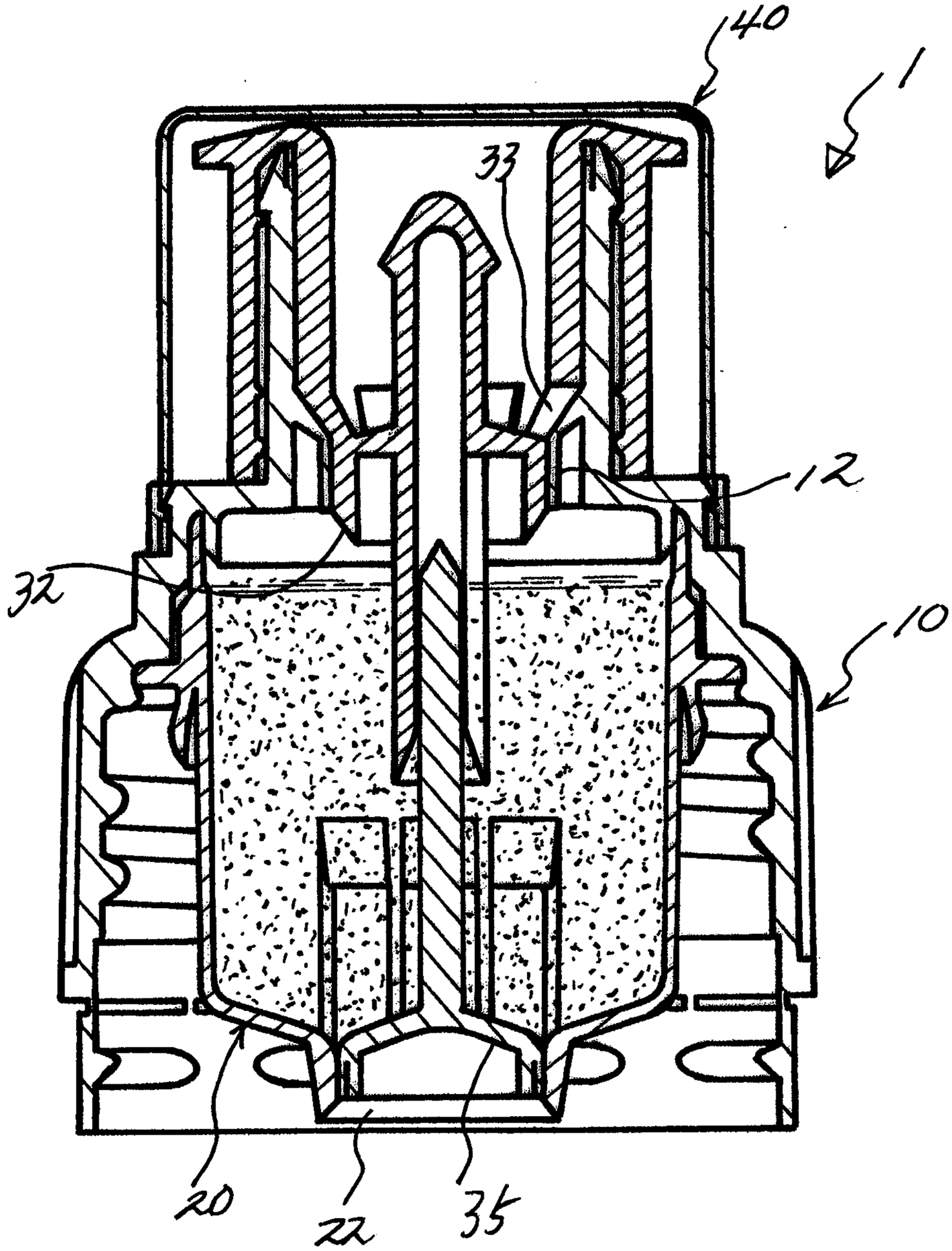


FIG.9

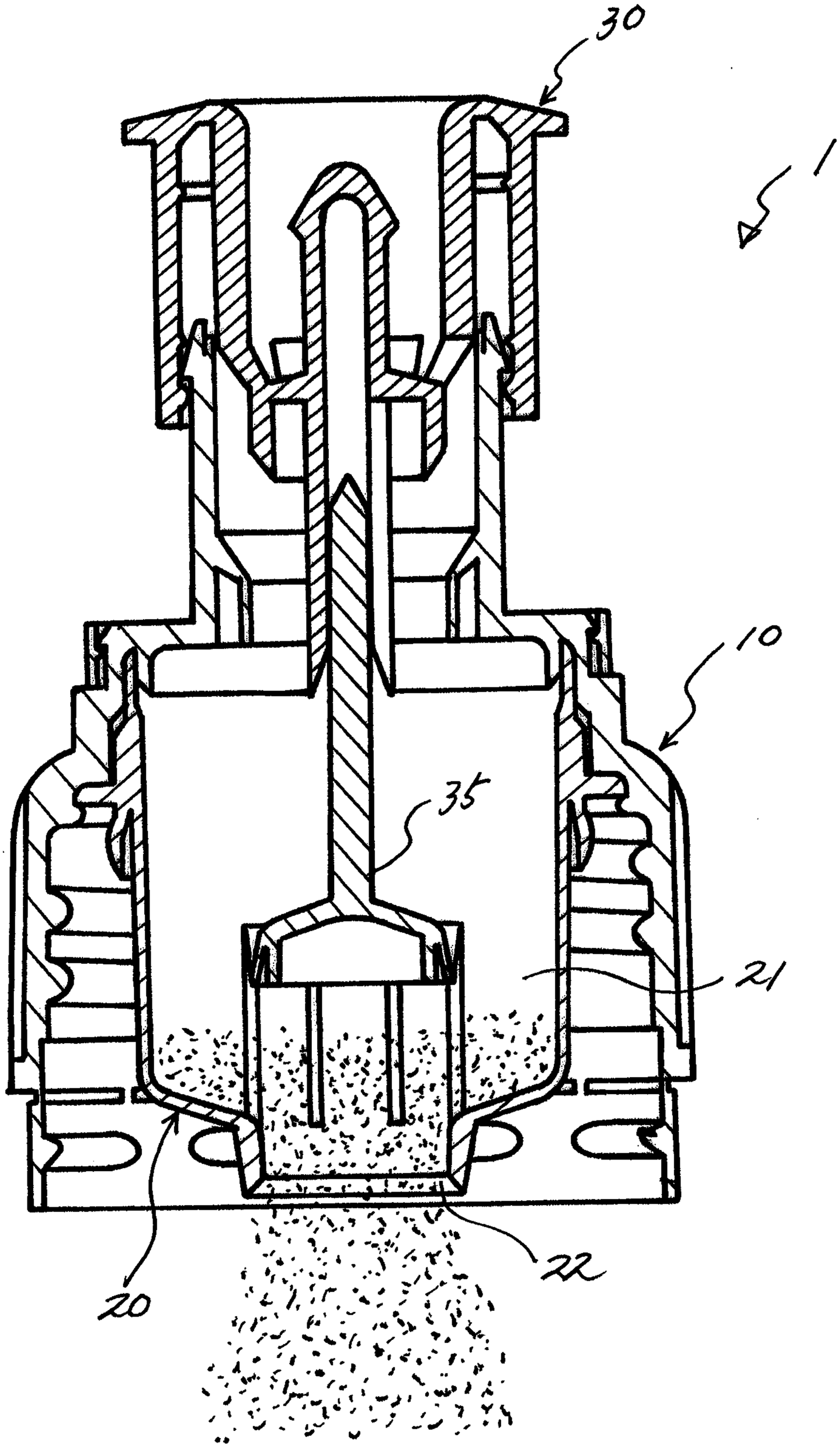


FIG.10

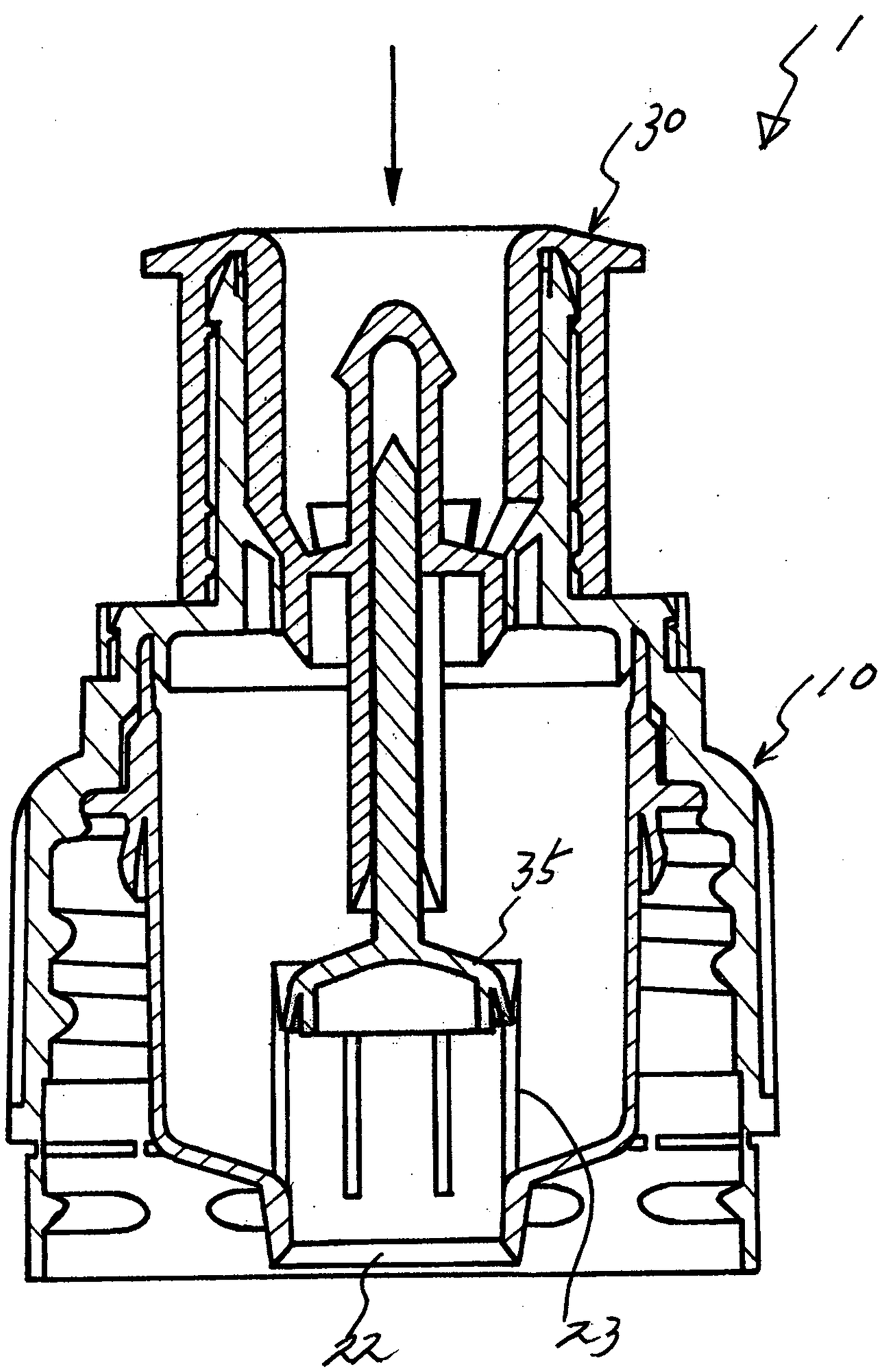


FIG.11

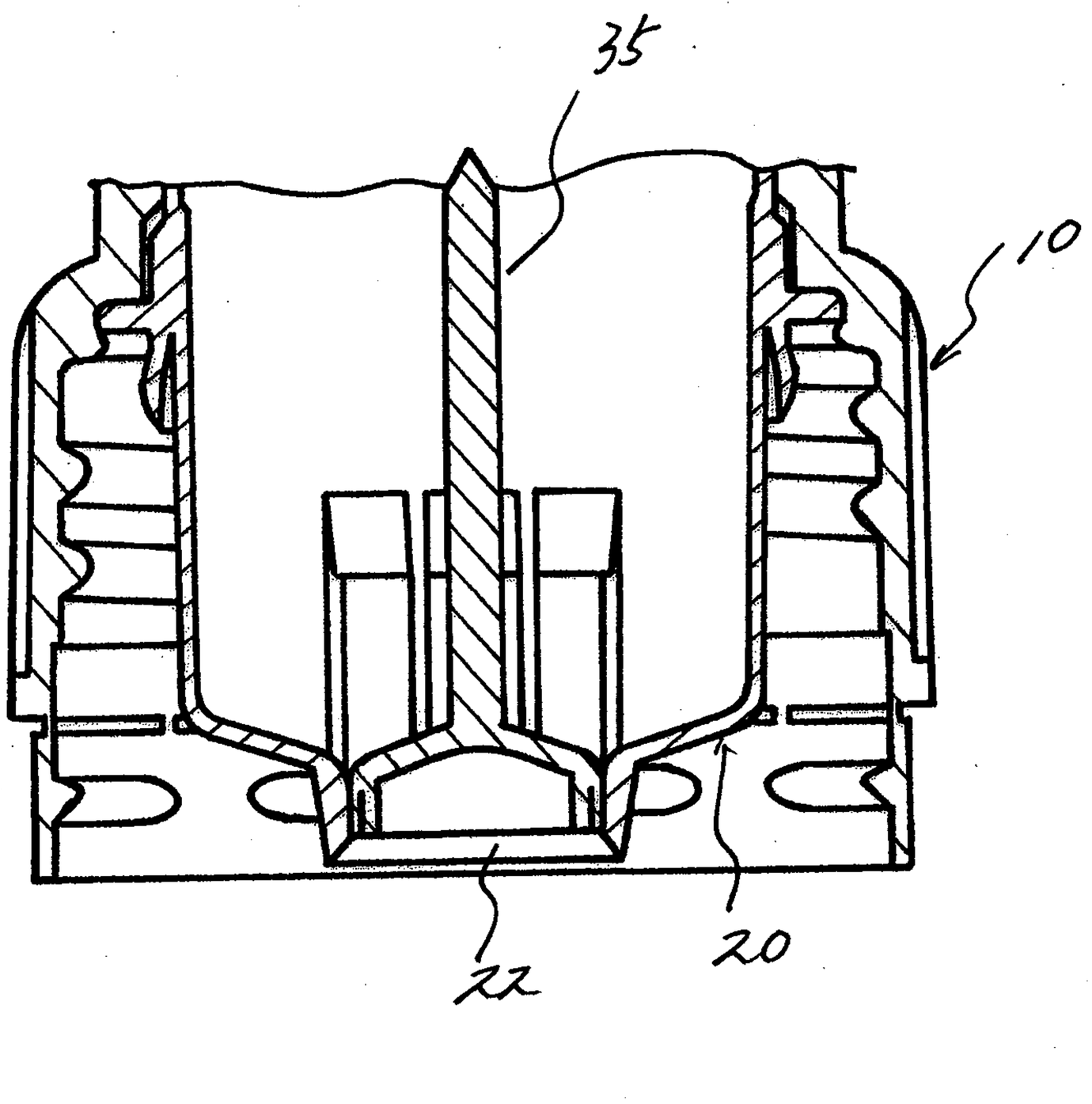


FIG.12

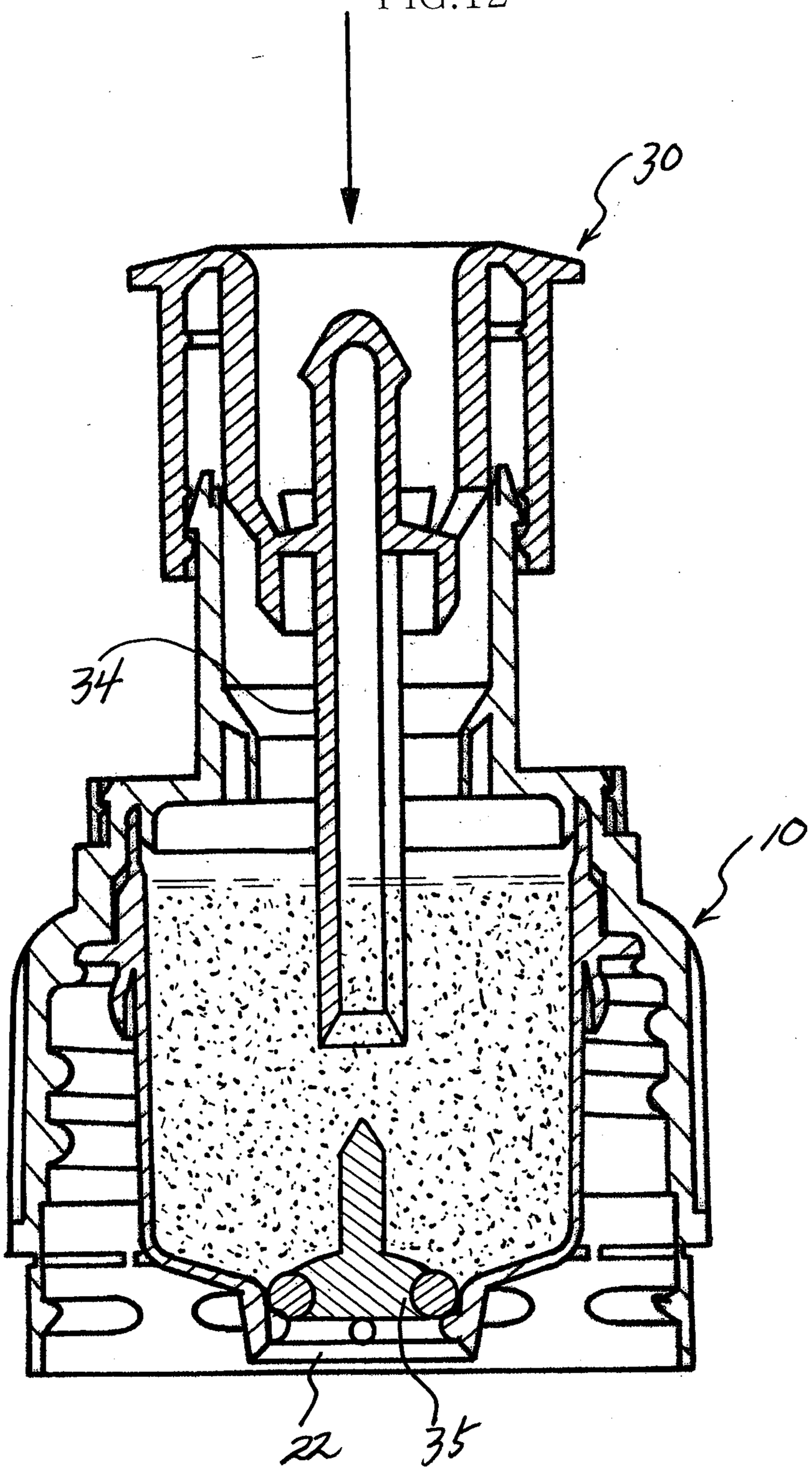


FIG.13

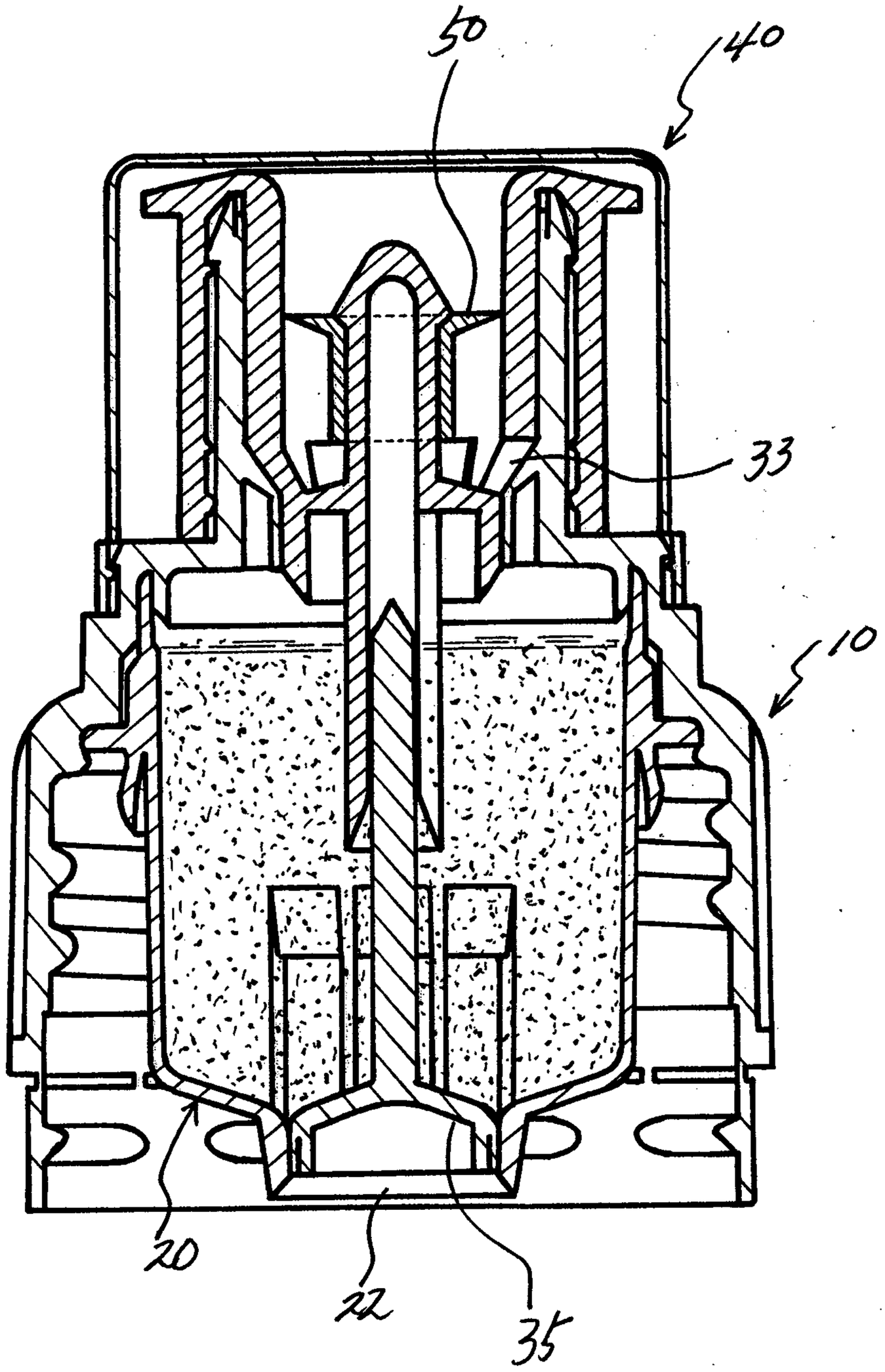


FIG.14

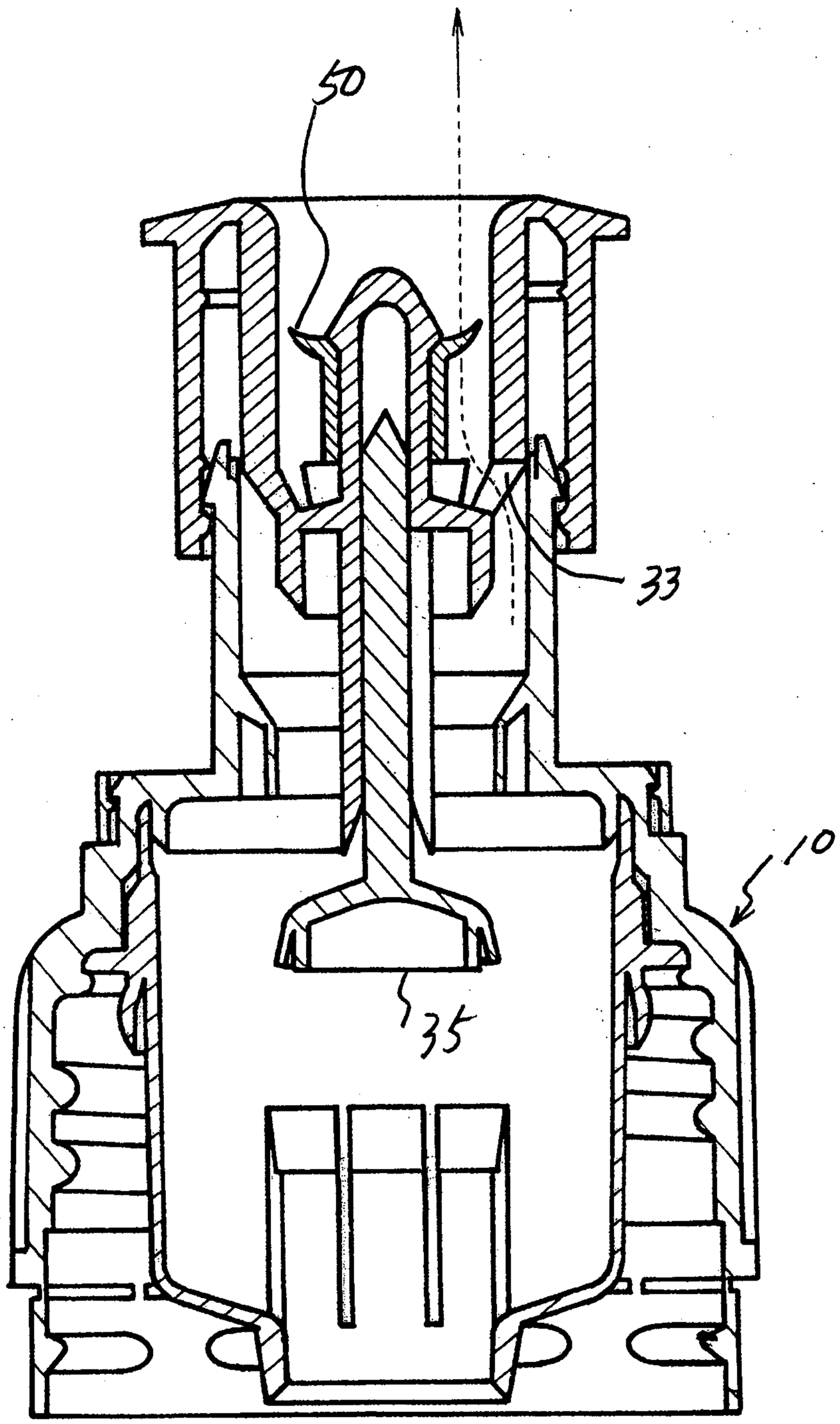


FIG.15

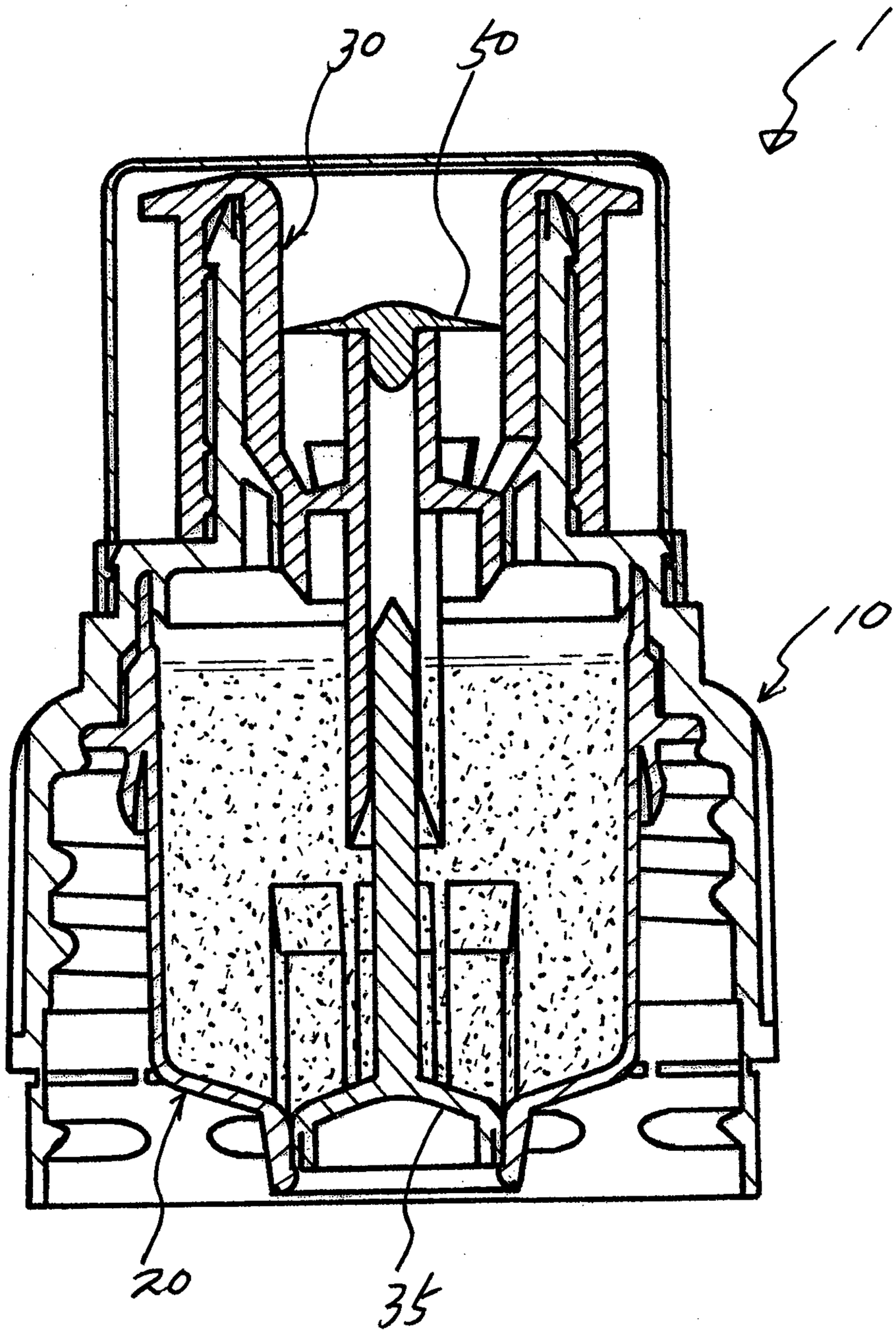


FIG.16

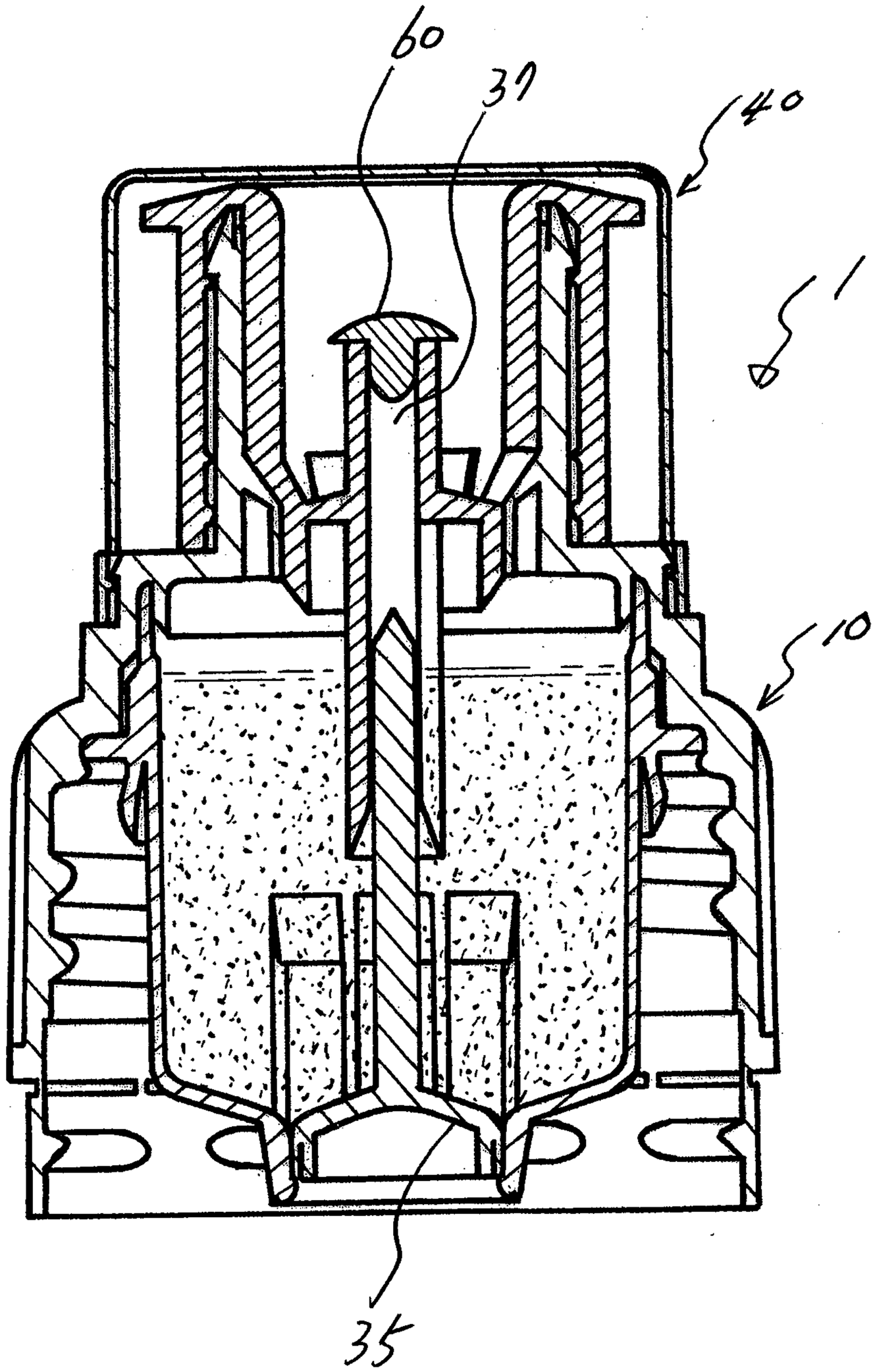


FIG.17

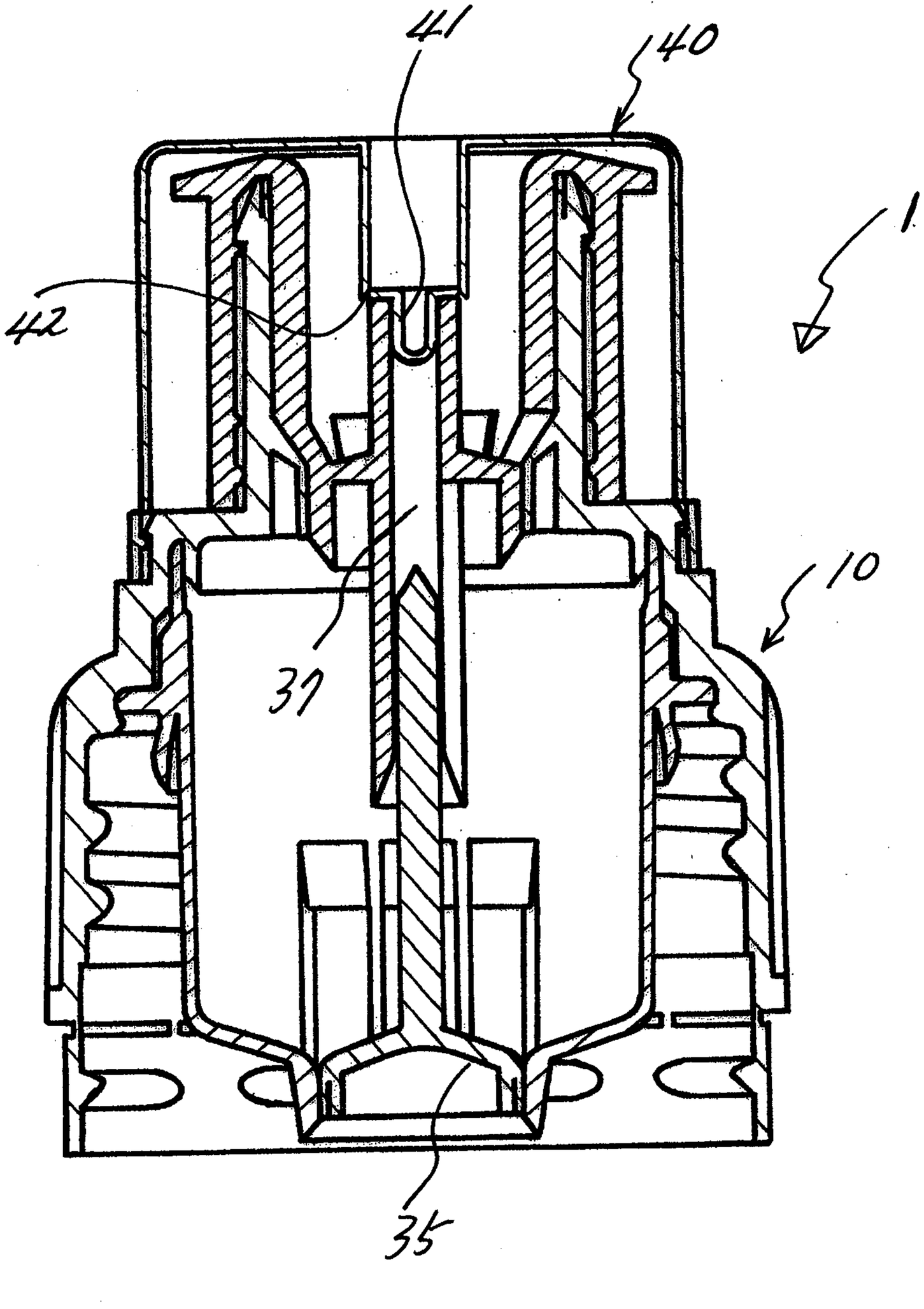


FIG.18

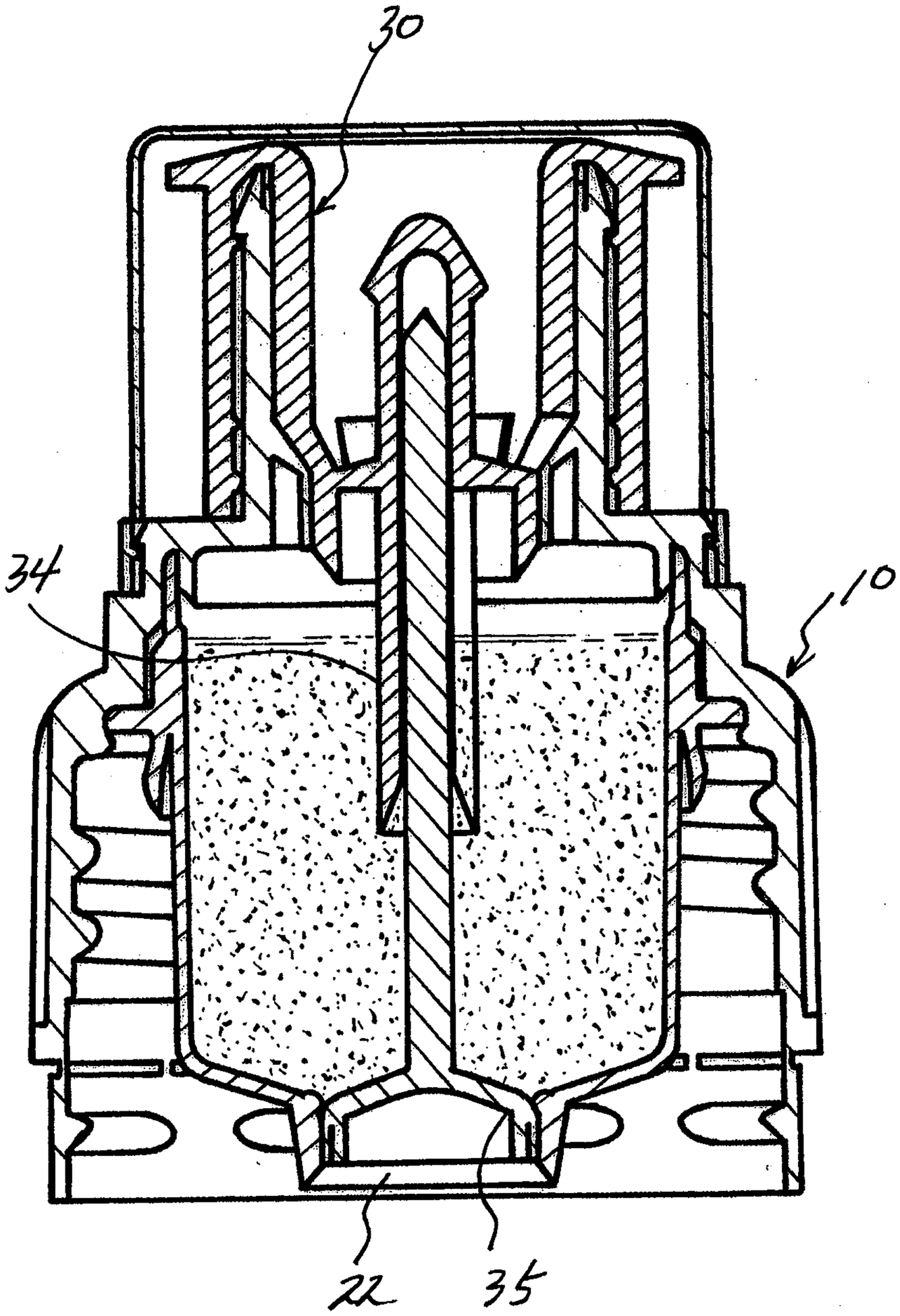


FIG.19

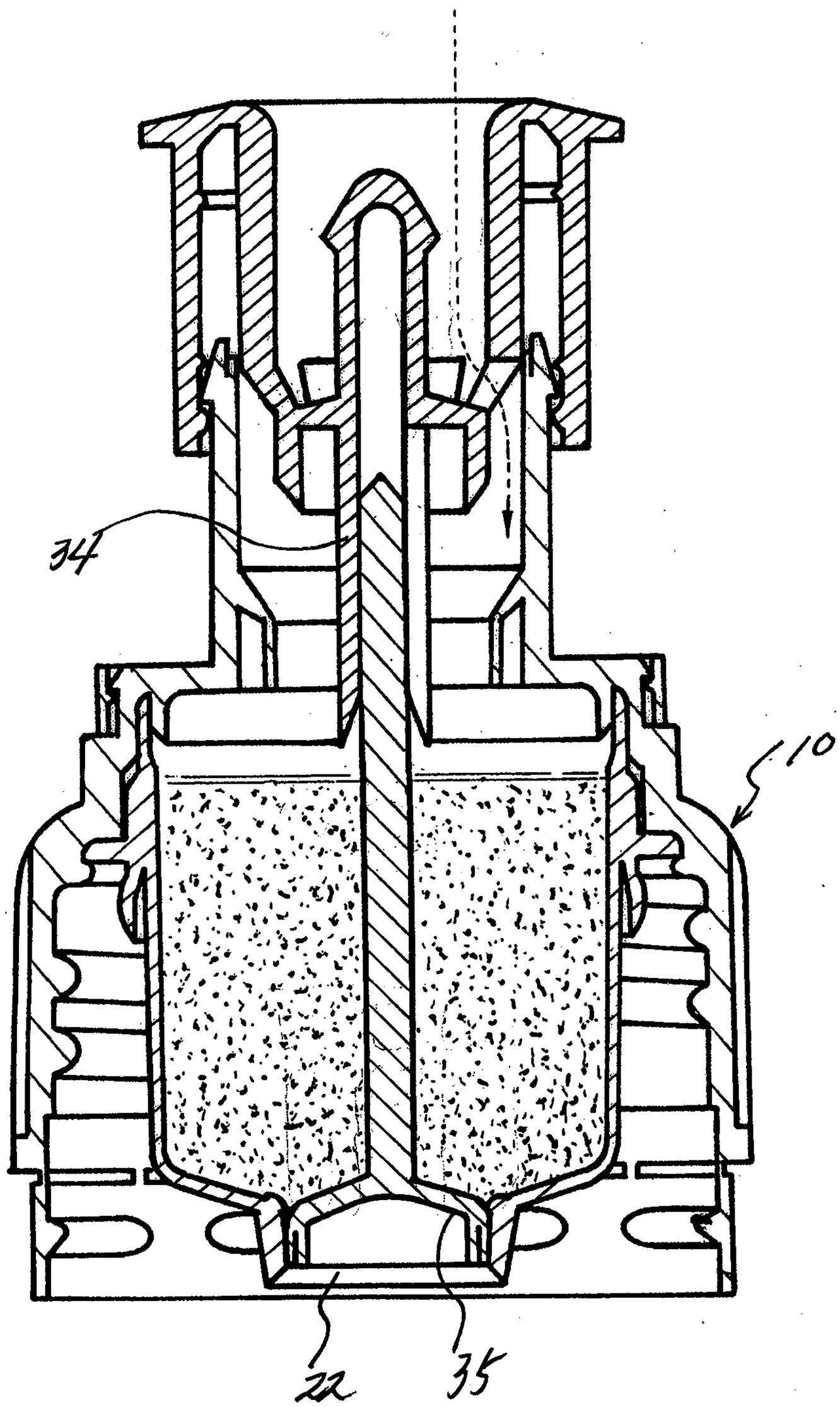


FIG.20

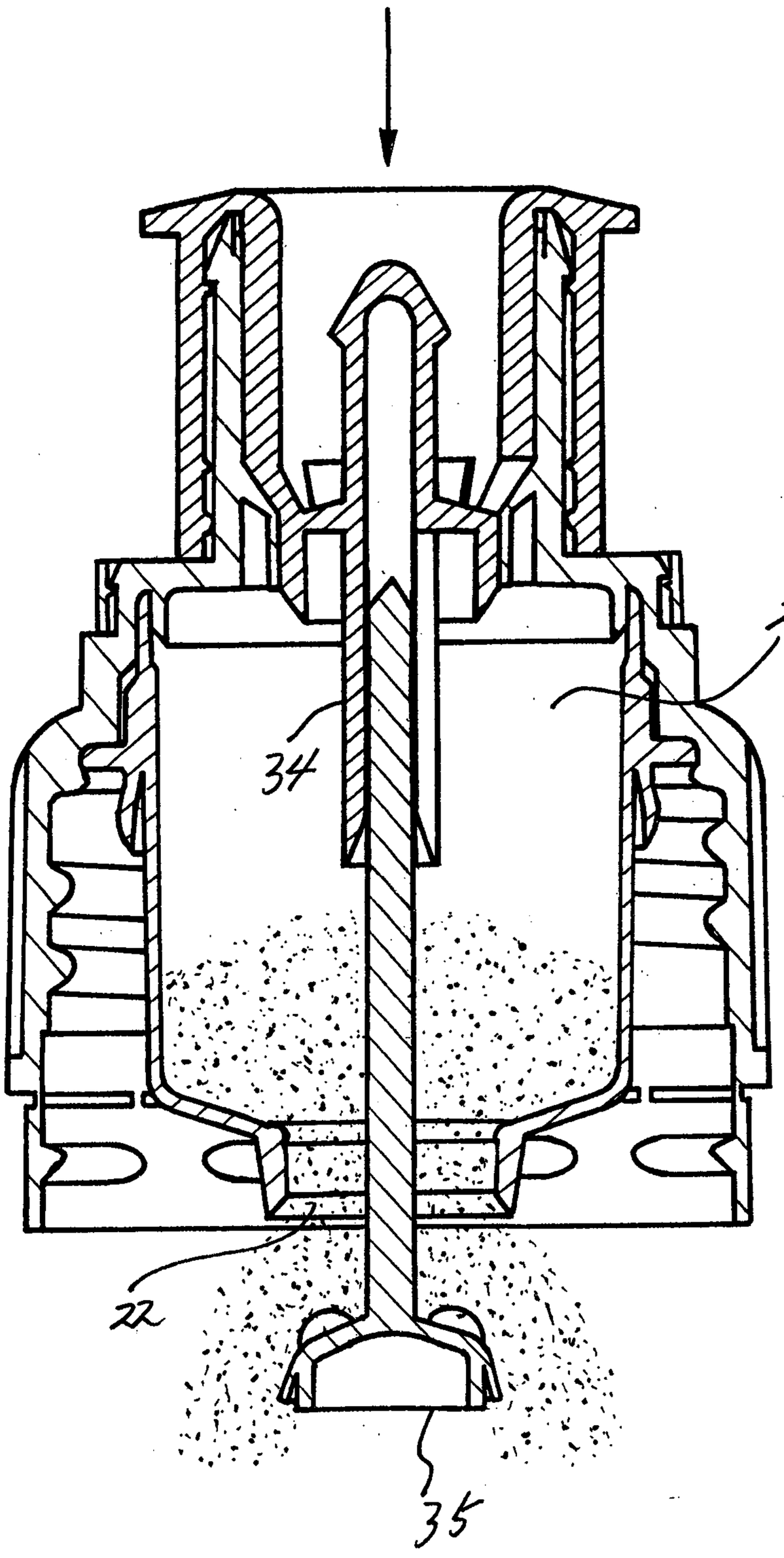


FIG.21

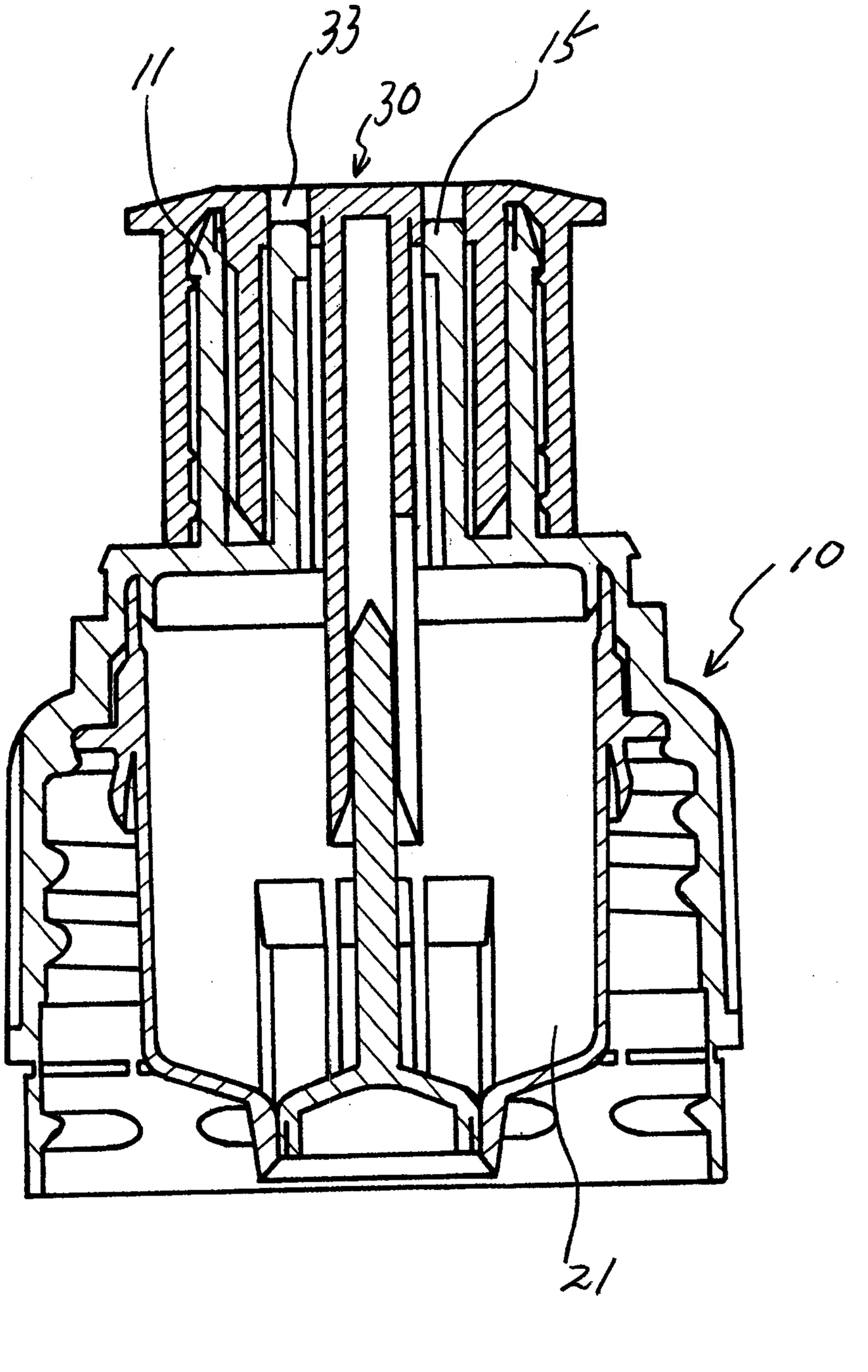


FIG.22

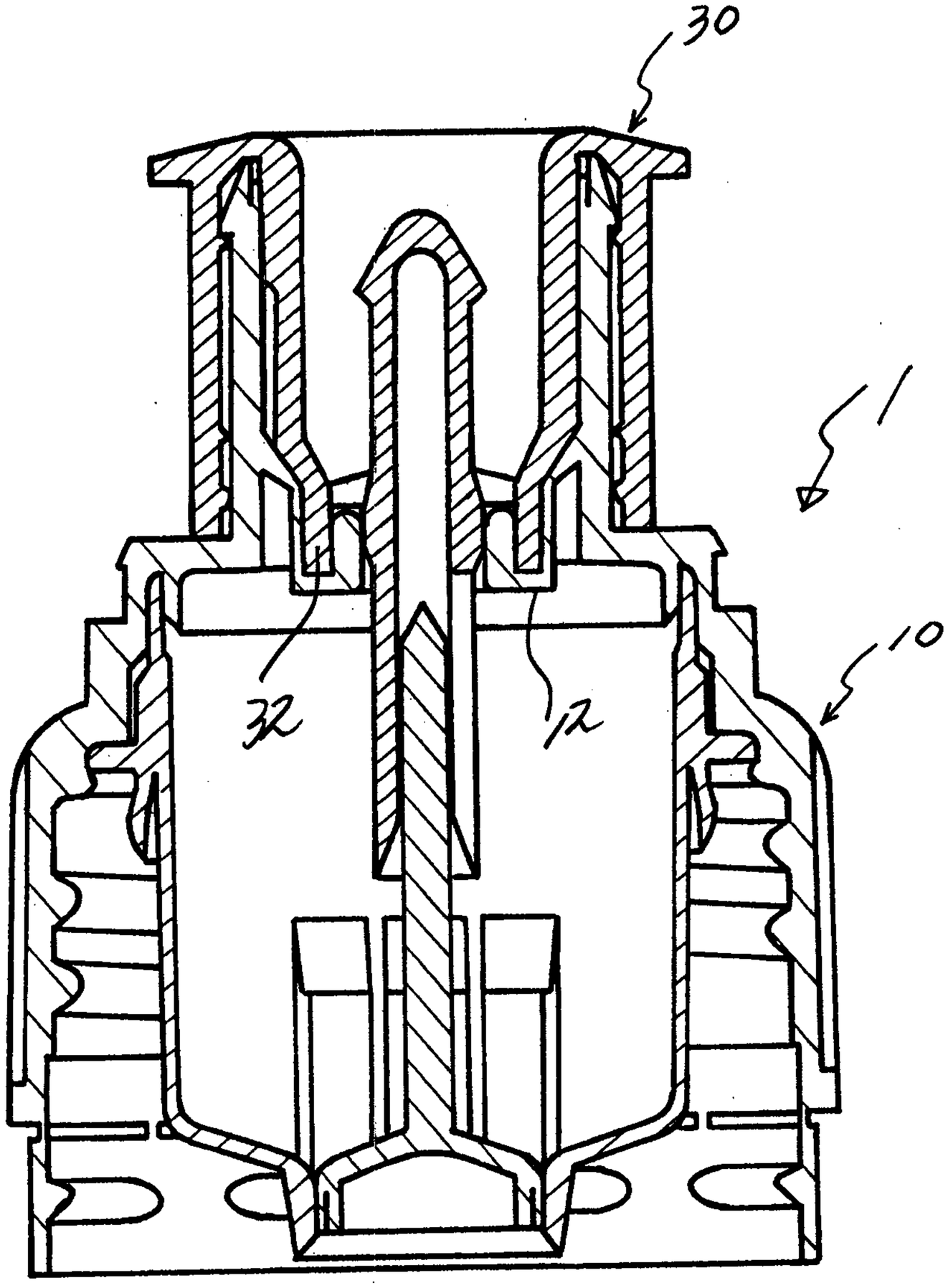


FIG.23

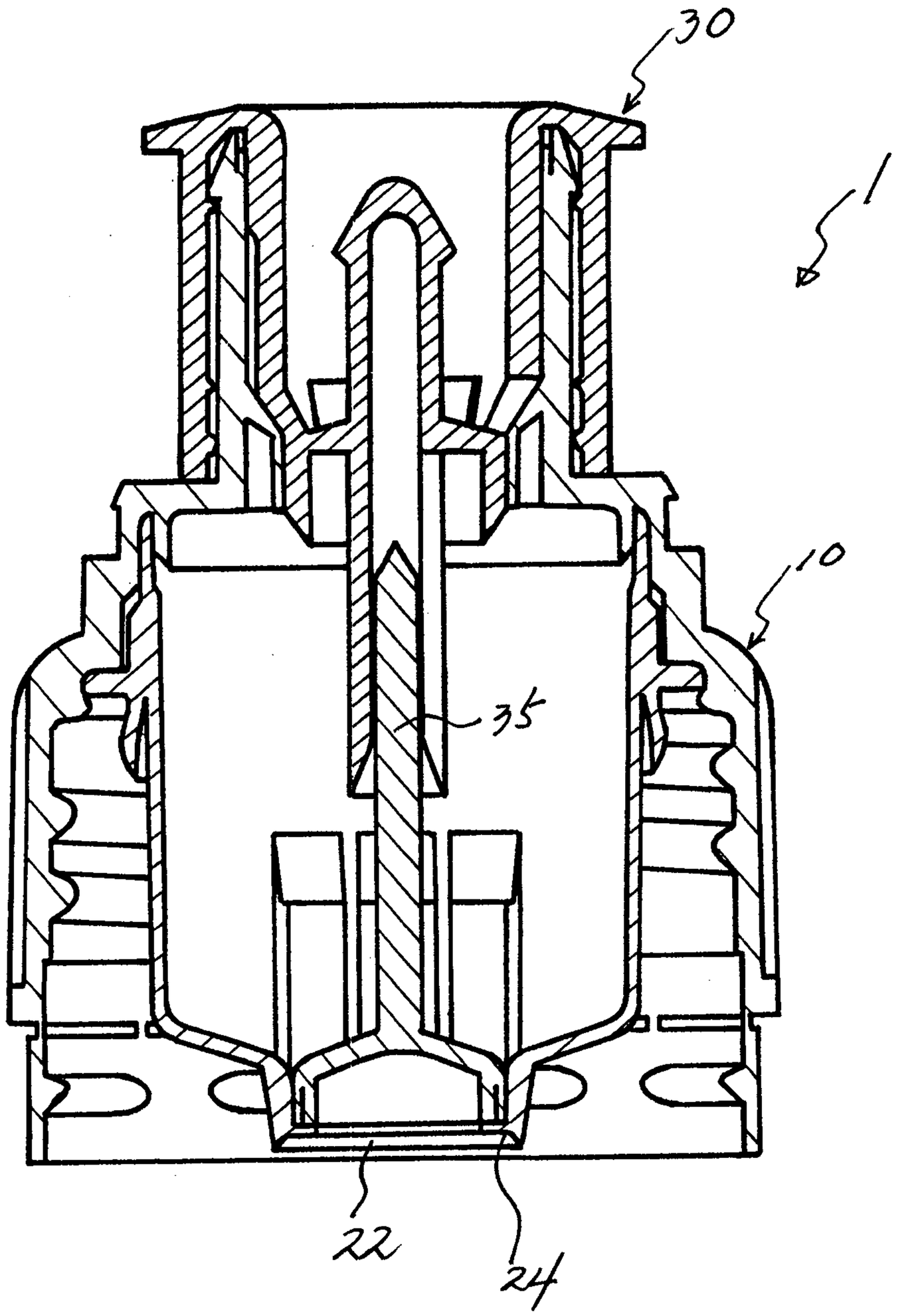


FIG.24

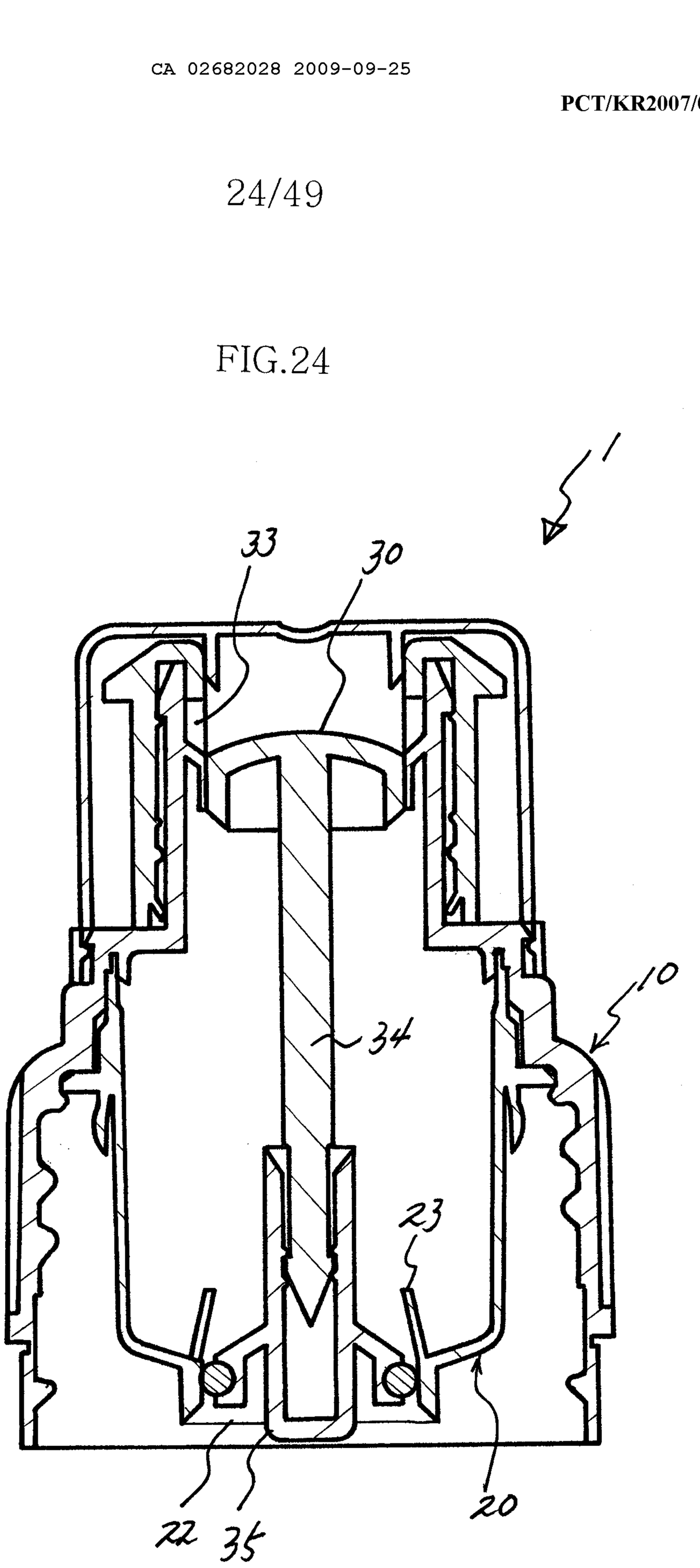


FIG.25

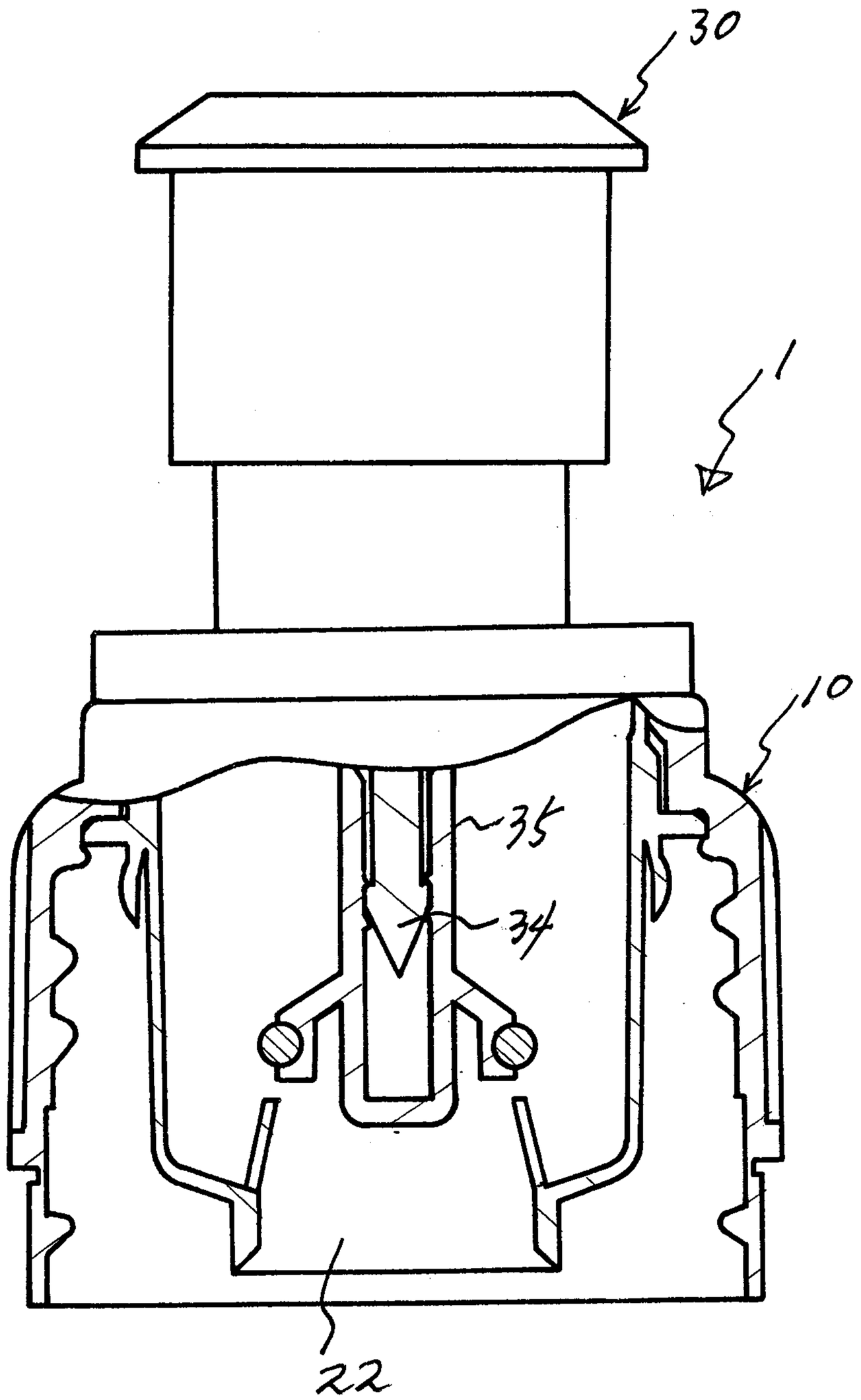


FIG.26

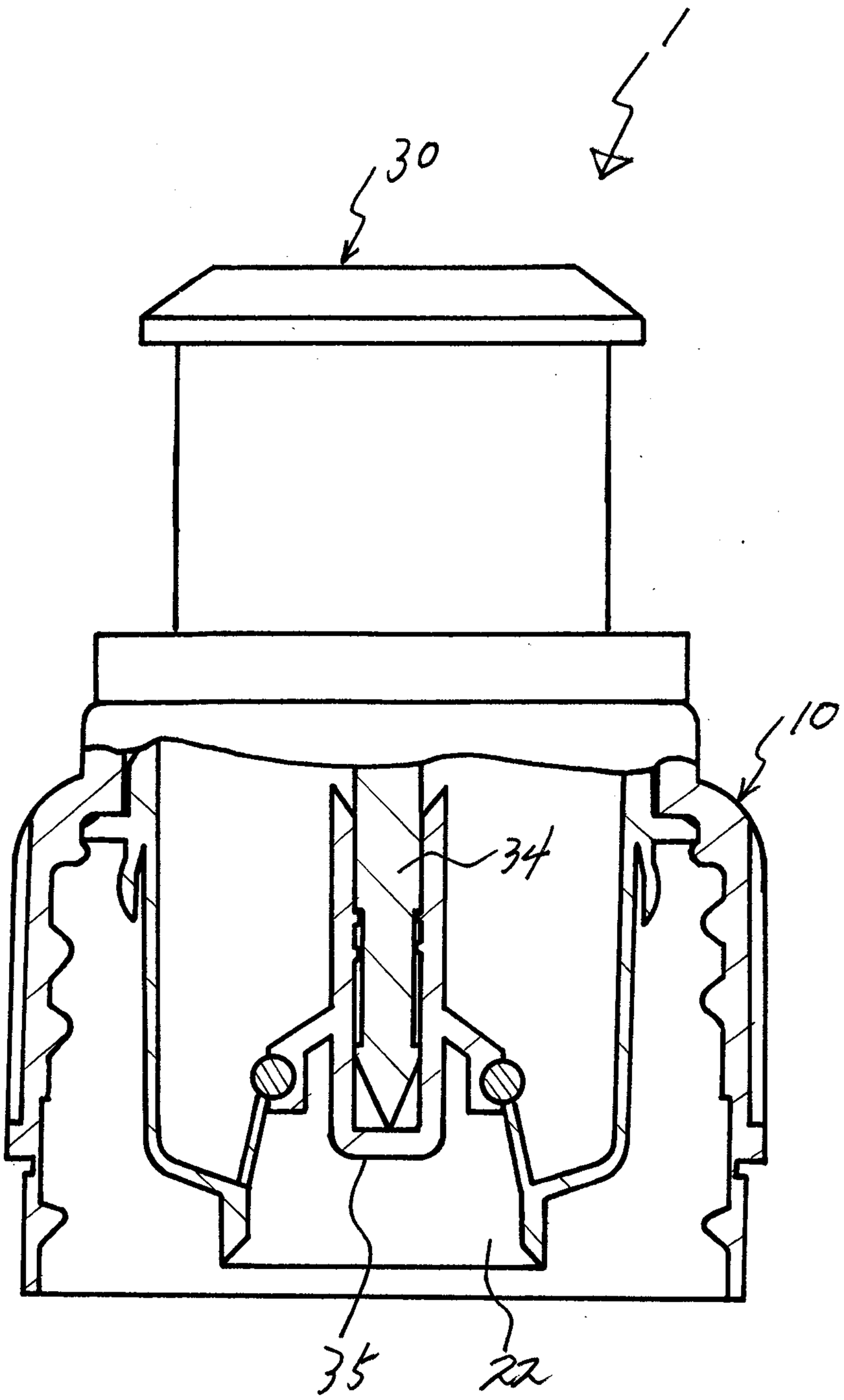


FIG.27

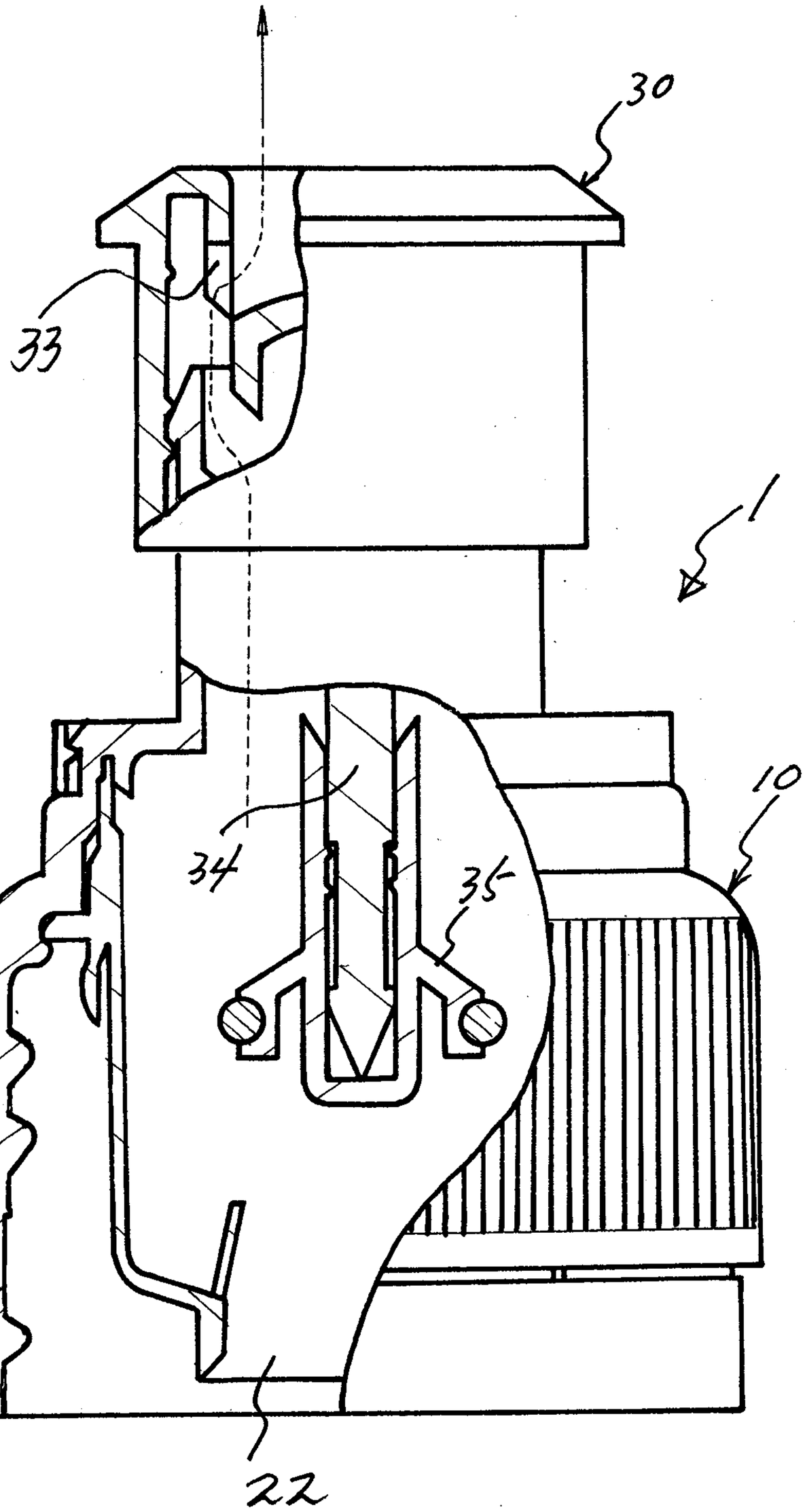


FIG.28

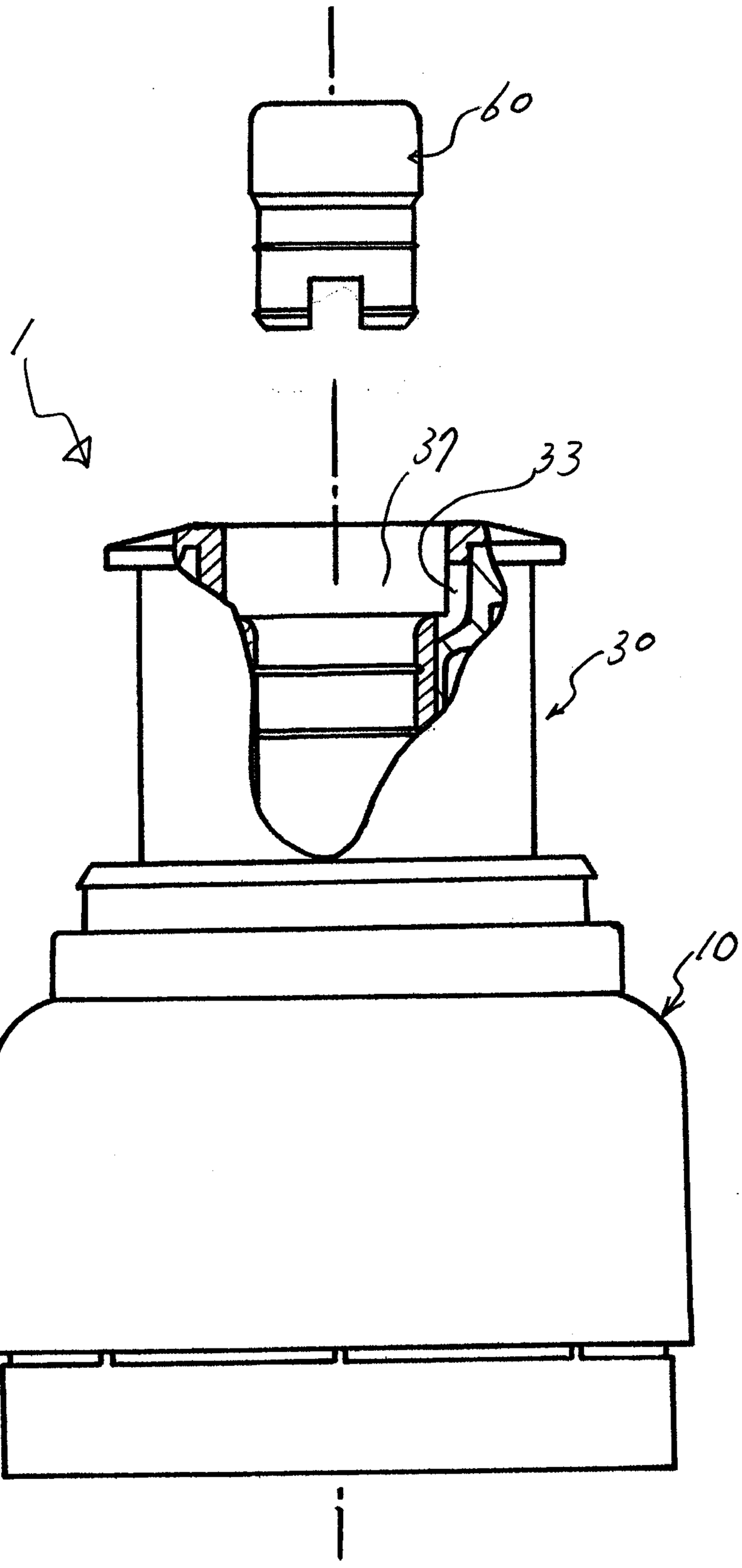


FIG.29

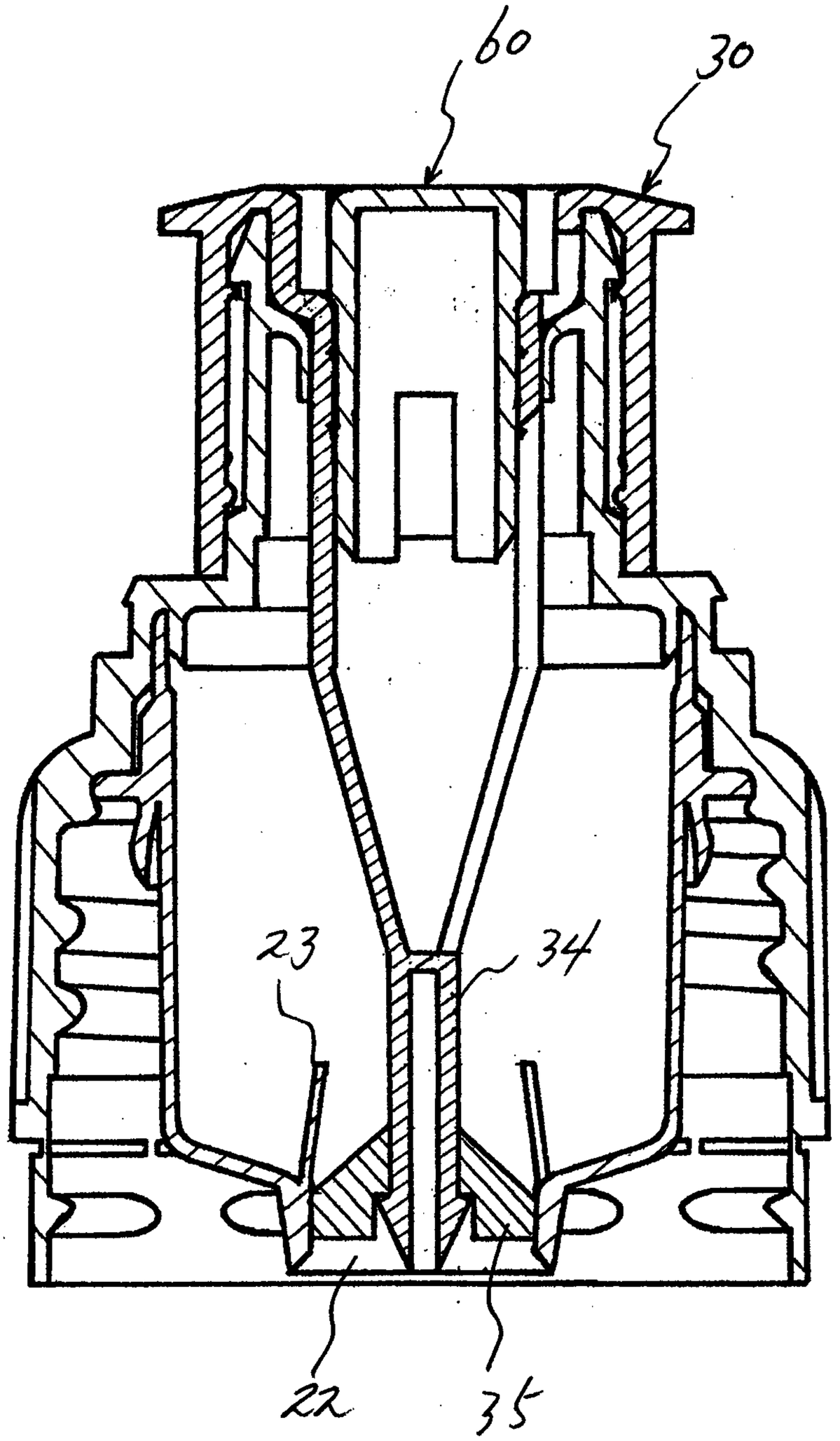


FIG.30

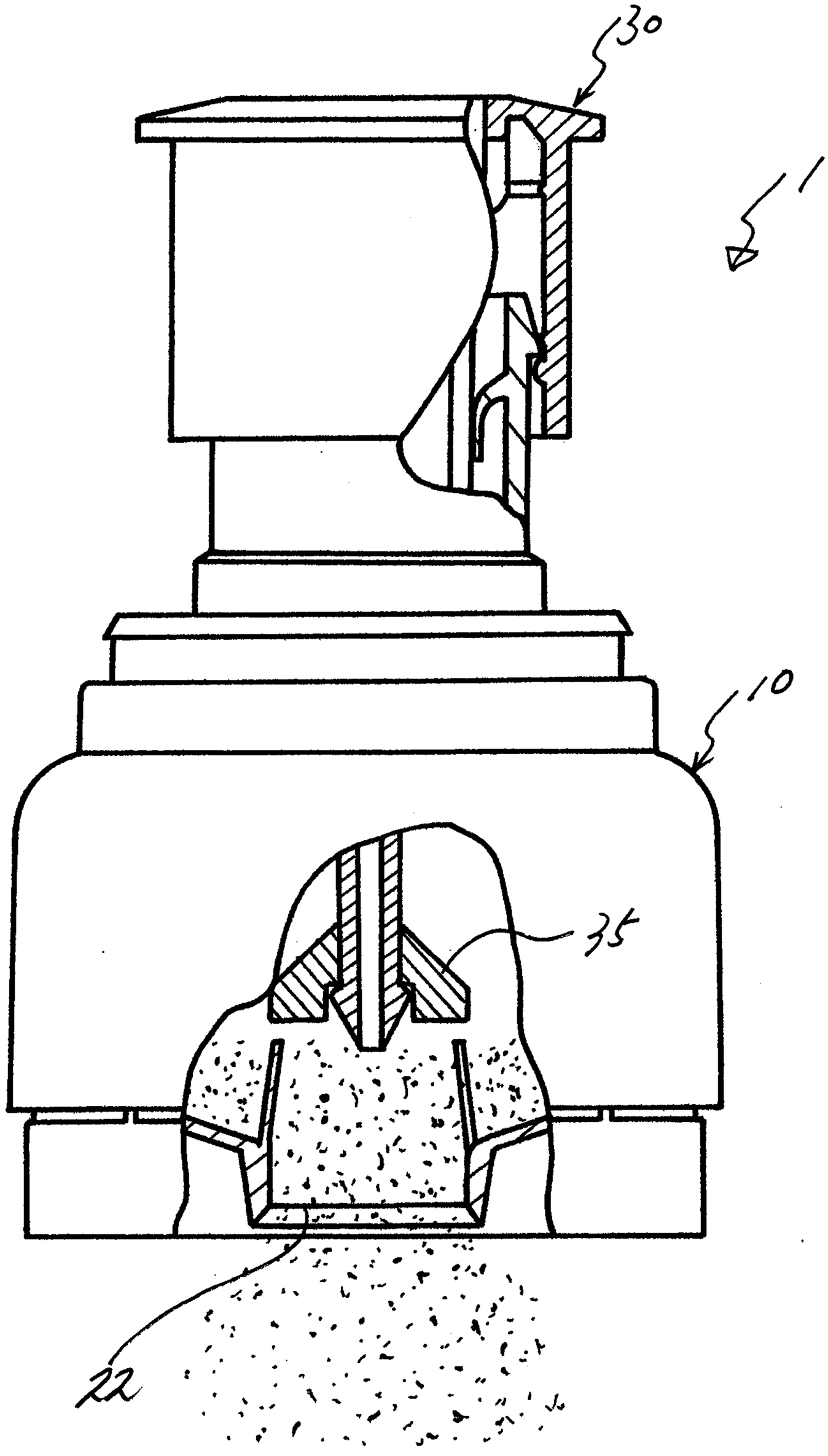


FIG.31

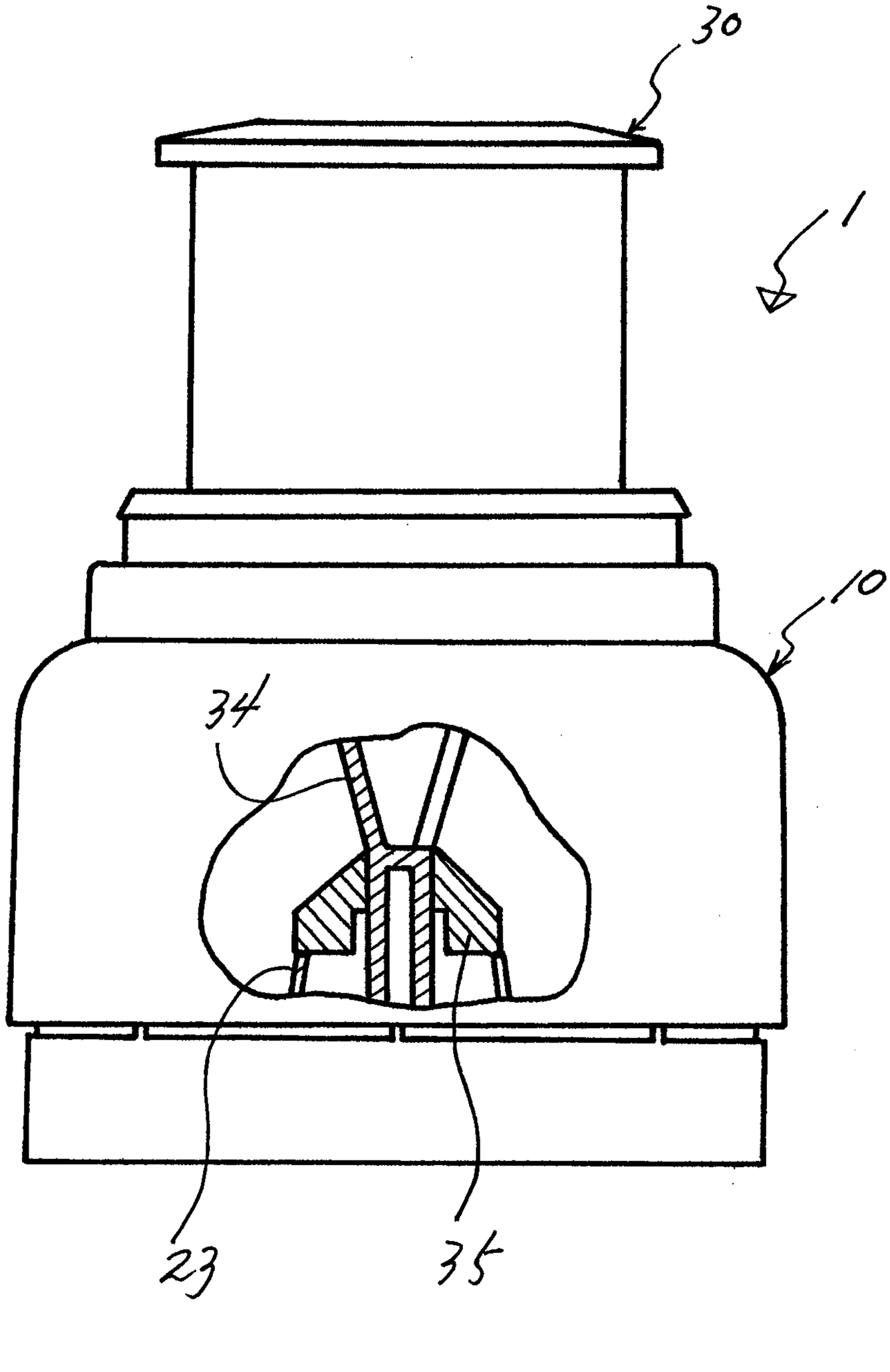


FIG.32

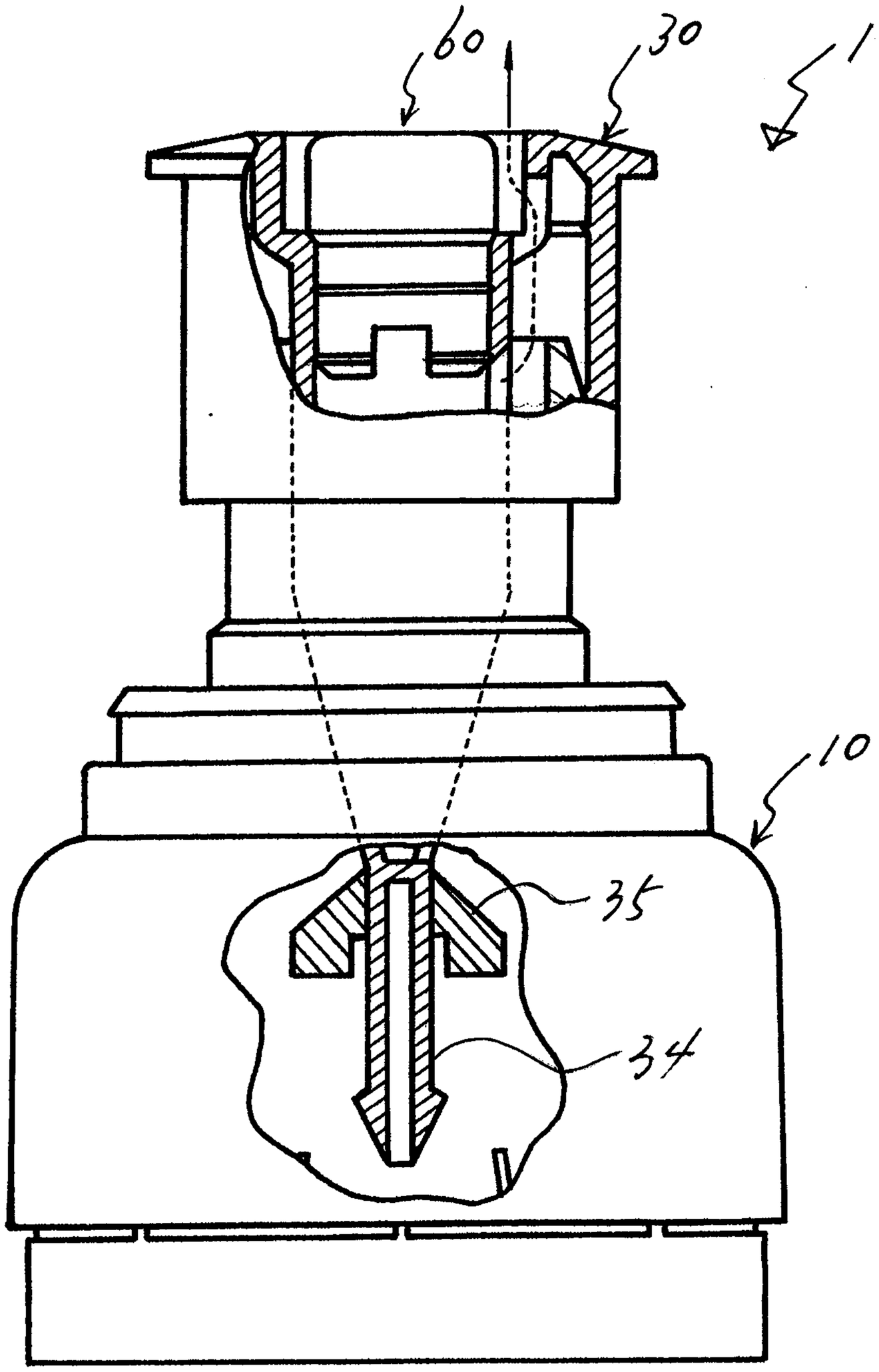


FIG.33

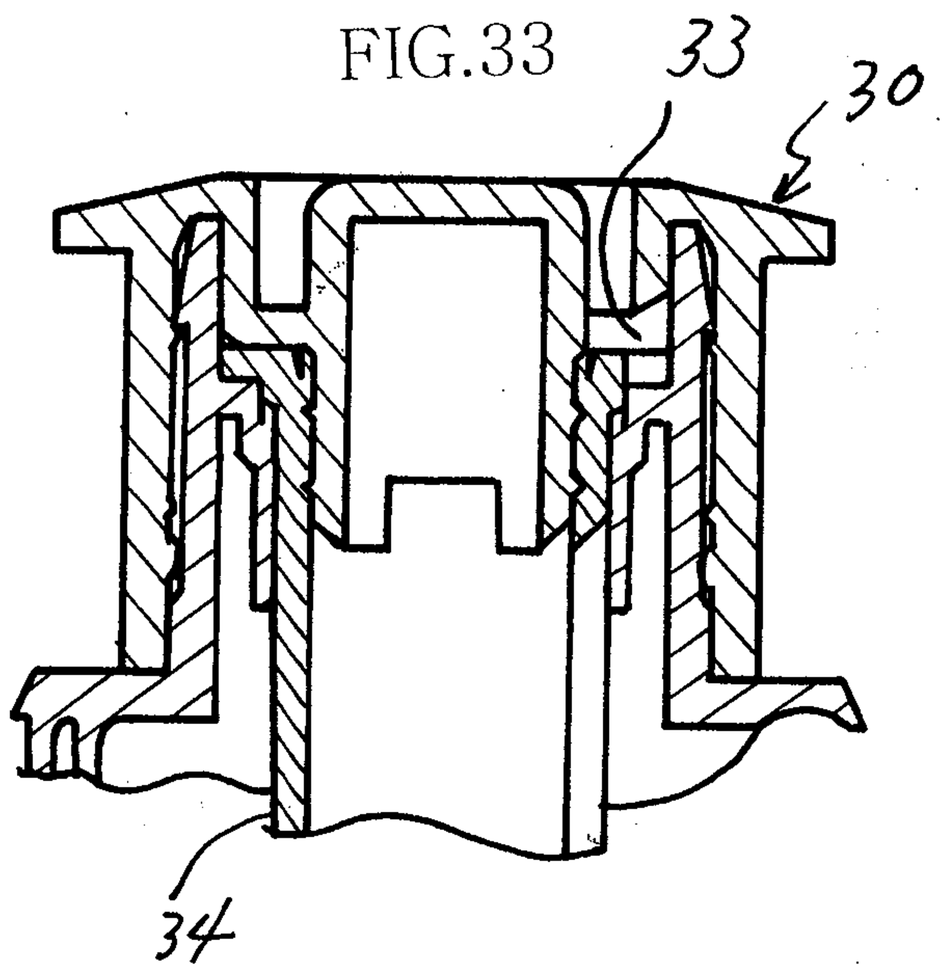


FIG.34

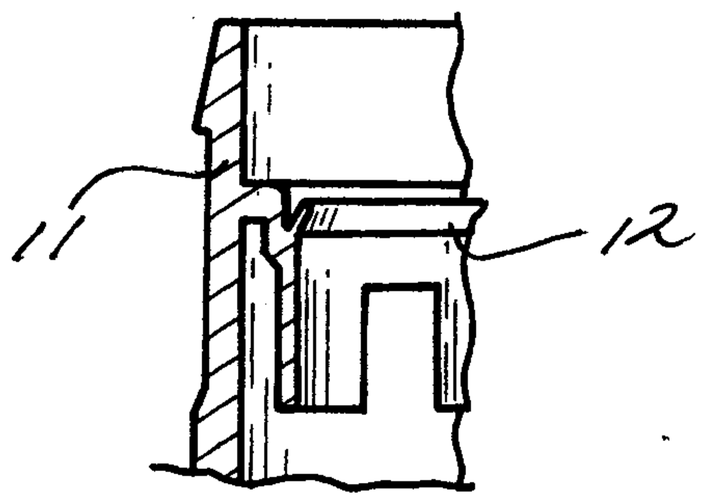


FIG.35

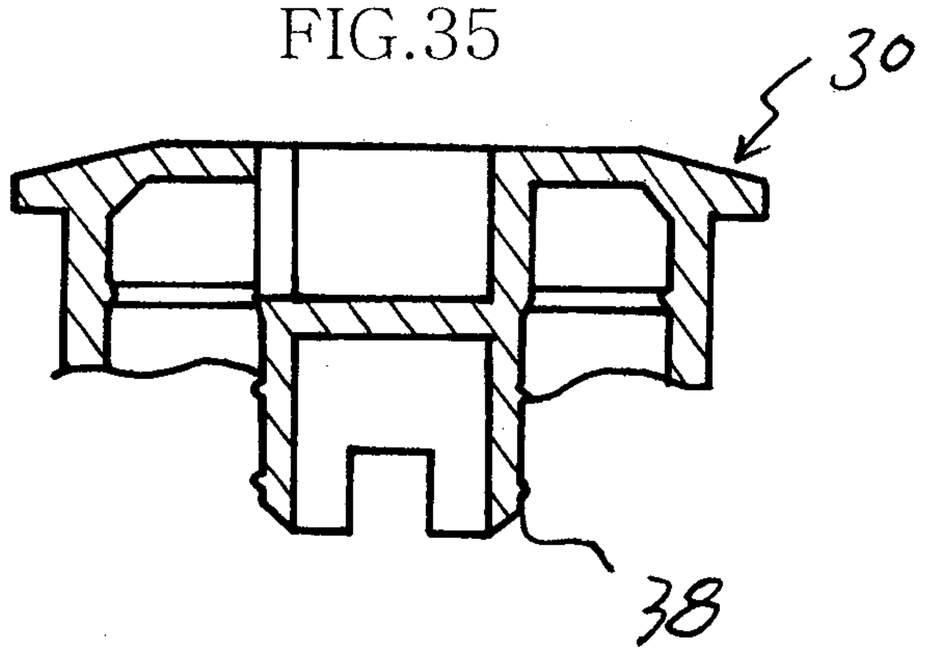


FIG.36

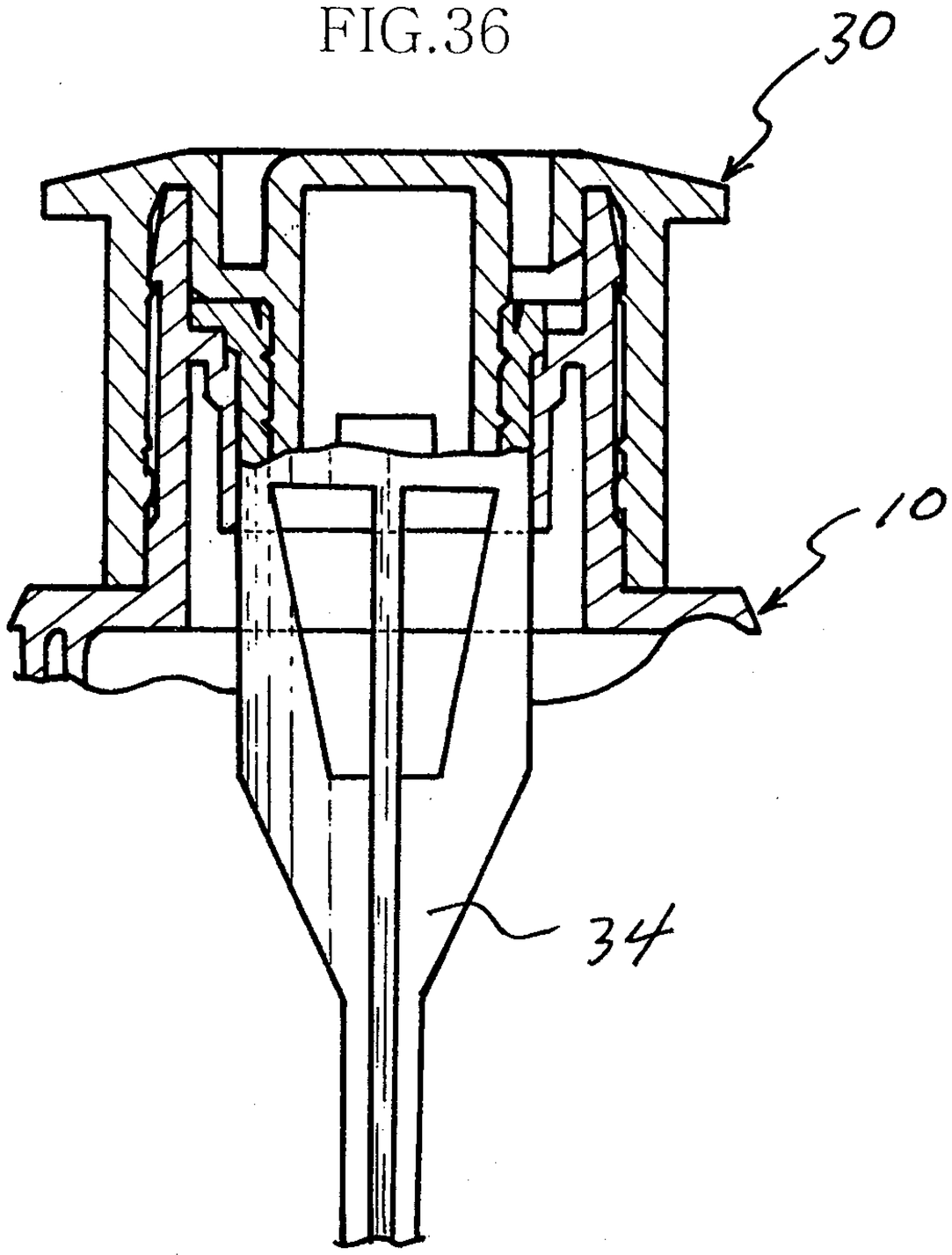


FIG.37

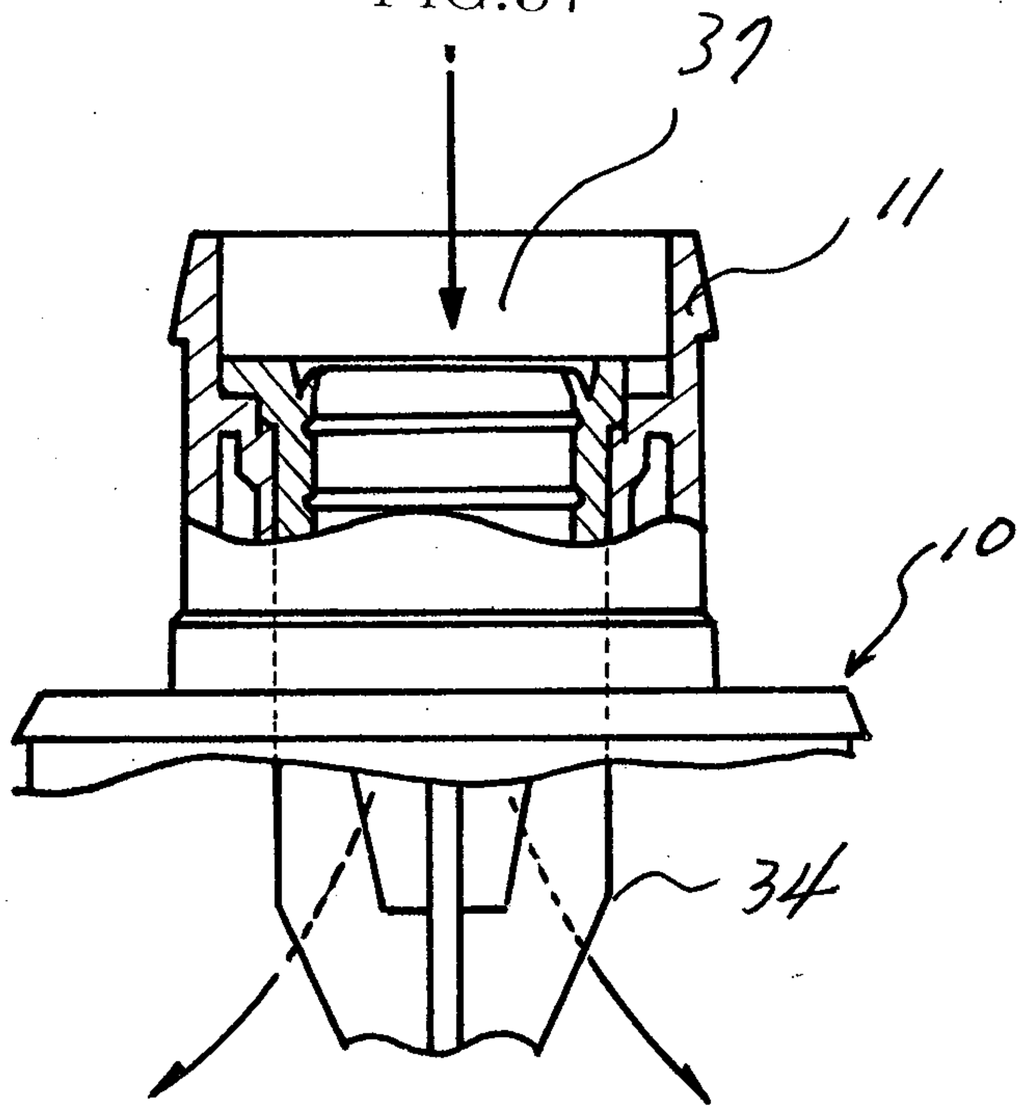


FIG.38

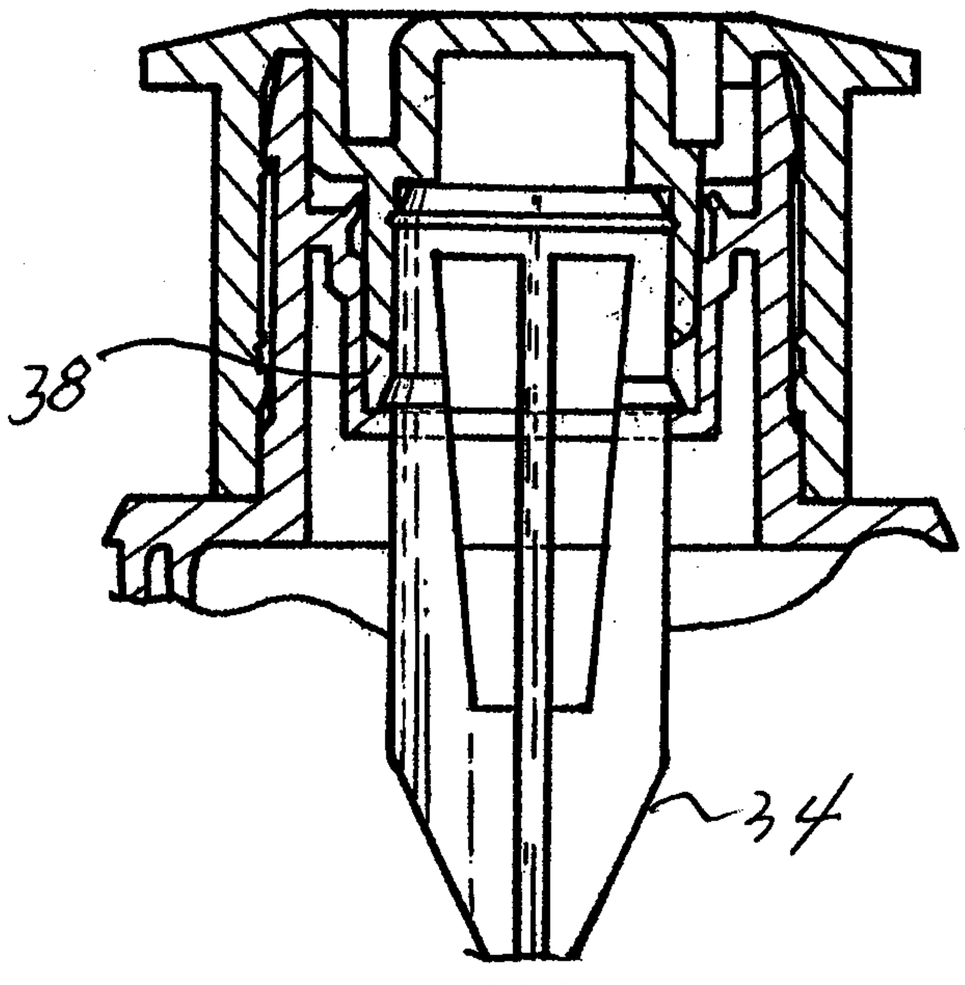


FIG.39

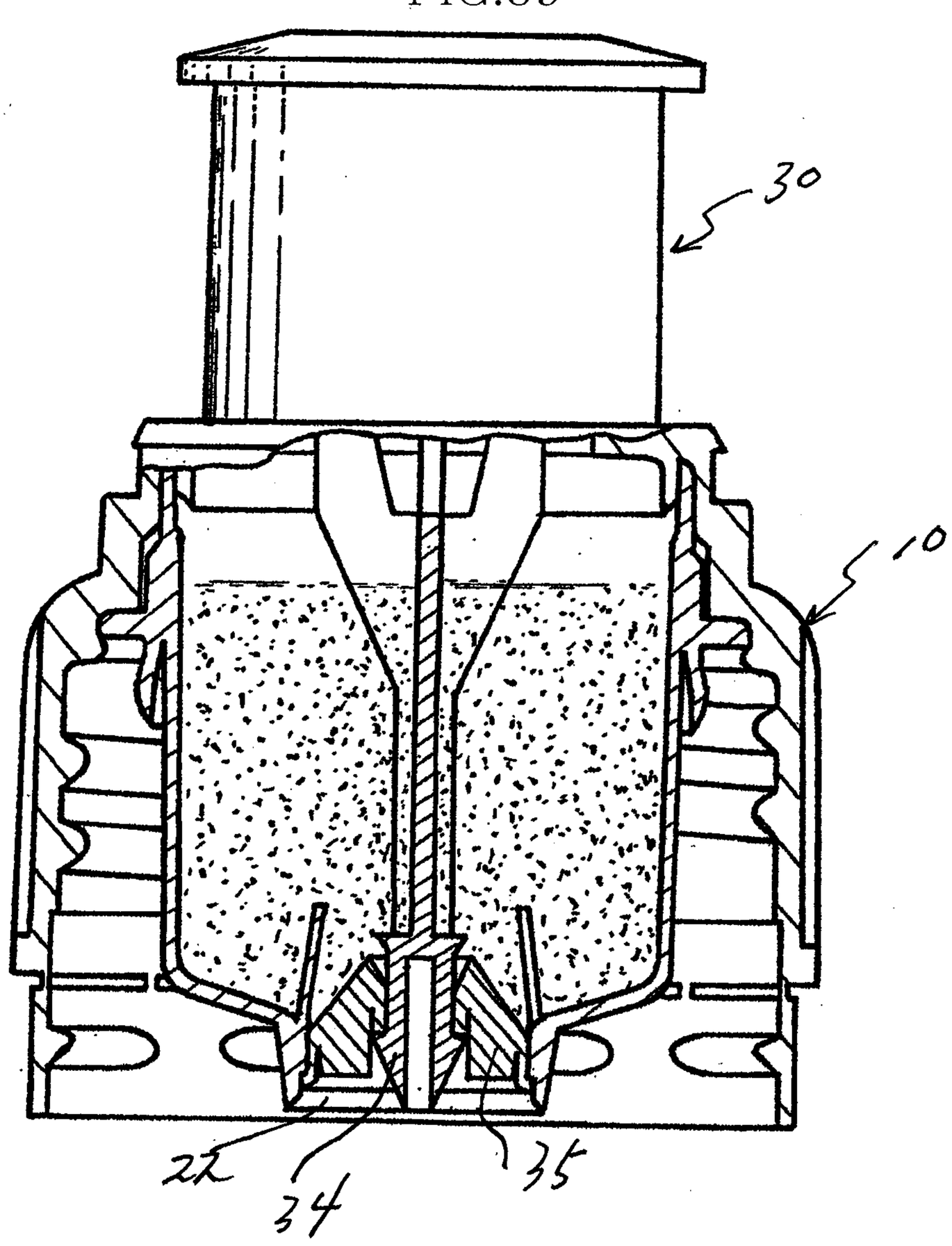


FIG.40

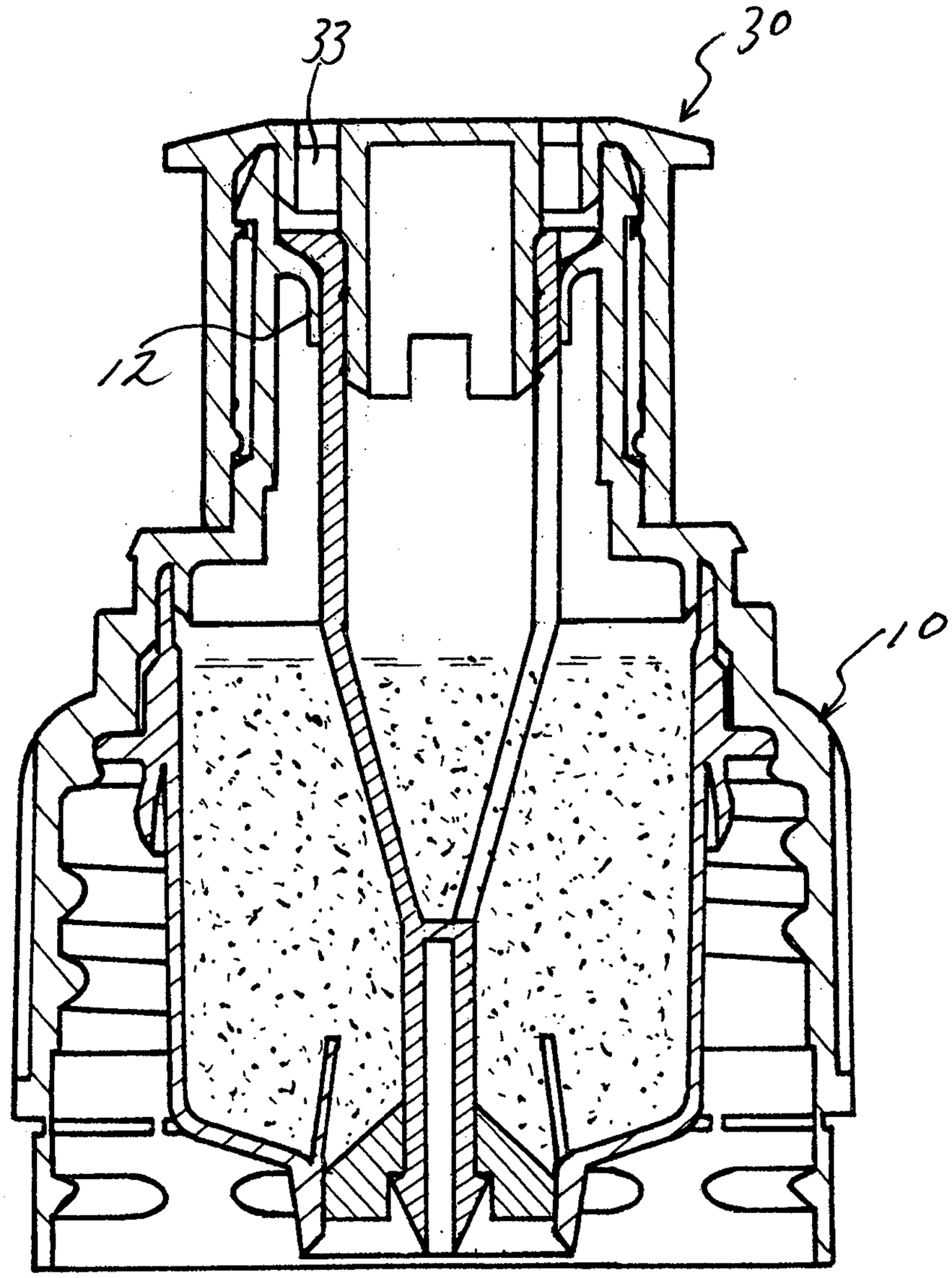


FIG.41

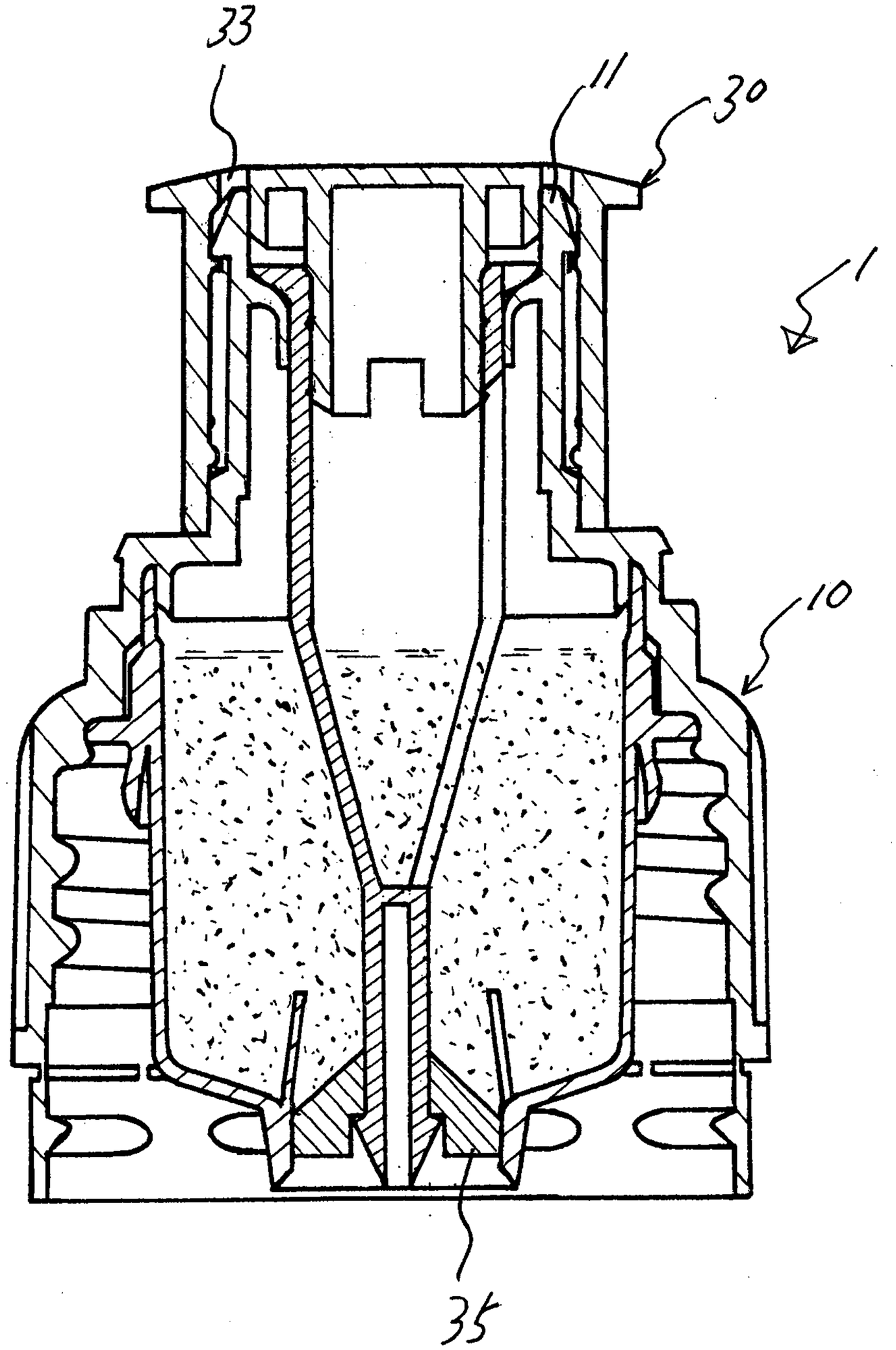


FIG.42

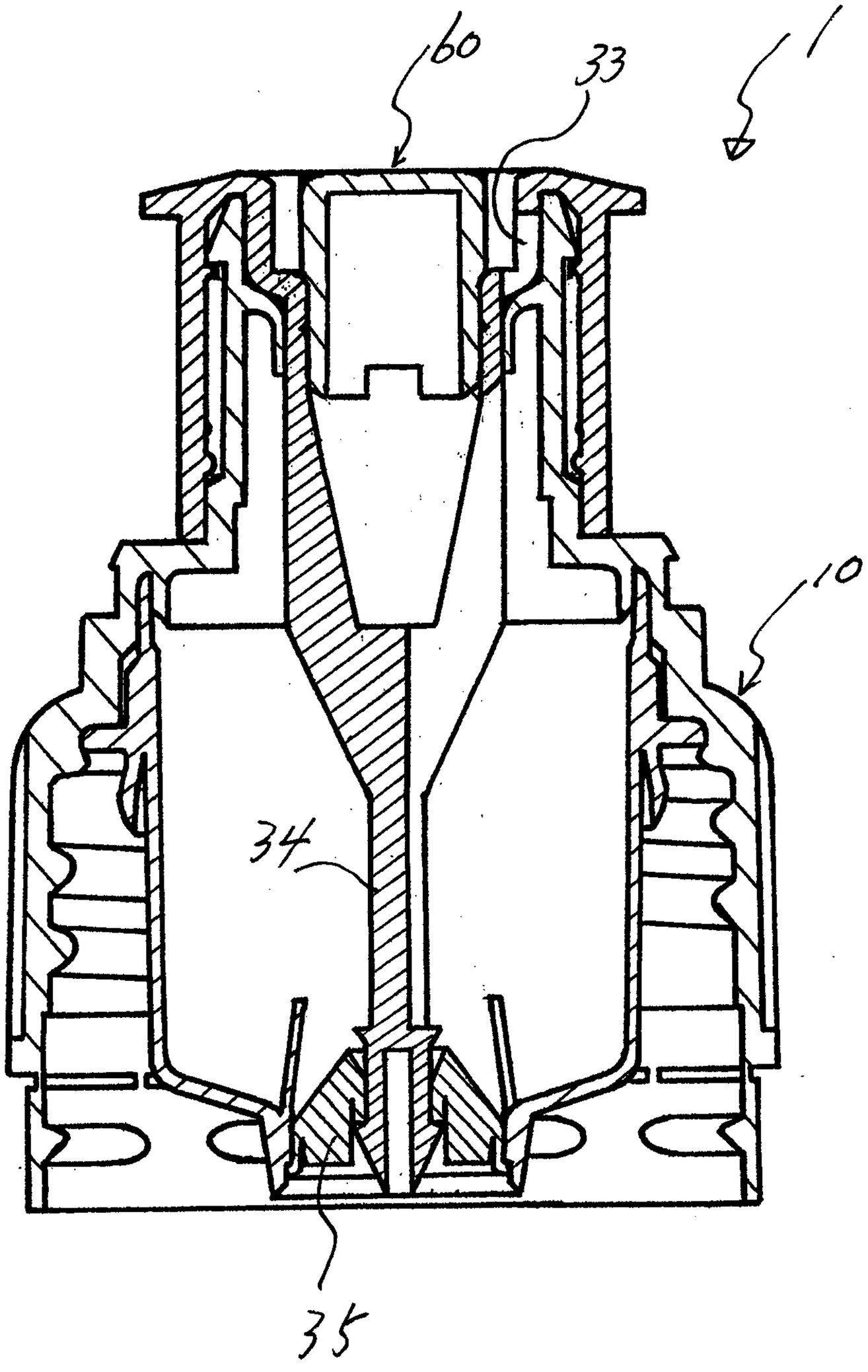


FIG.43

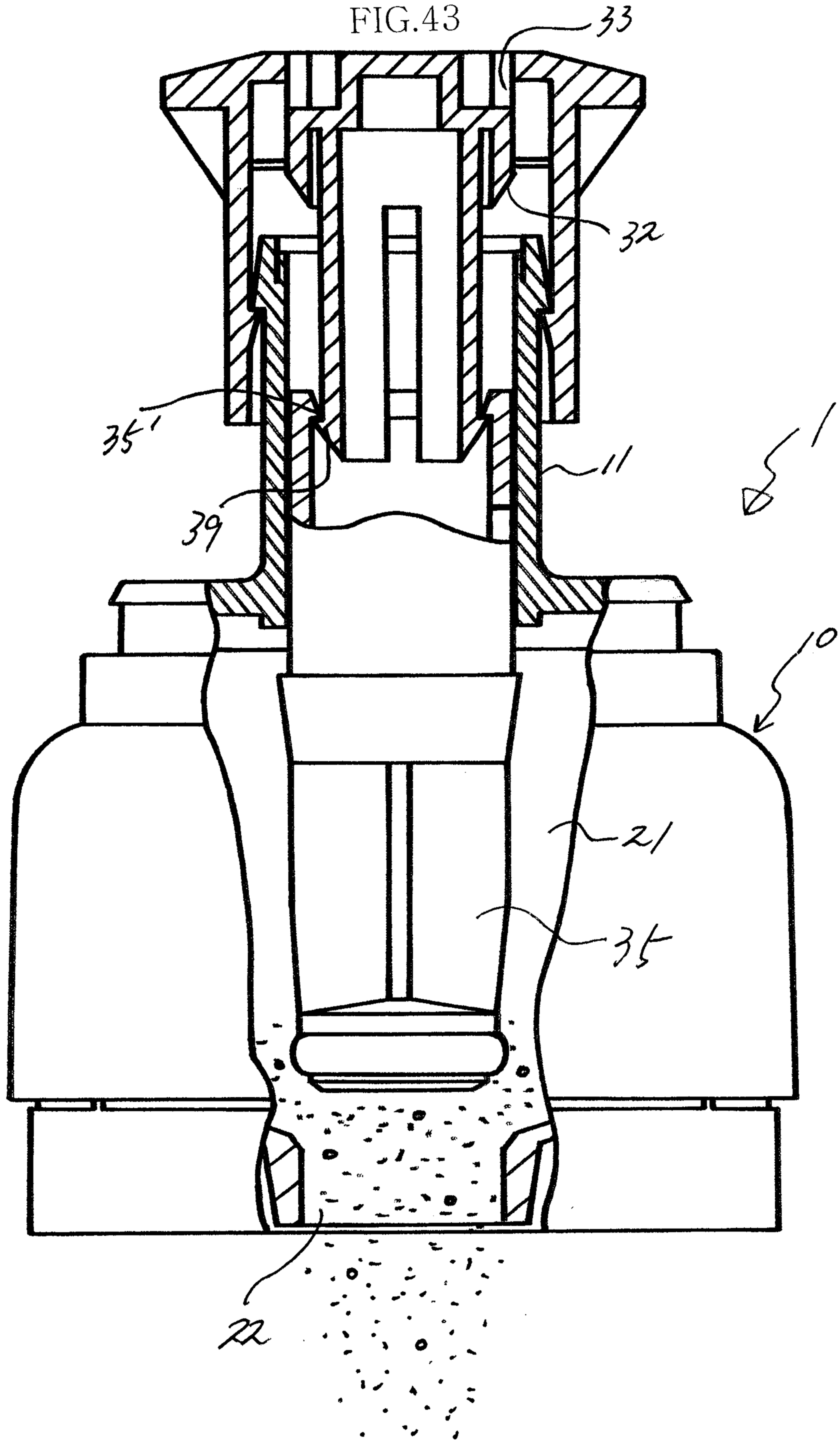


FIG.44

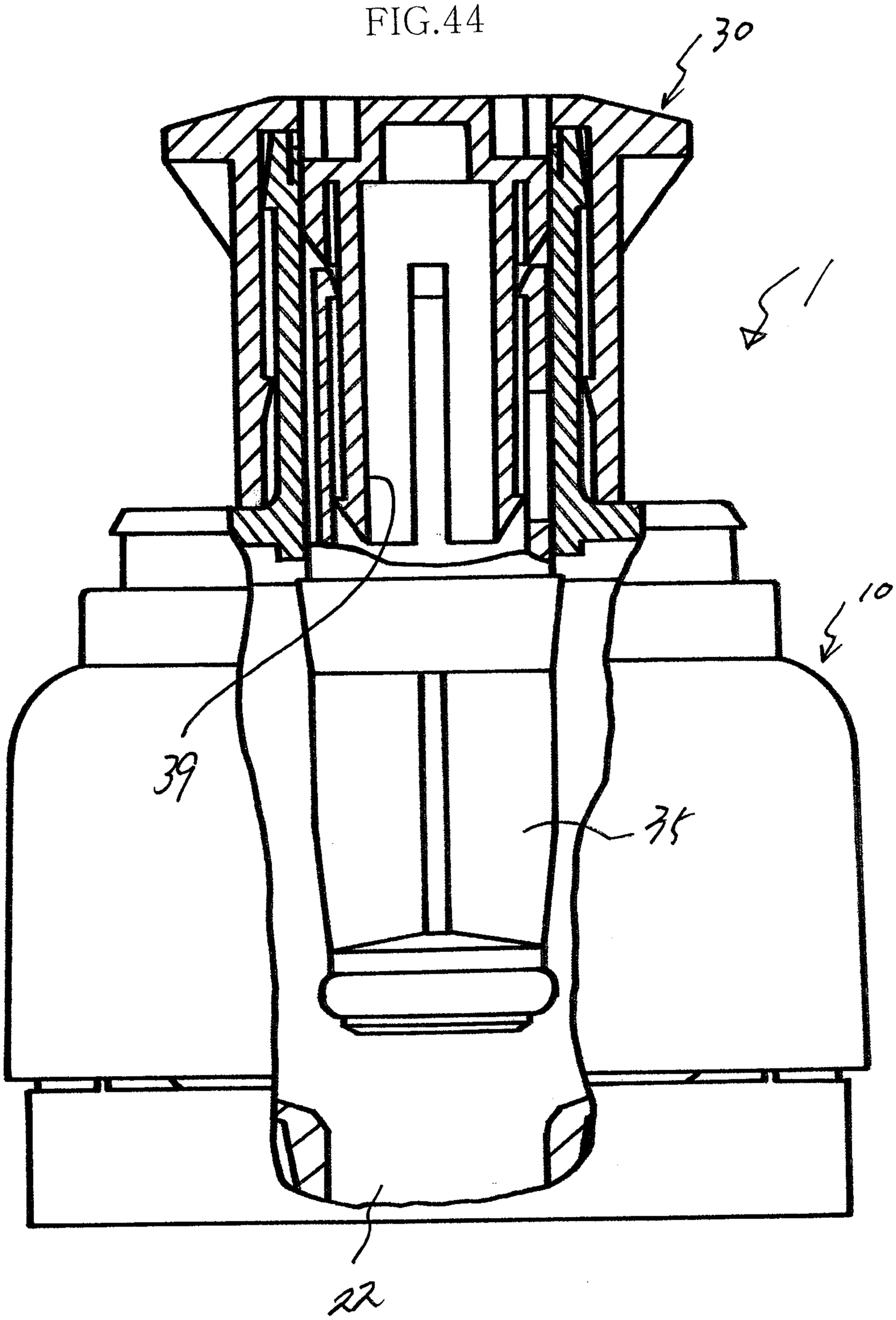


FIG.45

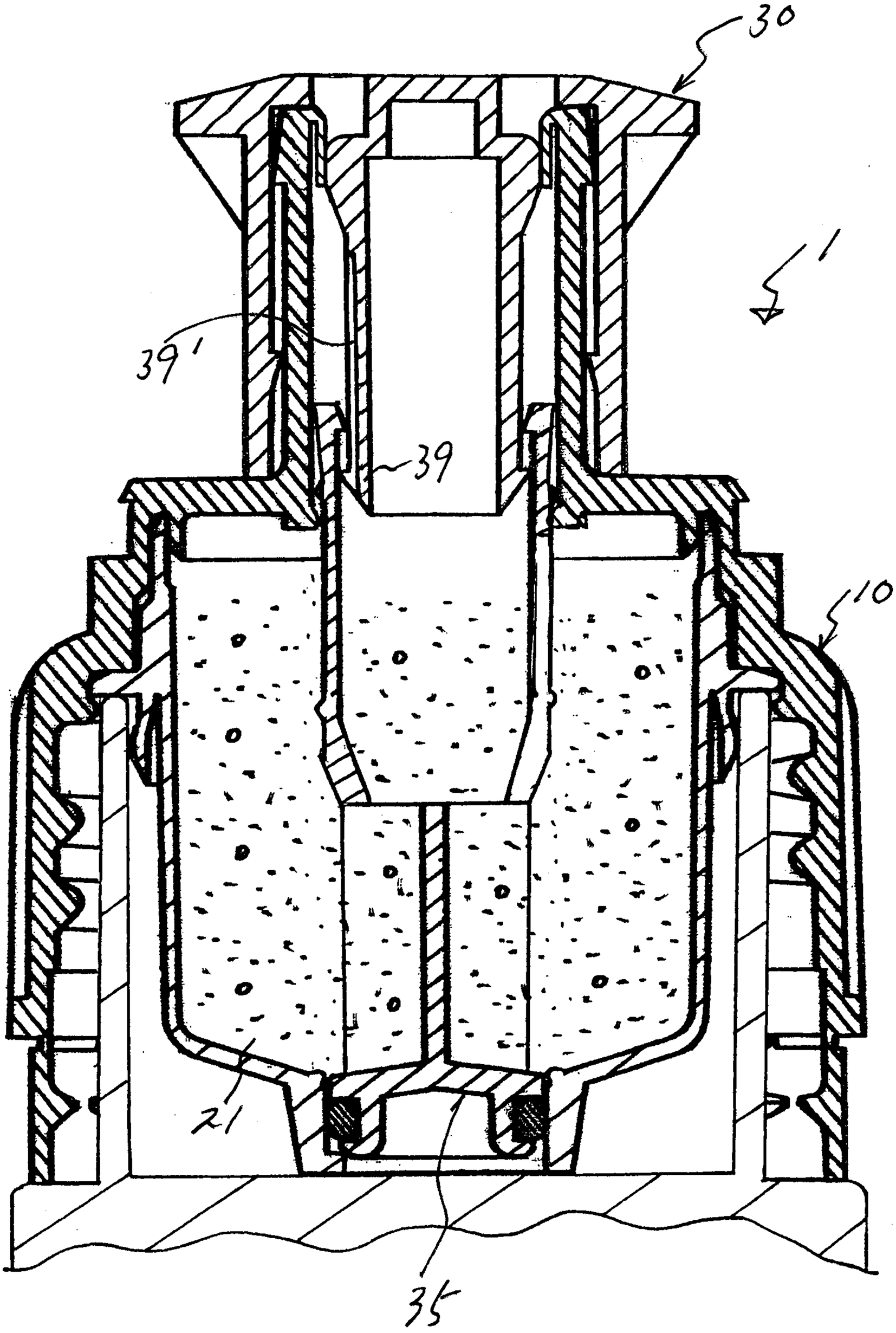


FIG.46

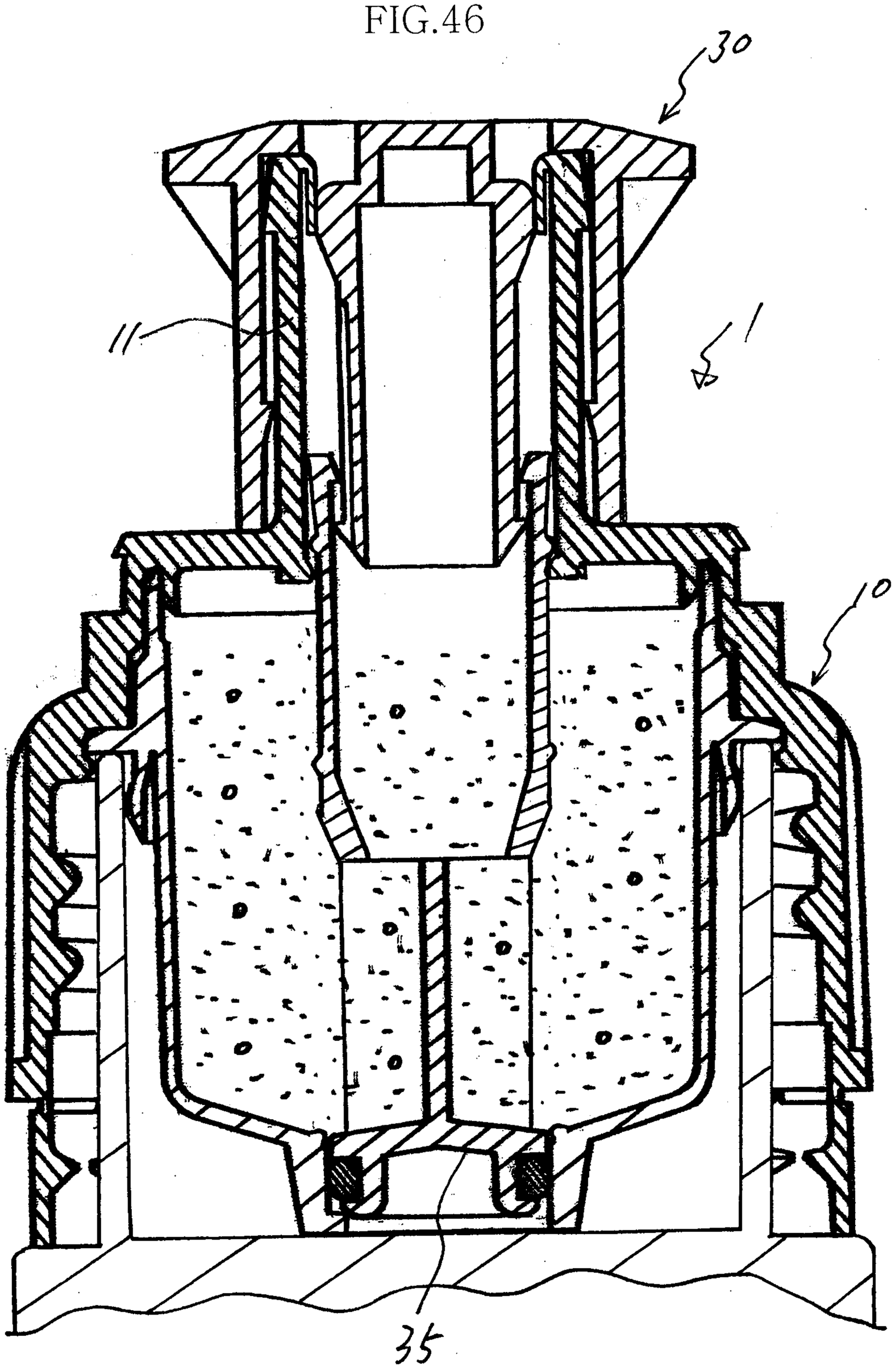


FIG.47

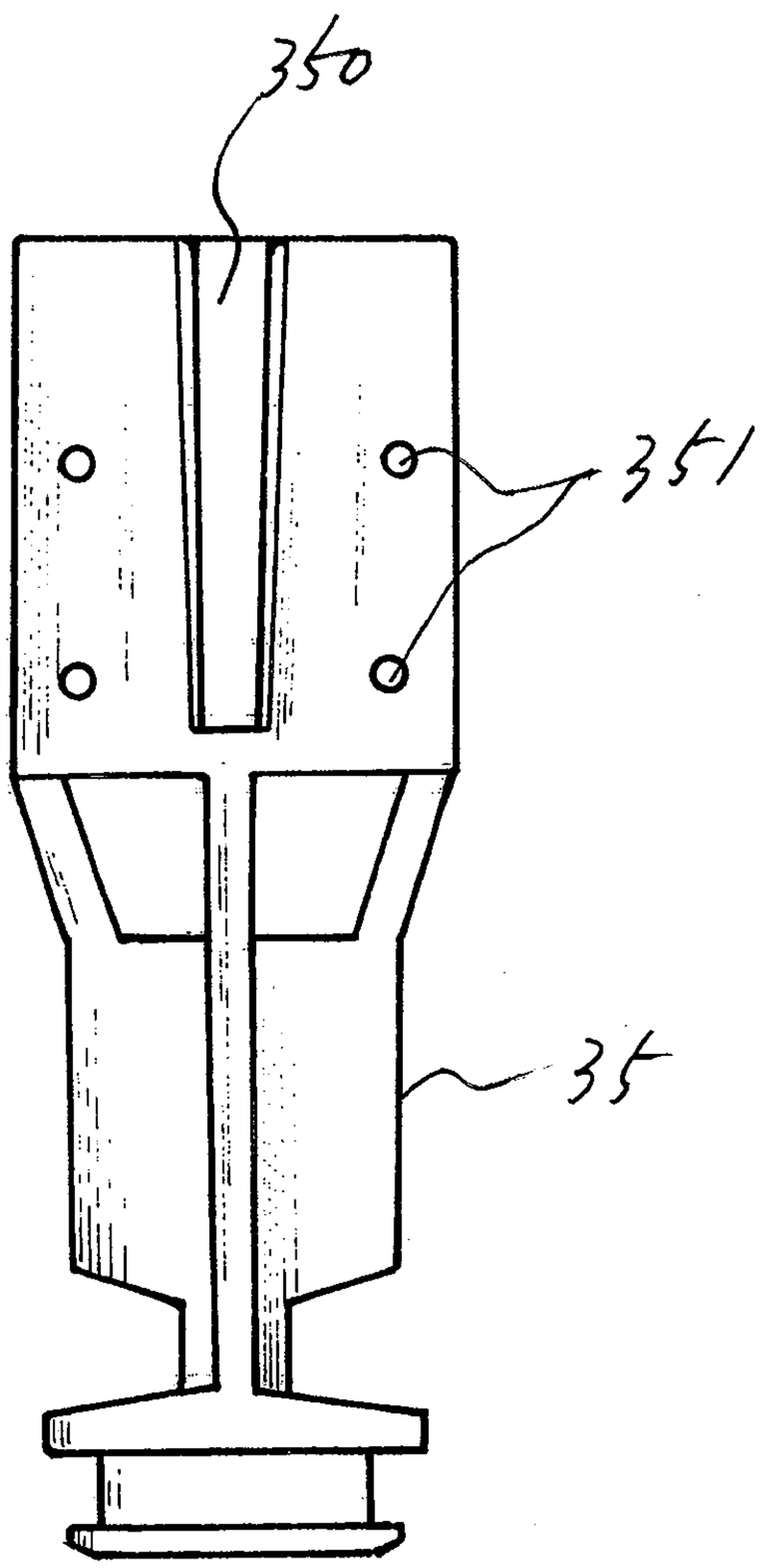


FIG.48

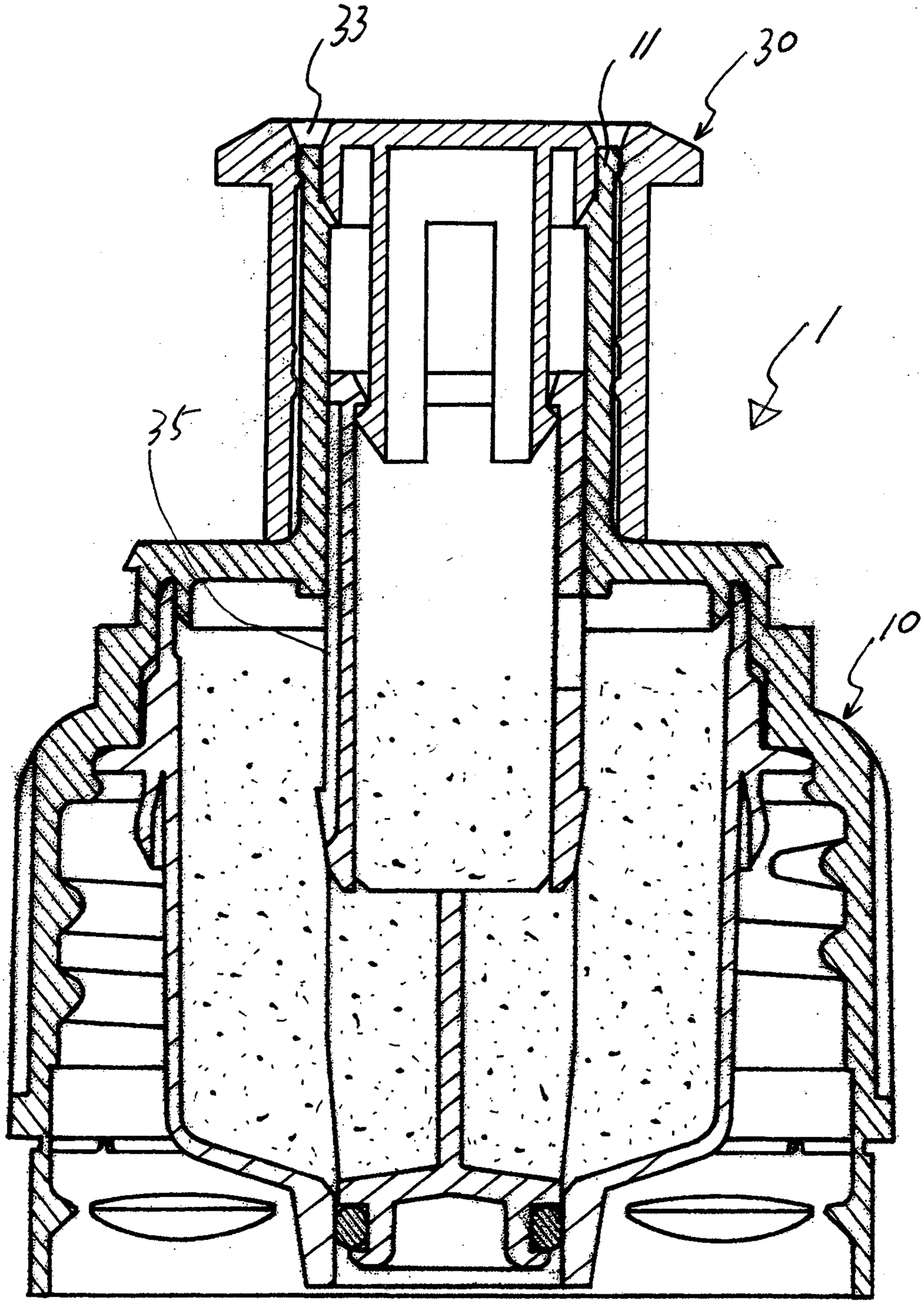


FIG.49

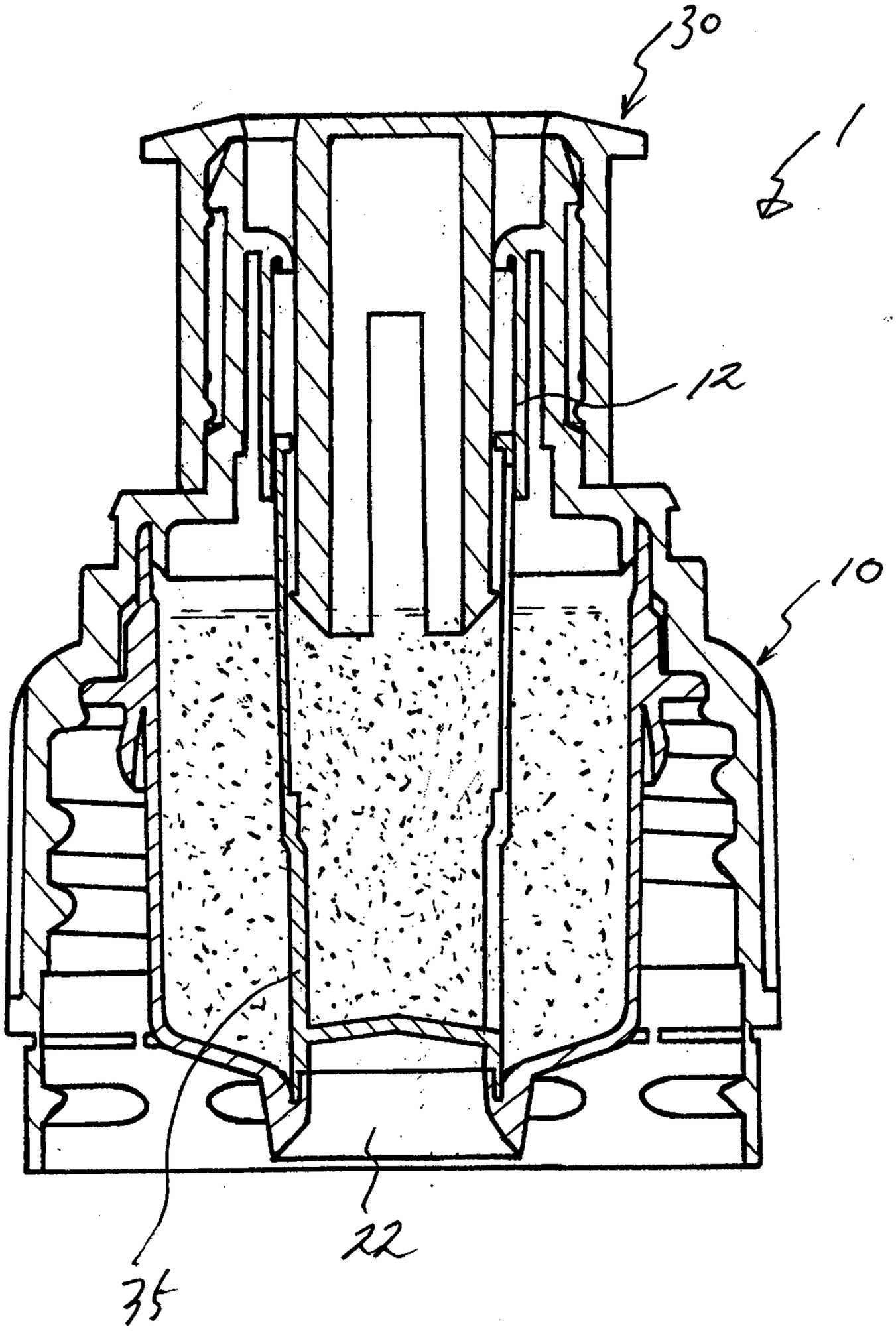


FIG.50

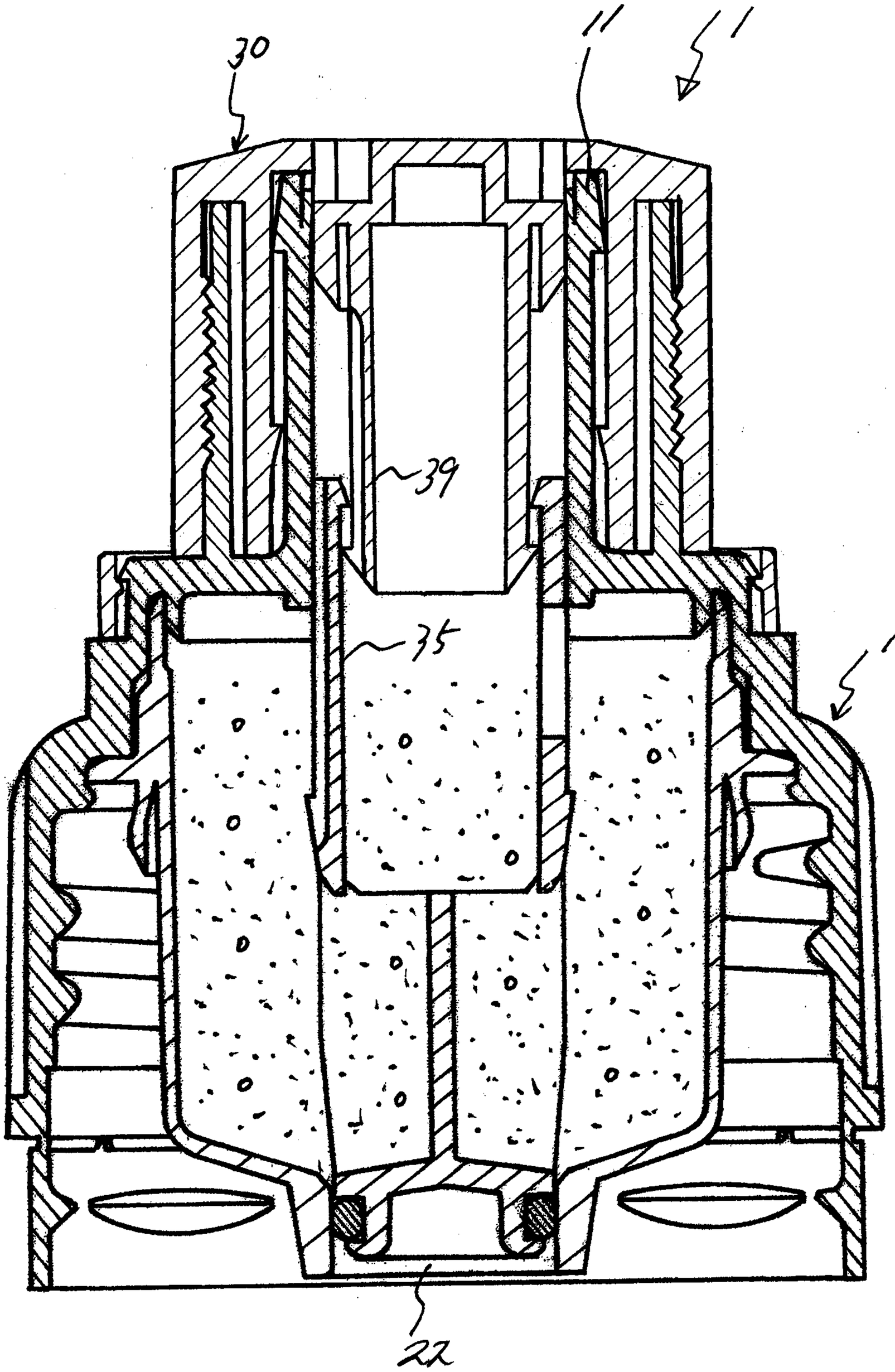


FIG.51

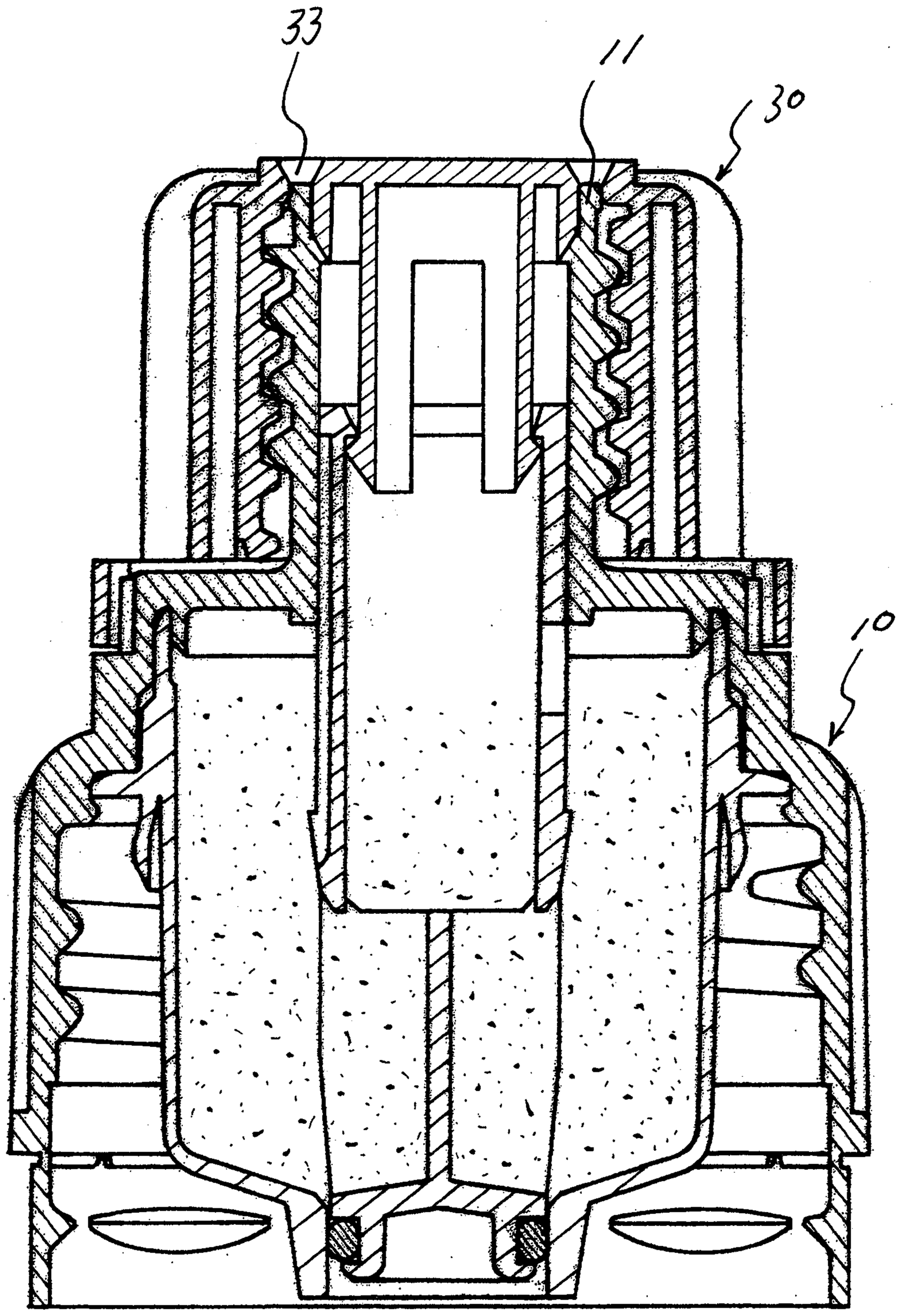


FIG.52

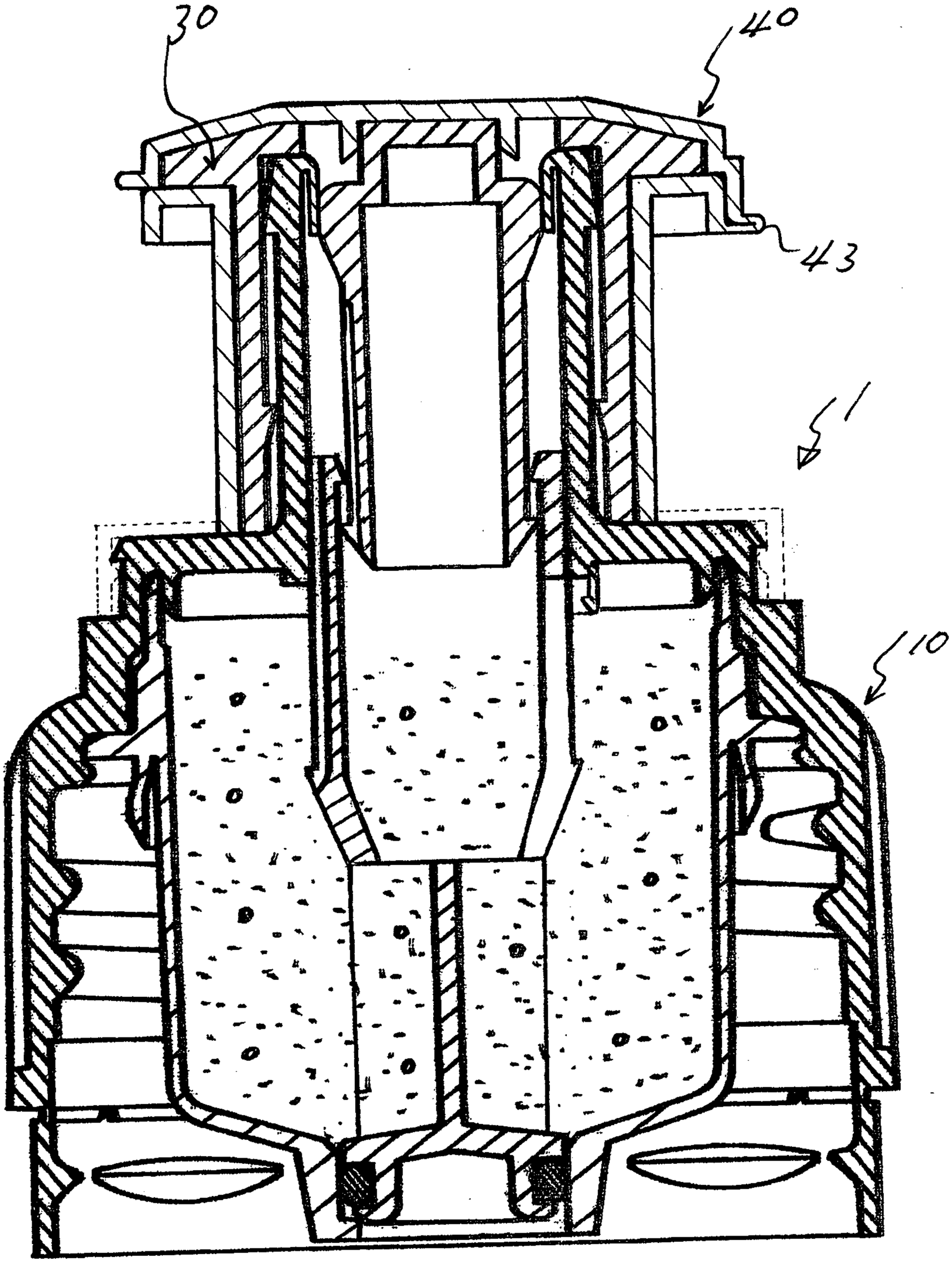
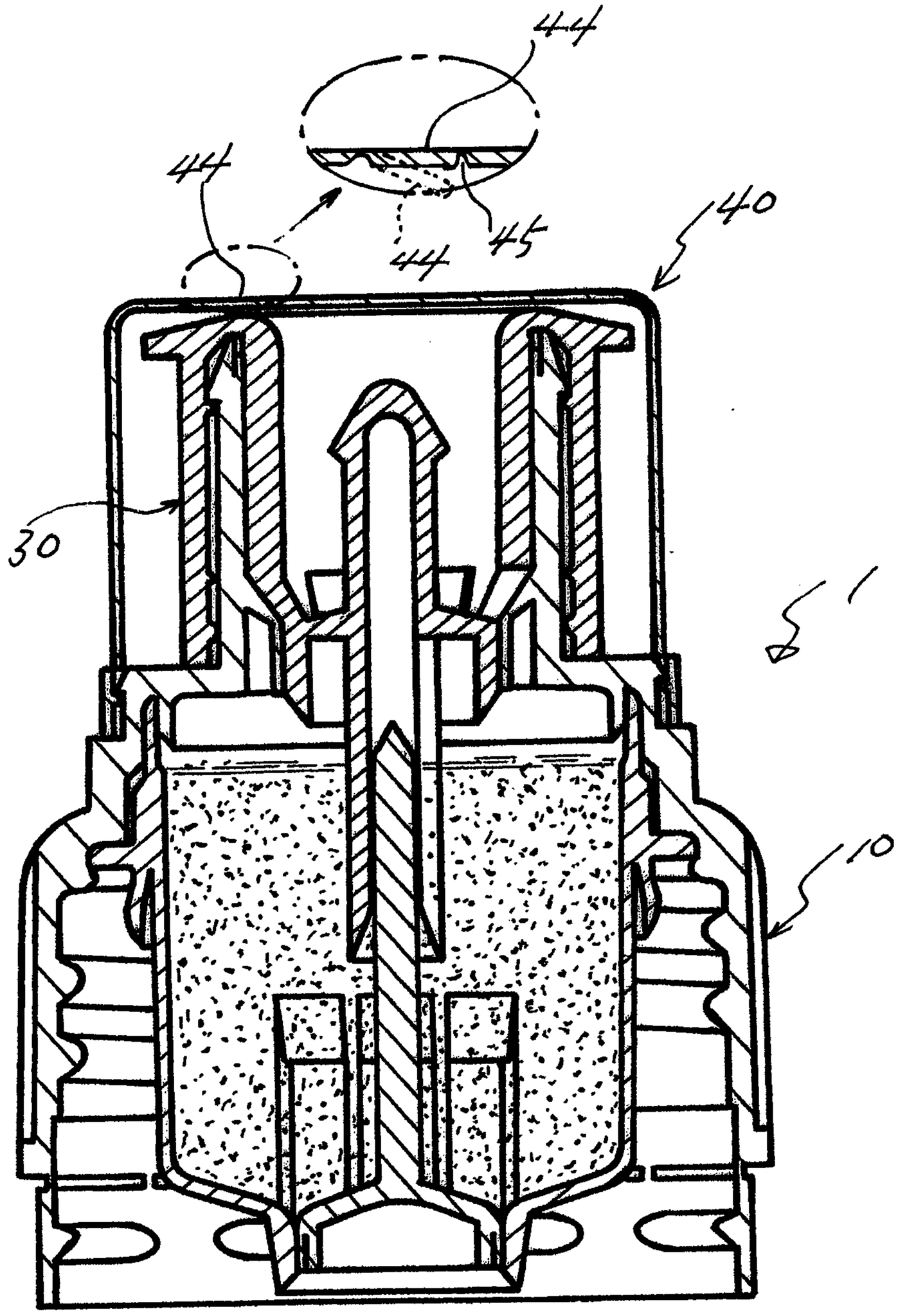
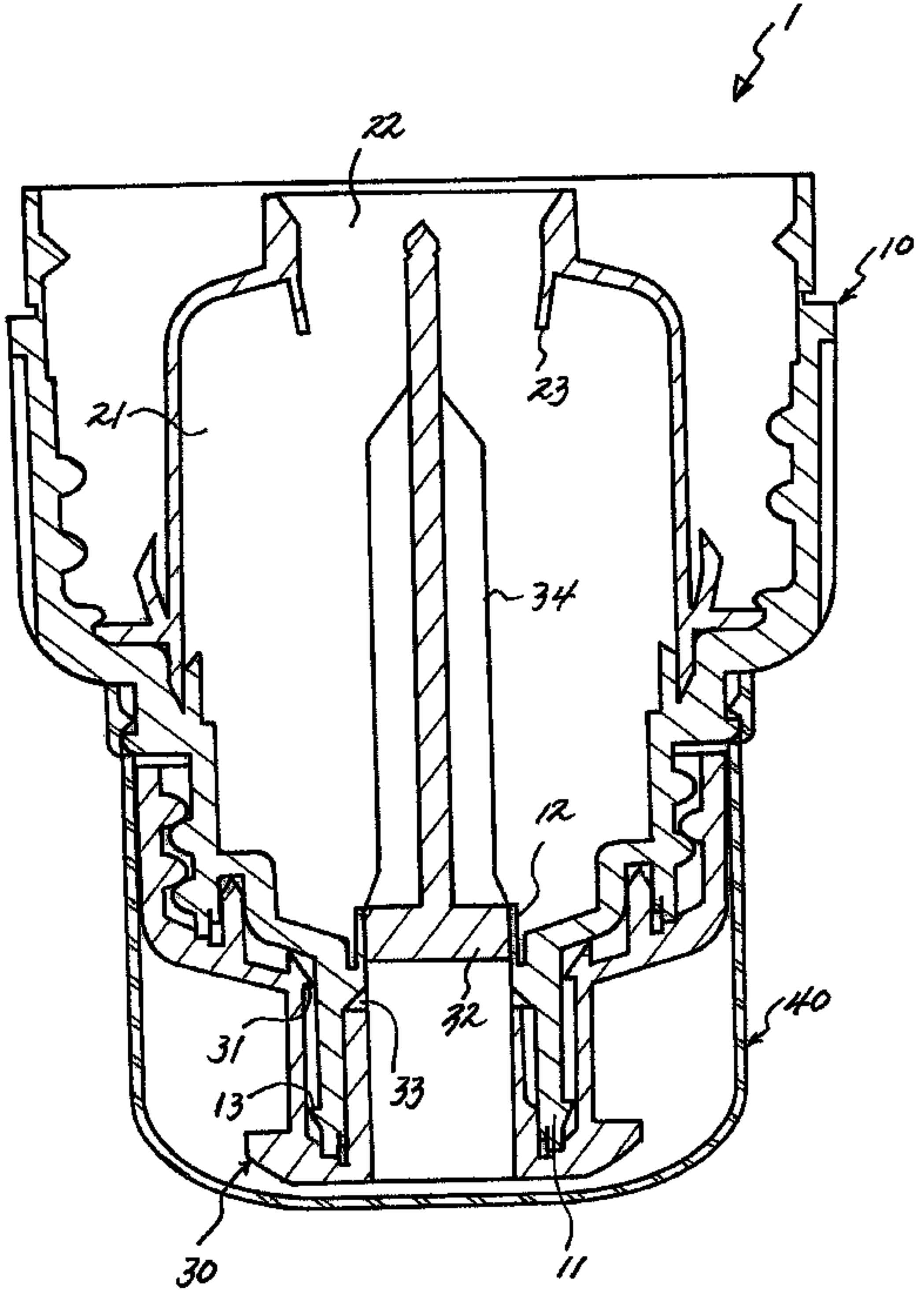


FIG.53




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