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(71) Applicants:
- **Lee, Seong-Jae**
  Jongno-Gu, Seoul 150-808 (KR)
- **Lee, Su-Jae**
  Seoul 139-837 (KR)
- **Lee, Sun-Hee**
  Seoul 138-797 (KR)
- **Lee, Tae-Keun**
  Kyenggido 464-842 (KR)

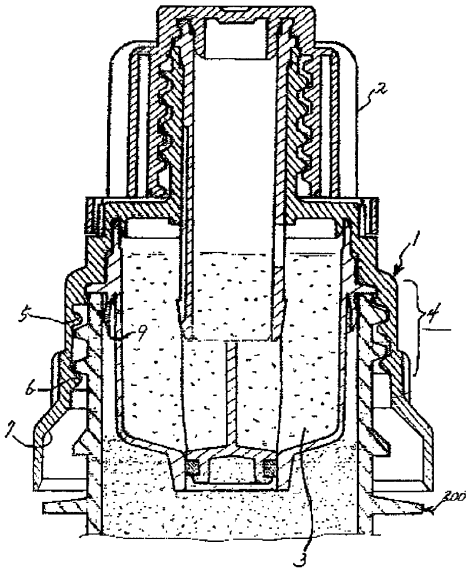
(72) Inventor: **LEE , Seong-jae**
- (KR)

(74) Representative: **Pfenning, Meinig & Partner GbR**
Theresienhöhe 13
80339 München (DE)

(54) RECEPTION APPARATUS USED BY BEING COUPLED TO A NECK OF A CONTAINER

(57) A reception apparatus to be coupled to container necks having different sizes has a main body in which a reception unit comprising a storage space is formed, and a lower side having a threaded part. Threads fitted to the sizes of the container necks are formed within the thread portion of the reception apparatus. The threads are formed to be capable of being coupled to a plurality of container necks, or formed of elastic threads integrally or separately produced.

[Fig. 1]



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Description

TECHNICAL FIELD

[0001] The present invention relates to a reception apparatus that is used by being coupled to a neck of a container so that the reception apparatus is applicable to necks of other containers through the container.

BACKGROUND ART

[0002] There are related arts disclosed in PCT/KR2008/4210 which was invented by the present inventor.

DISCLOSURE OF THE INVENTION

TECHNICAL PROBLEM

[0003] In the case of PCT/KR2008/4210 that is a related art, for example, a thread having a size of about 26.78 MM to about 28 MM is formed within a bottle cap. In addition, one bottle cap may be assembled with a container neck having a size of about 26.78 MM to about 28 MM.

[0004] In the technical constitution of the present invention, for example, to couple a reception apparatus having a previously set standard to a container neck (e.g., the container neck having a size of about 26.78 MM to about 28 MM) having a different standard, a flexible threaded part may be provided on a lower coupling part of the reception apparatus to achieve objects of the present invention.

TECHNICAL SOLUTION

[0005] A reception apparatus of the present invention includes first and second threads to couple an inner thread of a threaded part of the reception apparatus to a bent thread of a container neck, thereby coupling the reception apparatus to a container neck having a different standard. Particularly, the threaded part having the first thread may have a relatively thin thickness so that the threaded part is flexibly applied to the thread of the container neck corresponding thereto.

[0006] In one example of the present invention, when the inner thread of the bottle cap is suitable for a container neck having a size of about 28 MM, and a container neck has a size of about 26.78 MM, it may be difficult to couple the reception apparatus to the container neck without using a separate connection device. However, according to the present invention, at least one or more threads having different sizes may be provided on the inside of the flexible threaded part. Thus, one reception apparatus may be applicable to a container neck having an approximate value in size.

ADVANTAGEOUS EFFECTS

[0007] Even though the container neck does not match the reception apparatus, the flexible threaded part that is applicable to the container neck having a different standard may be provided. Thus, it may be unnecessary to manufacture separate bottle caps or container necks having various standards.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a cross-sectional view of a preferred embodiment of the present invention.

[0009] FIG. 2 is a cross-sectional view of another embodiment of the present invention.

[0010] FIGS. 3 and 4 are cross-sectional and semi-cross sectional views of a state which is assembled with a neck of a container.

[0011] FIG. 5 is a partial cut-off perspective view of a main part in the state which is assembled with the neck of the container.

[0012] FIG. 6 is a semi-cross sectional view of further another embodiment of the present invention.

[0013] FIG. 7 is a cross-sectional view illustrating another example of the present invention.

[0014] FIGS. 8 to 18 are cross-sectional views of a main part according to further another embodiment of the present invention.

[0015] FIGS. 19 to 20 are semi-cross sectional views of further another example of the present invention.

[0016] FIGS. 21 to 22 are cross-sectional views of further another example of the present invention.

[0017] FIGS. 23 to 28 are cross-sectional views of a main part according to further another embodiment of the present invention.

BEST MODE FOR CARRYING OUT THE INVENTION

[0018] According to a reception apparatus 1 of the present invention, an upper cap 2 or other unit for opening contents of a receiving part 3 received in the reception apparatus 1 is disposed above a main body. Also, a guide part 7 and a threaded part 4 that is a coupling part are disposed on a lower portion of the reception apparatus 1, and a first thread 5 and a second thread 6 are disposed within the threaded part 4.

[0019] Also, the thread disposed within the threaded part 4 that is the lower coupling part includes the first thread 5 and the second thread 6. The thread is configured to be coupled to necks of containers having a plurality of standards different from each other. For this, the threaded part 4 on which the first thread 5 is disposed may have a thin thickness so that the threaded part 4 is instantly expanded and assembled when a thread 201 of a container neck 200 is large.

[0020] Also, the second thread 6 that is couplable to a container neck having a relatively large standard than that of the first thread 5 is disposed under the first thread

5 so that one reception apparatus 1 is couplable to a plurality of container necks.

[0021] Also, an assembly part that is capable of being assembled with the other container neck may be disposed under the second thread 6. In this case, the assembly part may be variously designed so that the assembly part is pushed and closed in a one- touch manner and then be lifted to open the container.

[0022] In non-explained reference numerals in the drawing, a reference numeral 8 represents a container neck space, a reference numeral 9 represents a sealing part, a reference numeral 28 represents a protrusion, and a reference numeral 500 represents a skirt.

[0023] As described above, in FIGS. 1 to 3, when the reception apparatus 1 is disposed on the container neck 200 and then is coupled to the container neck 200, the first thread 5 meets with temporary resistance against the thread 201 of the container neck 200, and thus the threaded part 4 is expanded. In this process, when the reception apparatus 1 is more coupled, the second thread 6 disposed on the lower portion is closely fixed to the thread 201 of the container neck 200 as shown in FIG. 1.

[0024] According to the above-described features, even though the first thread 5 contacts an outer diameter portion of the thread 201 to resist, the threaded part 4 on which the first thread 5 is disposed may be expanded so that the second thread 6 disposed under the first thread 5 is coupled to the thread 201. This is done because the threaded part 4 on which the first thread 5 has a thin thickness so that the threaded part is expandable.

[0025] Thus, the reception apparatus 1 may be formed of a soft resin such as a PE than a hard resin such as a PP that is a synthetic resin material. If the reception apparatus 1 is formed of the PP, the threaded part 4 may be formed of a soft material and also have a significantly thin thickness.

[0026] FIG. 2 is a view of a state in which a container neck 300 having an outer diameter less than that of the container neck 200 of FIG. 1 is applied to the reception apparatus 1. Here, the first thread 5 is coupled without meeting with resistance against a thread 301.

[0027] FIG. 3 is a detailed view of the threaded part 4. Particularly, it may be seen that the first thread 5 has a relatively thin thickness that that of the second thread 6.

[0028] According to another embodiment of the present invention (see FIG. 6), an auxiliary support 120 is additionally disposed on the outside of a main body 10. When the reception apparatus 1 on which the auxiliary support 120 is disposed is assembled toward the container neck 200, a lower end of a lower threaded part 4-A of the main body 10 is spread outward. Here, a portion of the spread lower threaded part 4-A is defined as a main body space 11. When the reception apparatus 1 is coupled with respect to the auxiliary support 120, the auxiliary support 120 descends along the thread disposed on the main body corresponding to the auxiliary support. In this process, the thread or the protrusion disposed inside the threaded part 4 may be hung on the thread 201 of the container neck 200 to improve a sealing force.

[0029] Also, FIG. 6 illustrates a state before the reception apparatus 1 is disposed on and coupled to the container neck 200, and FIG. 4 illustrates a state of a connection part 15 disposed on a portion of the main body 10. According to features of the connection part, when the auxiliary support 120 contracts the threaded part 4-A of the main body 10 inward, the threaded part 4- A may be easily contracted by the auxiliary support 120 because the connection part 15 has a relatively thin thickness than other portions.

[0030] Also, as shown in FIG. 5, since the main body space 11 split by a predetermined length toward a lower end thereof is provided, the threaded part 4- A may be easily contracted by the downward movement of the auxiliary support 120.

[0031] According to further another embodiment (see FIG. 7), FIG. 7 illustrates an application example of the present invention in which the reception apparatus 1 includes various receiving parts 3. Referring to FIG. 7, when a soft part 20 disposed on an upper end of a foldable part 16 is pressed in use, the foldable part 16 having a dome shape descends. In this process, a sealing part disposed under the receiving part 3 is broken by contents so that a heteromaterial within the receiving part 3 drops into the container and then is mixed.

[0032] As described above, the reception apparatus 1 used in the present invention may be changed in design of various receiving parts 3 and a method of opening the receiving parts.

[0033] Also, as shown in FIG. 7, the foldable part 16 having the dome shape may be molded by using a soft resin such as silicone (injection- molded by using a multi-injection molding machine) and then be folded to improve a restoring force. Alternatively, in a threaded part 4- B, a portion constituting the first thread 5 may constitute a soft- material molded portion 17.

[0034] According to features of the above-described constitutes, the first thread 5 may flexibly improve contact and coupling forces according to a size of the thread 201 of the container neck 200.

[0035] According to further another embodiment of the present invention (see FIG. 8), the present invention may be designed so that the reception apparatus 1 of the present invention is capable of being coupled to containers having various standards. According to the features, a threaded part 4-C has a predetermined angle and a thin thickness.

[0036] Also, in use, FIG. 8 illustrates an initial state that is assembled with the container neck 200. In this state, when the reception apparatus 1 further rotates, the reception apparatus 1 contacts the thread 201 and is flexibly expanded outward according to a size of the thread 201 and thus be coupled to the thread 201. Here, to improve the flexibility, other rubber material such as silicone may be dual- injected to a predetermined portion.

[0037] According to further another embodiment of the present invention (see FIG. 9), the current embodiment is similar to that of FIG. 8. However, according to features of the current embodiment, a portion of a threaded part 4-D is cut to improve elasticity (flexibility) of the threaded part 4-D. Then, the cut portion is treated as a flexible part 12. Here, this may be molded by using the multi-injection molding machine.

[0038] The flexible part 12 may be formed of a soft synthetic robber material such as silicone.

[0039] According to further another embodiment of the present invention (see FIGS. 10 and 12), to apply the reception apparatus to container necks having standards different from each other by using a single threaded part 4-E or 4-F, the threaded part 4-E or 4-F should have flexibility (elasticity). For example, when the threaded part 4-E or 4-F is disposed on the thread 201 of the container neck 200, the threaded part 4-E or 4-F may be spread outward along an outer diameter of the thread 210 or be pushed inward, and thus is closely attached to the thread 201.

[0040] For supplemental explain, FIGS. 10 and 11 illustrate an initial state in which the reception apparatus 1 is assembled with the container neck 200. In this state, when the reception apparatus 1 rotates toward the container neck 200, in the case of FIG. 10, an upper portion of the threaded part 4-E is spread outward with respect to a lower portion thereof or disposed inside the lower portion. Also, in the case of FIG. 11, a lower portion of the threaded part 4-F is flexible inward or outward with respect to an upper portion thereof. This may depend on a position of a cut space 13-A. That is, the cut space 13 may be set at various angles in vertical or horizontal directions.

[0041] According to further another embodiment of the present invention (see FIG. 12), FIG. 12 illustrates a modified example in which upper and lower portions of a threaded part 4-G are spread outward with respect to a center thereof. Furthermore, to improve elasticity, a soft resin such as silicone may be added to at least one of the upper and lower portions to form a flexible part 12. The flexible part 12 may be preferably molded by using a multi-injection molding machine. (FIG. 12 illustrates a process of initially assembling the reception apparatus 1 with the container neck 200)

[0042] According to further another embodiment of the present invention (see FIG. 13), FIG. 13 illustrates an example of a process of initially assembling with the container neck 200. According to feature of the current embodiment, a foldable threaded part 4-H is provided inside the reception apparatus 1. The foldable threaded part 4-H is inclined downward when injection molding is performed, and then, is maintained upward at a predetermined angle through a past-process. As a result, the foldable threaded part 4-H has elasticity.

[0043] Thus, the threaded part 4- H may be spread outward according to a size of the thread 201 of the container neck 200 or be assembled along the thread 201 while maintaining the elasticity toward the inside thereof. The foldable threaded part 4- H may have a circular shape, or a plurality of independent threaded parts 4- H which is cut at predetermined portions thereof may be provided. Furthermore, when the threaded part 4- H has the circular shape, the threaded part 4- H may be inclined at a predetermined angle to correspond to the thread 201. When the threaded part 4 is provided in plurality, the threaded parts 4 may have lengths (sizes) different from each other so that each of the threaded parts 4 having the different sizes are coupled to the corresponding thread 201 according to an angle of the thread 201 of the container neck 200.

[0044] According to further another embodiment of the present invention (see FIGS. 14 and 15), a threaded part 4-I or 4-J may be separately manufactured with a material having superior elasticity to maximize elasticity. Then, the threaded part 4-I or 4-J is assembled with the inside or the outside of the reception apparatus 1. FIGS. 14 and 15 illustrate an initial state in which the reception apparatus 1 is assembled with the container neck 200. When the reception apparatus 1 is assembled with the container neck 200, the threaded part 4-I or 4-J may be contracted or expanded according to a size of the thread 201 formed on the container neck 200 and then be coupled.

[0045] According to further another embodiment of the present invention (see FIGS. 16 and 17), the threaded part 4-K faces an upper side with respect to a lower side thereof. To realize the threaded part 4-K having a predetermined angle, an upwardly opened space 13-B is provided in consideration of manufacture of a mold. Also, at least two threaded parts 4-K may be operably provided on the container neck 200.

[0046] Also, FIG. 16 illustrates an initial state which is assembled with the container neck 200, and FIG. 17 illustrates an assembled state. An end of the threaded part 4- K is lifted upward and inward from the outside. When the reception apparatus 1 is coupled, as shown in FIG. 17, the threaded part 4- K may be contracted or expanded according to a size of the thread 201 and then be coupled.

[0047] According to further another embodiment of the present invention (S18), when an auxiliary support 120 is screw-coupled to the outside of the reception apparatus 1 in a rotation direction, the threaded part 4-L is clamped inward so that any container neck or the other container neck having a similar standard is applied to the thread. In some cases, a predetermined portion of the threaded part 4-L may be maintained in a cut shape.

[0048] According to further another embodiment of the present invention (see FIG. 19), a storage space 132 in which a heteromaterial is stored may be formed in the reception apparatus 1 including various threaded parts as described above. (FIG. 19 illustrates an initial state which is coupled to the container neck 200, and also, the threaded part 4-M may be contracted or expanded according to a size of the thread 201.

[0049] In use as described above, when a cover dis-

posed on the outside of the elastic part 130 formed of a soft resin such as silicon or the like is removed, and an end on which a stopper 131 is disposed is pressed, the elastic part 131 is folded downward. Simultaneously, a breaking protrusion disposed under the stopper 131 to lengthily extend may a sealing part, which has a thin film shape to seal a lower end of a storage space 132, so that a heteromaterial within the storage space 132 drops down and is mixed.

[0050] According to further another embodiment of the present invention (see FIG. 20), a threaded part 4-N of the present invention includes a first thread 5 having a thin thickness to provide elasticity. A second thread 6 disposed under the first thread 5 is foldable. Thus, when the first thread 5 operates and then is coupled to the container neck 200, the second thread 6 may provide the elasticity so that the reception apparatus 1 moves downward without being disrupted with respect to a skirt of a bottle cap remaining on the container neck 200. Here, the second thread 6 may be manufactured in a partially cut shape.

[0051] Referentially, the threaded part 4- N may be called a coupling part, and the present invention may have the same means.

[0052] As described above, in summary of fundamental technologies of the present invention, the reception apparatus used to be coupled to the other container neck having a different standard may be classified under the general term of an apparatus in which various heteromaterials such as liquid or powder are injected into the reception apparatus, and when the reception apparatus is coupled to the container neck, or the main body of the reception apparatus or the other portion such as an upper stopper disposed in an upper side is touched or opened after the heteromaterial reception apparatus is coupled to the container neck, the heteromaterial contained in the reception apparatus drops into the container and is mixed, or a solid content having taste and flavor injected into the reception apparatus through an upper opening of the reception apparatus is dissolved and discharged while a liquid contained in the container is discharged through the reception apparatus.

[0053] Also, the threaded part capable of being coupled to threads of a plurality of container necks having different standards is disposed under the reception apparatus. The threaded part may correspond to the thread of the container neck, and the thread of the container neck may be formed of a flexible material so that the thread of the container neck may be assembled while pushing the threaded part outward.

[0054] Also, the reception apparatus may be called an apparatus in which a heteromaterial is contained. Technically, the reception apparatus may be applicable to a bottle cap having various shapes such as a general push-pull- cap.

[0055] Also, when the first and second threads used in the present invention are applied to a metal can container, a protrusion having a hook instead of the threads may be applicable through design change.

[0056] Also, the reception apparatus of the present invention may be applicable as a reception apparatus in which a unit for discharging a content through a portion of a main body is disposed, or a coupling unit for coupling a reception apparatus containing a heteromaterial within a main body to a container such as a metal can is disposed. For example, the lower end coupling unit of the reception apparatus may be configured so that an end of the metal can is coupled to the other end.

[0057] Also, a plurality of coupling parts having different standards such as first and second coupling parts may be disposed on the coupling unit so that the metal can is assembled with the other end having a different standard. Alternatively, the coupling unit may be formed of a soft resin such as silicone.

[0058] Continuously (see FIG. 21), a reception apparatus used to be coupled to a container neck 200 having a different standard and a lower coupling part for coupling the reception apparatus 1 to the container neck 200 may be provided. In the coupling part, a threaded part 4-0 may be formed on the reception apparatus 1 in an injection molding manner in which a soft resin is integrally injection-molded.

[0059] Also, the threaded part 4- 0 that is the coupling part may be formed of a soft resin such as silicone, and also, may be preferably molded through a dual injection molding machine.

[0060] Also, FIG. 21 illustrates a process of coupling the reception apparatus 1 to the container neck 200. In this state, when the reception apparatus 1 is further coupled, the soft threaded part 4- 0 is temporarily expanded and coupled in a moment. Then, the reception apparatus 1 is stopped in a predetermined line. In this process, the expanded threaded part 4- 0 may return to its original shape so that the threaded part 4- 0 is more closely attached to the container neck 200.

[0061] Also, a threaded part 4- P that is the coupling part is assembled in a manner in which the threaded part 4- P is fitted into the reception apparatus 1. (see FIG. 22) .

[0062] Also, the threaded part 4- P assembled in the fitted manner may be formed of a soft resin, i.e., a resin such as silicone. Alternatively, the threaded part 4- P may be formed of one of other resins.

[0063] Also, FIG. 22 illustrates a process in which the reception apparatus 1 is coupled to the container neck 200. In the state, when the reception apparatus is further coupled, a flexible threaded part 4- P may be temporarily expanded and coupled.

[0064] According to further another embodiment of the present invention (see FIGS. 23 to 28), the reception apparatus 1 used to be coupled to the other container neck having a different standard may include an apparatus in which various heteromaterials such as liquid or powder are injected into the reception apparatus, and when the reception apparatus is coupled to the container neck, or the main body of the reception apparatus or the other portion such as an upper cap disposed in an upper side

is touched or opened after the heteromaterial reception apparatus is coupled to the container neck, the heteromaterial contained in the reception apparatus drops into the container and is mixed, or a solid content having taste and flavor injected into the reception apparatus through an upper opening of the reception apparatus is dissolved and discharged while a liquid contained in the container is discharged through the reception apparatus.

[0065] Also, the reception apparatus 1 in which a heteromaterial is injected is configured to a main body 10 is coupled to a thread of a container neck. A separate coupling stand 400 is assembled to an outer surface part 22 so that a first inner surface part 20 and a second inner surface part 21 of the main body 10 are coupled to the thread of the container neck. When a cap (reception apparatus 1) is pushed toward the container neck or is rotationally coupled to the container neck with respect to the coupling stand 400, the main body 10 having the inner surface part (the first and second inner surface parts 20 and 21) is disposed first. In this state, when the coupling stand 400 rotates, the coupling stand 400 pushes the outer surface part 22 of the main body 10 inward so that a threaded part 4Q that is an inner surface of the outer surface part 22 of the main body 10 and a first or second thread 5 or 6 disposed on the inner surface part (the first and second inner surface parts 20 and 21) are more closely attached and coupled to a container neck thread 301 of a container neck 301.

[0066] Also, the coupling stand 400 is coupled to the outer surface part 22 of the main body 10 of the reception apparatus 1, and the coupled coupling stand is not separated.

[0067] Also, a coupling groove 23 is defined in the outer surface part 22 of the main body. A coupling stand fixing part 401 is disposed on the coupling stand surrounding to the coupling groove 23.

[0068] Also, a protrusion 25 and a return prevention part 26 are disposed on front and rear sides of the outer surface part 22 of the main body 10 of the reception apparatus 1 with respect to the main body stopper 24. A protrusion operating projection 402 and a coupling moving section stopper 403 are disposed on the inner surface part of the coupling stand 400 to correspond to the outer surface part 22 of the main body 10.

[0069] Also, when the coupled coupling stand 400 operates with respect to the outer surface part 22 of the main body 10, the protrusion operating projection 402 disposed within the coupling stand 400 pushes the protrusion 25 disposed on the outer surface part 22 inward. In this process, the first or second thread 5 or 6 disposed on the inner surface part may be more closely attached and coupled to the container neck thread 301 of the container neck 300.

[0070] Also, the protrusion operating projection 402 pushes the protrusion 25. In this process, the main body stopper 24 and the coupling stand moving section stopper 403 are disposed on the outer surface part 22 and the coupling stand 400 corresponding to the outer surface part 22 so that the coupling stand 400 does not rotate on the outer surface part 22 at a predetermined angle.

[0071] Also, when the coupling stand 400 rotates in a direction opposite to the coupling direction thereof, the coupling stand 400 rotates on the outer surface part 22. In this process, the coupling stand moving section stopper 403 of the coupling stand 400 is hooked on any portion of the outer surface part 22 so that the coupling stand 400 together the main body 10 including the outer surface part 22 is separated from the container neck.

[0072] Also, when the coupling stand 400 reversely rotates from the main body 10 including the outer surface part 22, the protrusion operating projection 402 gets out of the protrusion 25.

[0073] Also, a space having a predetermined size is defined in the outer surface part 22 of the main body 10 including the inner surface part (the first and second inner surface parts 20 and 21) to push the outer surface part 22 inward when the coupling stand 400 rotates in the rotational direction thereof.

[0074] Also, the first and second threads 5 and 6 disposed on the inner surface part are respectively disposed on the first and second inner surface parts 20 and 21. The second inner surface part 21 has an inner diameter or length greater than that of the first inner surface part.

[0075] Also, the first and second threads 5 and 6 may be intermittently provided as a projection type (see FIG. 26) .

[0076] Also, the inner surface part 21 having the second thread 6 may have a height of about 2 MM to about 3 MM. Alternatively, the second inner surface part 21 having the second thread 6 may have a height of about 2 MM to about 4 MM.

[0077] On the other hand, the second inner surface part 21 having the second thread 6 may have a height of about 2 MM to about 6 MM.

[0078] Continuously (see FIGS. 27 to 28), the reception apparatus in which the heteromaterial is injected has a coupling stand outside space 29 inside an outer surface part 22' of the main body 10. An inner coupling stand 600 is assembled with the coupling stand outside space 29 in a fitting manner. Then, a threaded part 4R of the inner coupling stand 600 is provided. A coupling stand protrusion 407 and a return prevention part 406 are disposed on the outside of the inner coupling stand 600. A main body operating projection 30 and a coupling stand stopper moving section 31 which are disposed outside the inner coupling stand 600 and disposed on front and rear sides of the coupling stand stopper 409 are disposed inside the main body 10.

[0079] Also, the threaded part 4R of the main body 10 includes a first thread 404 and a second thread 405.

[0080] Also, the threaded part 4R may include an intermittent projection or fine thread.

INDUSTRIAL APPLICABILITY

[0081] According to the reception apparatus of the

present invention, the reception apparatus and the container are separately provided without being coupled to each other. When a consumer purchases the reception apparatus to couple the reception apparatus to a container that is previously held, or a bottle cap is removed from a separate purchased container to couple the reception apparatus to the container, thereby providing the reception apparatus having the plurality of coupling parts in which the heteromaterial is contained. Thus, the reception apparatus may be applicable to various fields such as containers for drinking water, general drinks, and the like.

Claims

1. A reception apparatus used to be coupled to the other container neck having a different standard, in which various heteromaterials such as liquid or powder are injected into the reception apparatus, and when the reception apparatus is coupled to the container neck, or a main body of the reception apparatus or the other portion such as an upper cap disposed in an upper side is touched or opened after the heteromaterial reception apparatus is coupled to the container neck, the heteromaterial contained in the reception apparatus drops into the container and is mixed, or a solid content having taste and flavor injected into the reception apparatus through an upper opening of the reception apparatus is dissolved and discharged while a liquid contained in the container is discharged through the reception apparatus, **characterized in that** a threaded part that is capable of being coupled to a plurality of threads of container necks having different standards is disposed under the reception apparatus, and the threaded parts is formed of a flexible material so that, when the threaded part corresponds to the thread of the thread of each of the container necks, the container neck thread is assembled with the threaded part while pushing the threaded part outward.

2. The reception apparatus of claim 1, wherein first and second threads are disposed inside the threaded part.

3. The reception apparatus of claim 2, wherein the second thread has an inner diameter greater than that of the first thread.

4. The reception apparatus of claim 1, wherein the threaded part on which the first and second threads are disposed has a thin thickness.

5. The reception apparatus of claim 1, wherein the threaded part of the reception apparatus on which the first thread is disposed is injection-molded by using a soft resin such as silicone.

6. A reception apparatus used to be coupled to the other container neck having a different standard, the reception apparatus being coupled to a plurality of container necks, the reception apparatus comprises:

   a threaded part that is a coupling part at a lower side thereof so that the reception apparatus is coupled to each of the container necks,
   wherein the threaded part disposed at the lower side is adjusted in degree of expansion according to a standard of the container neck or size of a thread when the threaded part that is a coupling apart assembled to correspond to the size of the container neck is assembled with the other container neck, thereby coupling the reception apparatus to the container neck.

7. The reception apparatus of claim 6, wherein the threaded part has elasticity and a thin thickness.

8. The reception apparatus of claim 6, wherein any portion of the threaded part is spread, and a flexible part formed of a soft resin is disposed on the spread portion.

9. The reception apparatus of claim 8, wherein the flexible part is multi-injection molded.

10. The reception apparatus of claim 6, wherein the threaded part has flexibility and a predetermined space so that the threaded part is spread outward when the threaded part meets resistance against the thread of the container neck.

11. The reception apparatus of claim 6, wherein the threaded part is provided in a prefabricated type within the reception apparatus at a position corresponding to the thread of the container neck.

12. The reception apparatus of claim 11, wherein, when the prefabricated threaded part contacts the thread of the container neck, an outwardly expanded degree of the threaded part is different according to a size of the container neck.

13. The reception apparatus of claim 6, wherein the threaded part is disposed on a position corresponding to the thread part of the container neck in a prefabricated type and an upwardly folded portion of the threaded part is coupled about a lower end of the reception apparatus.

14. The reception apparatus of claim 6, wherein an outwardly expanded degree of the threaded part is different according to a size of the container neck, and an end of the threaded part is lifted upward and inward from the outside.

15. The reception apparatus of claim 14, wherein a space is defined toward the upper end of the threaded part.

16. The reception apparatus of claim 6, wherein an auxiliary support is disposed outside the reception apparatus on which the threaded part is disposed, and when the auxiliary support operates together with the reception apparatus, the auxiliary support clamps the threaded part toward the container neck.

17. The reception apparatus of claim 6, wherein a first thread having a thin thickness is disposed on an upper end of the inside of the threaded part, and a second thread corresponding to a degree folded according to a size of the thread of the container neck is disposed on a lower end of the threaded part.

18. The reception apparatus of claim 1, wherein a storage space in which the heteromaterials are stored is defined within the reception apparatus.

19. The reception apparatus of claim 6, wherein a storage space in which a heteromaterial is stored is defined within the reception apparatus.

20. A reception apparatus comprises:

a unit for discharging a content through a portion of a main body; and
a coupling unit for coupling the reception apparatus containing a heteromaterial within the main body to a container such as a metal can,
wherein the lower end coupling unit of the reception apparatus is configured so that an end of a metal can is coupled to the other end.

21. The reception apparatus of claim 20, wherein a plurality of coupling part having different standards such as first and second coupling parts are disposed on the coupling unit to assemble the coupling part to the other end having a different standard such as the metal can.

22. The reception apparatus of claim 20, wherein the coupling unit is formed of a soft resin such as silicone.

23. A reception apparatus used to be coupled to the other container neck having a different standard, the reception apparatus being coupled to a plurality of container necks, the reception apparatus comprises:

a coupling part disposed under the reception apparatus to couple the reception apparatus to each of the container necks,
wherein the coupling part disposed under the reception apparatus is formed of a soft resin.

24. The reception apparatus of claim 23, wherein the coupling part is integrally molded to the reception apparatus.

25. The reception apparatus of claim 23, wherein the coupling part is assembled with the reception apparatus.

26. The reception apparatus of claim 23, wherein the coupling part is formed of a silicone resin.

27. A reception apparatus used to be coupled to the other container neck having a different standard, in which various heteromaterials such as liquid or powder are injected into the reception apparatus, and when the reception apparatus is coupled to the container neck, or a main body of the reception apparatus or the other portion such as an upper cap disposed in an upper side is touched or opened after the heteromaterial reception apparatus is coupled to the container neck, the heteromaterial contained in the reception apparatus drops into the container and is mixed, or a solid content having taste and flavor injected into the reception apparatus through an upper opening of the reception apparatus is dissolved and discharged while a liquid contained in the container is discharged through the reception apparatus, **characterized in that** the reception apparatus in which the heteromaterials are introduced is configured to couple the main body to the thread of the container neck, a separate coupling stand is assembled with an outer surface part so that an inner surface part of the main body is coupled to the thread of the container neck, when a cap is coupled about the coupling stand in a manner in which the cap pushes the container neck or rotates with respect to the container neck, the main body on which the inner surface part is disposed is disposed on the container neck first, and in this state, when the coupling stand rotates, the coupling stand pushes the outer surface part of the main body inward so that first and second threads disposed on the inner surface part that is an inner surface of the outer surface part of the main body are more closely attached to the thread of the container neck.

28. The reception apparatus of claim 27, wherein the coupling stand is coupled to the outer surface part of the main body of the reception apparatus, and the coupled coupling stand is not separated.

29. The reception apparatus of claim 28, wherein a coupling groove is defined in the outer surface of the main body, and a coupling stand fixing part is disposed on the coupling stand corresponding to the coupling groove.

30. The reception apparatus of claim 27, wherein a pro-

trusion and a return prevention part are disposed on front and rear sides with respect to a main body stopper on the outer surface of the main body of the reception apparatus, and a protrusion operating projection and a coupling stand moving section stopper are disposed on the inner surface part of the coupling stand to correspond to the outer surface part of the main body.

31. The reception apparatus of claim 30, wherein, when the coupling stand coupled about the outer surface part of the main body operates, the protrusion operating projection disposed within the coupling stand pushes a protrusion disposed on the outer surface part inward, and the first and second threads disposed on the inner surface part are more closely attached and fixed to the thread of the container neck.

32. The reception apparatus of claim 31, wherein the protrusion operating projection pushes the protrusion, and a main body stopper and a coupling stand moving section stopper are disposed on the coupling stand so that the coupling stand does not further rotate on the outer surface part at a predetermined angle or more.

33. The reception apparatus of claim 31, wherein, when the coupling stand rotates in a direction opposite to the coupling direction thereof, the coupling stand rotates on the outer surface part, and in this process, the coupling stand moving section stopper of the coupling stand is hooked on any portion of the outer surface part so that the coupling stand together with the main body including the outer surface part is separated from the container neck.

34. The reception apparatus of claim 33, wherein when the coupling stand reversely rotates from the main body including the outer surface part, the protrusion operating projection gets out of the protrusion.

35. The reception apparatus of claim 27, wherein a space having a predetermined size is defined in the outer surface part of the main body including the inner surface part to push the outer surface part inward when the coupling stand rotates in the rotational direction thereof.

36. The reception apparatus of claim 27, wherein the first and second threads disposed on the inner surface part are respectively disposed on the first and second inner surface parts, and the second inner surface part has an inner diameter greater than that of the first inner surface part.

37. The reception apparatus of claim 27, wherein each of the first and second threads is intermittently provided as a projection type.

38. The reception apparatus of claim 27, wherein the inner surface part having the second thread has a height of about 2 MM to about 3 MM.

39. The reception apparatus of claim 27, wherein the second inner surface part having the second thread has a height of about 2 MM to about 4 MM.

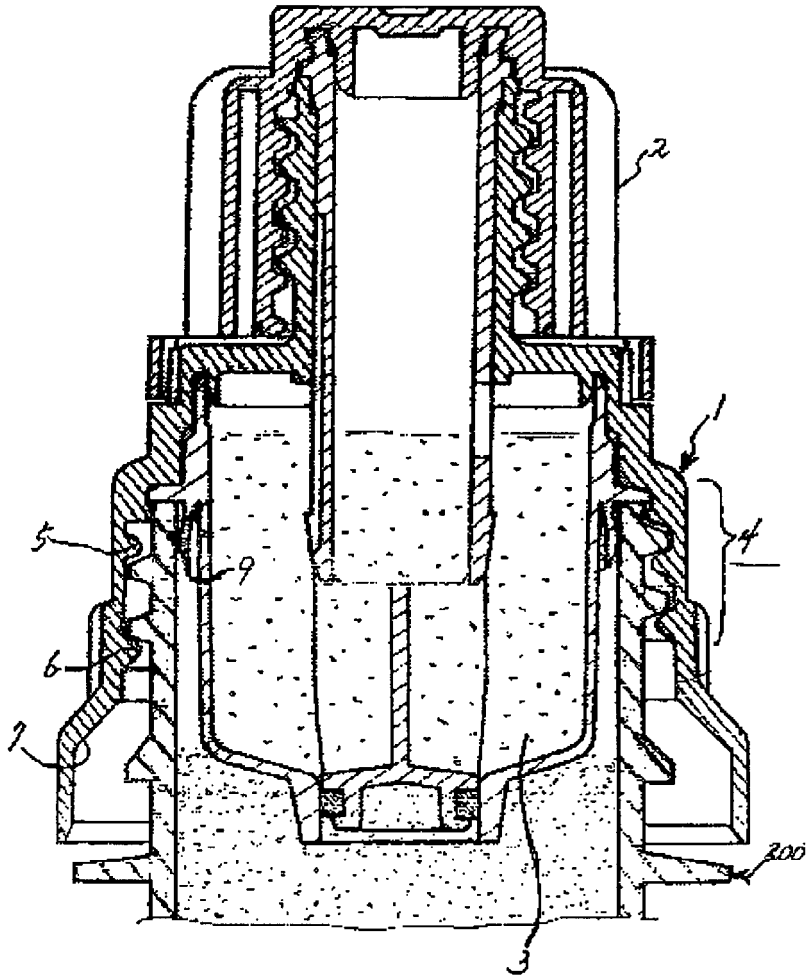
40. The reception apparatus of claim 1, wherein the second inner surface part having the second thread has a height of about 2 MM to about 6 MM.

41. A reception apparatus used to be coupled to the other container neck having a different standard, in which various heteromaterials such as liquid or powder are injected into the reception apparatus, and when the reception apparatus is coupled to the container neck, or a main body of the reception apparatus or the other portion such as an upper cap disposed in an upper side is touched or opened after the heteromaterial reception apparatus is coupled to the container neck, the heteromaterial contained in the reception apparatus drops into the container and is mixed, or a solid content having taste and flavor injected into the reception apparatus through an upper opening of the reception apparatus is dissolved and discharged while a liquid contained in the container is discharged through the reception apparatus, **characterized in that** the heteromaterials are injected has a coupling stand outside space inside an outer surface part of the main body, an inner coupling stand is assembled with the coupling stand outside space in a fitting manner, a threaded part of the inner coupling stand is provided, a coupling stand protrusion and a return prevention part are disposed on the outside of the inner coupling stand, and a main body operating projection and a coupling stand stopper moving section which are disposed outside the inner coupling stand and disposed on front and rear sides of the coupling stand stopper are disposed inside the main body.

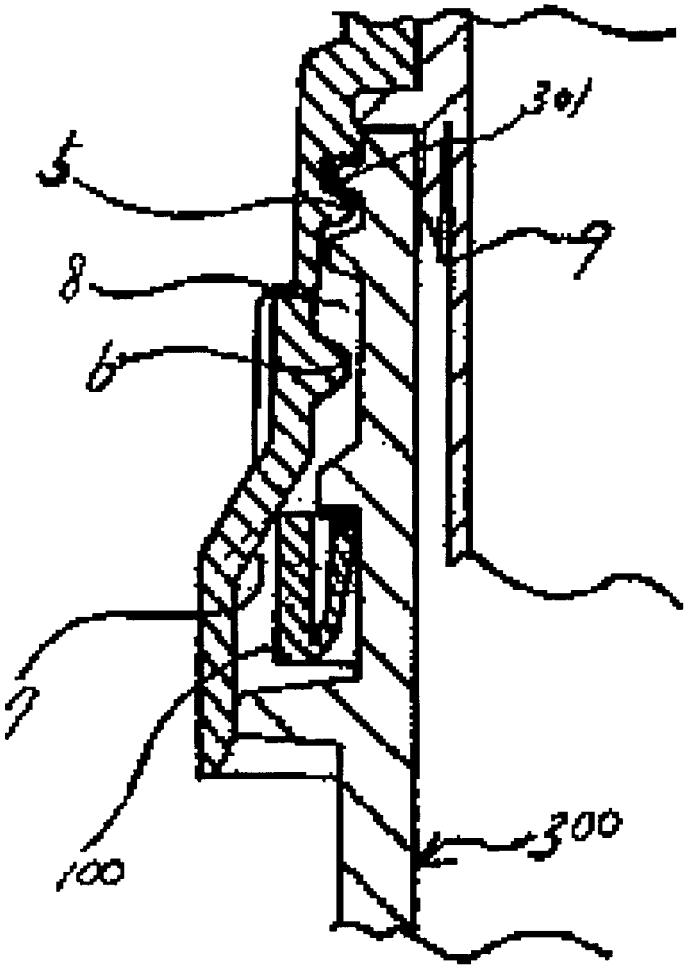
42. The reception apparatus of claim 41, wherein the threaded part comprises a first thread and a second thread.

43. The reception apparatus of claim 41, wherein the threaded part includes an intermittent projection or fine thread.

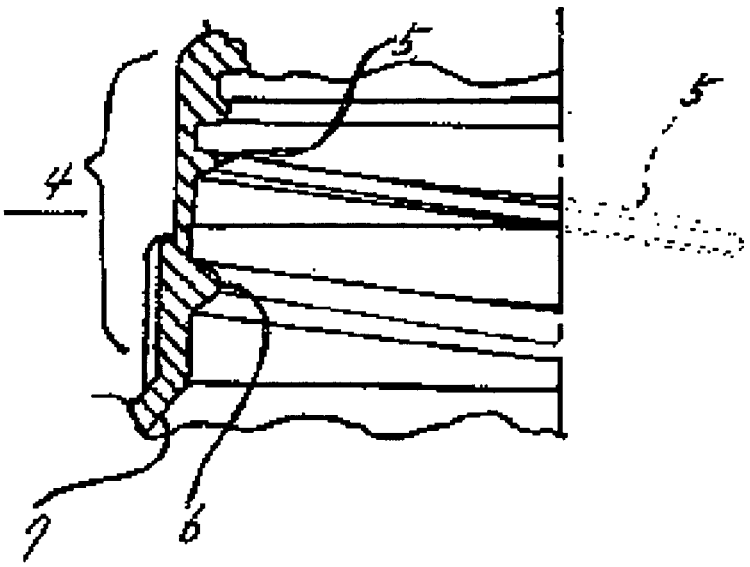
[Fig. 1]



[Fig. 2]



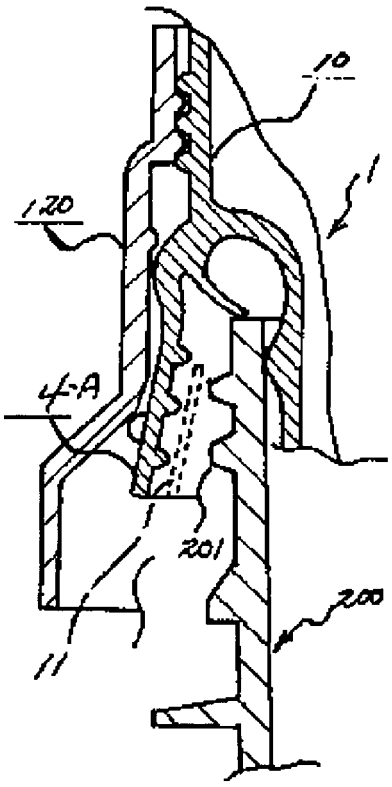
[Fig. 3]



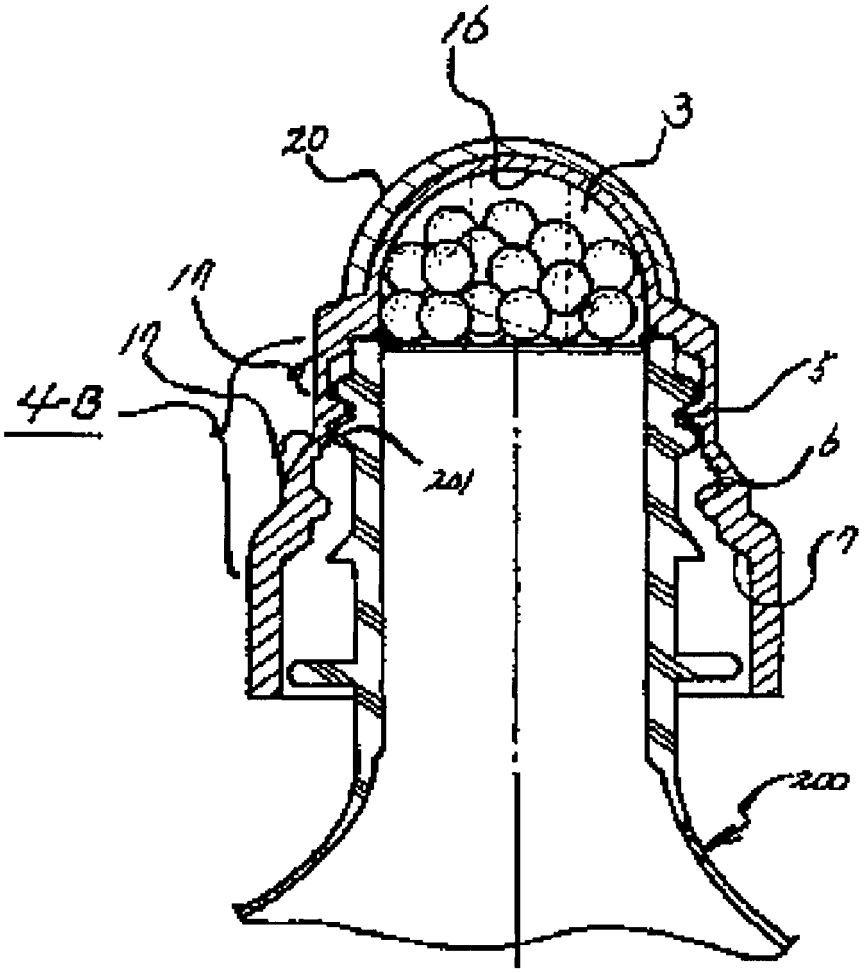
[Fig. 4]

[Fig. 5]

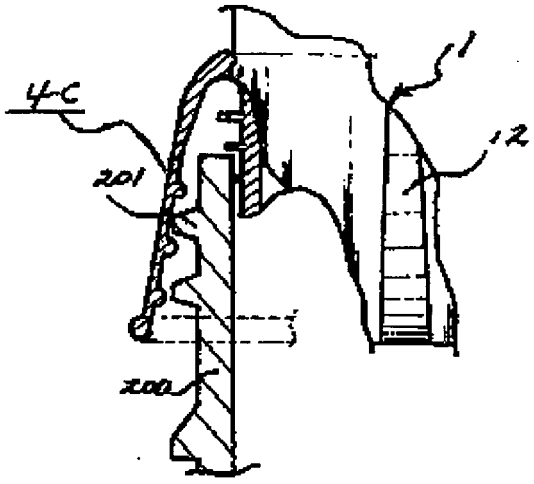
[Fig. 6]



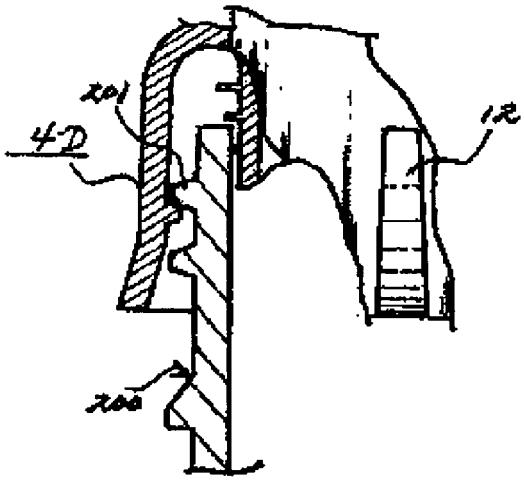
[Fig. 7]



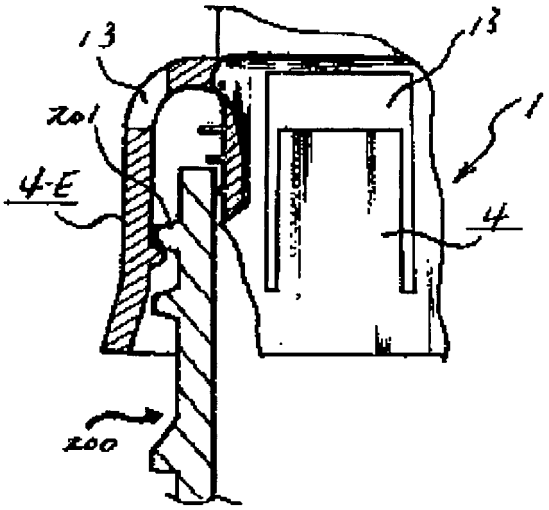
[Fig. 8]



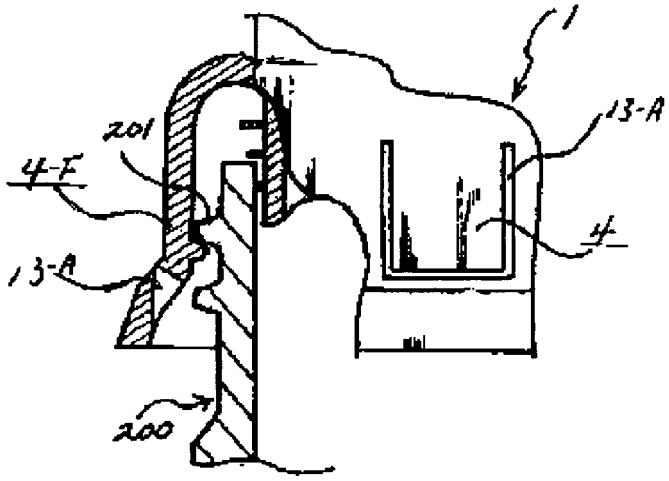
[Fig. 9]



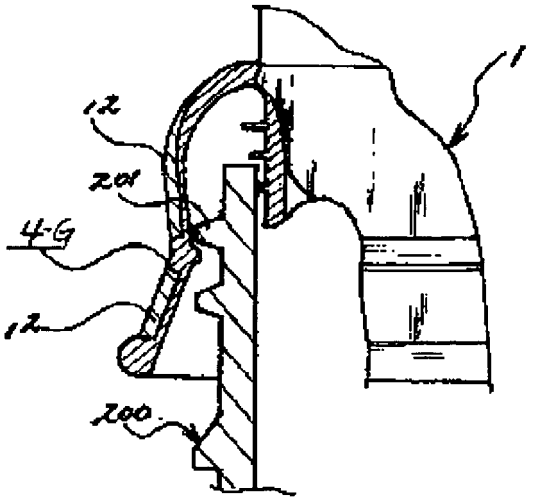
[Fig. 10]



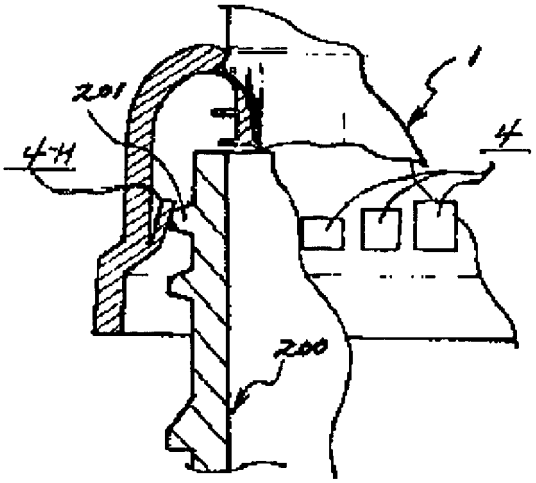
[Fig. 11]



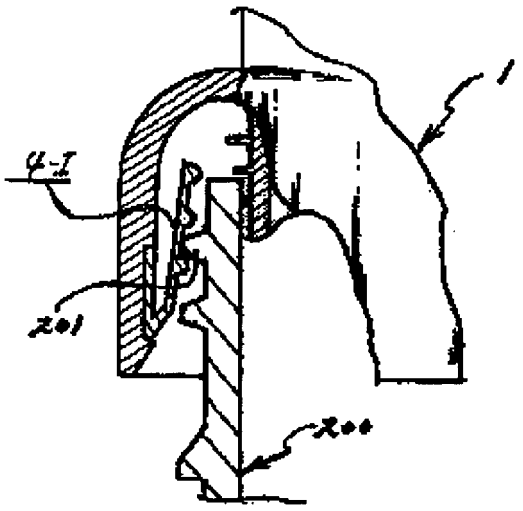
[Fig. 12]



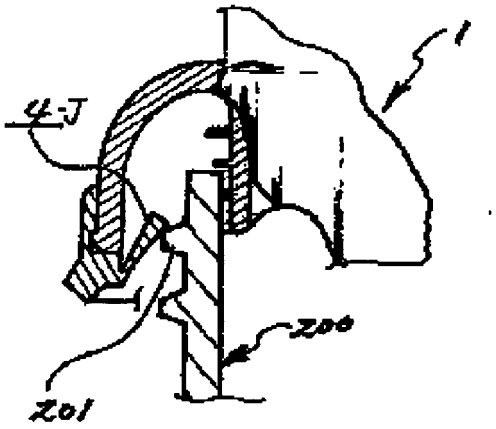
[Fig. 13]



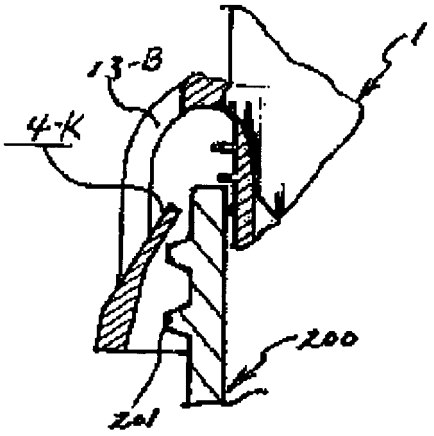
[Fig. 14]



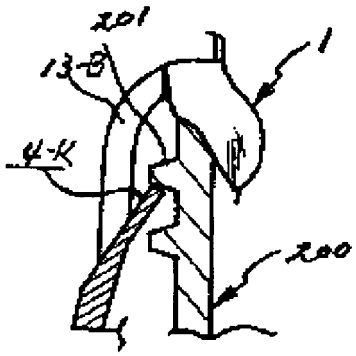
[Fig. 15]



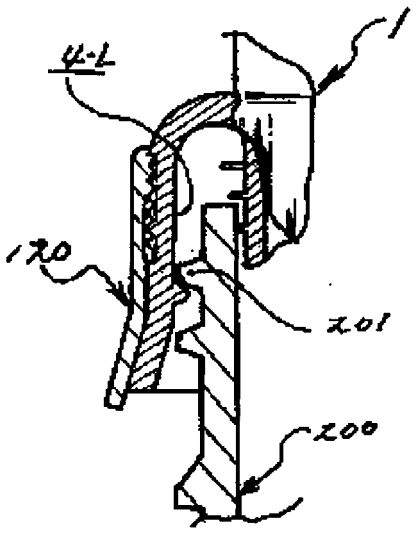
[Fig. 16]



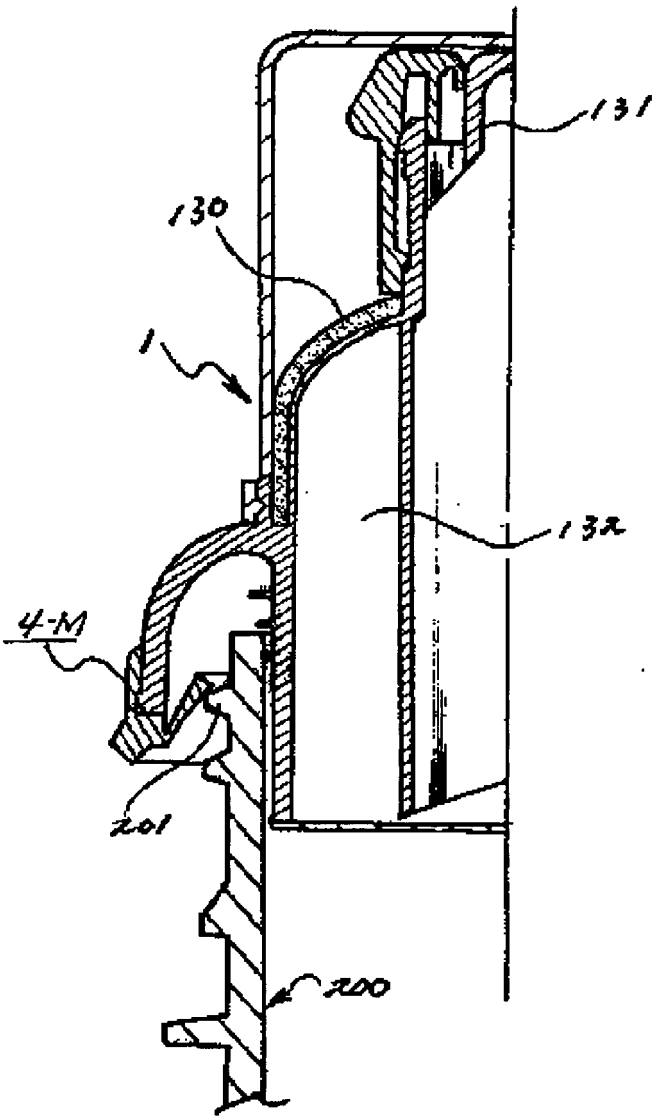
[Fig. 17]



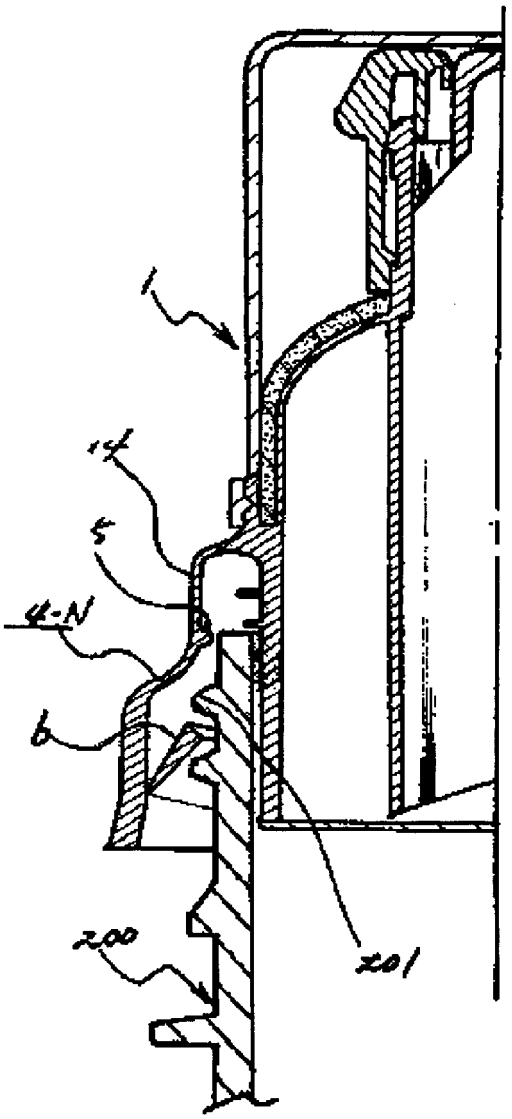
[Fig. 18]



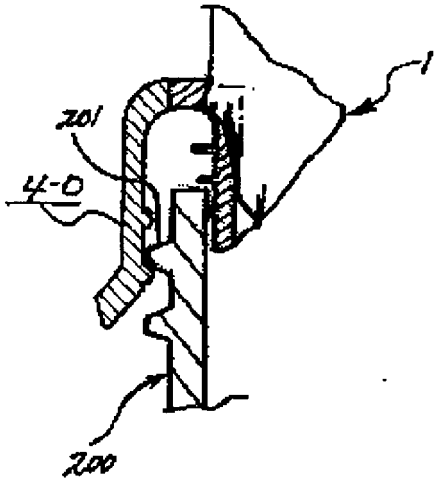
[Fig. 19]



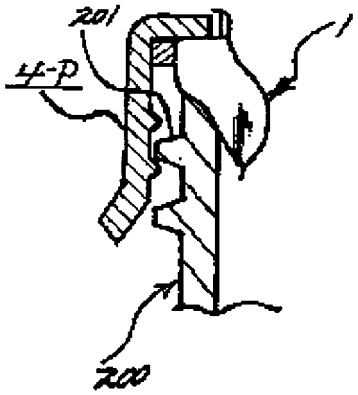
[Fig. 20]



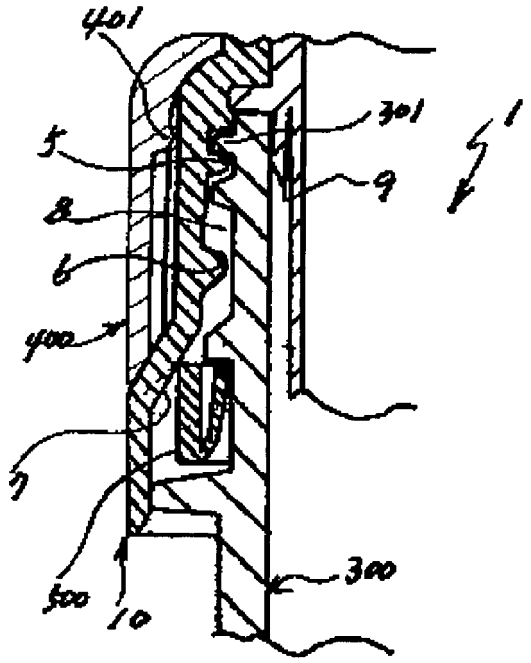
[Fig. 21]



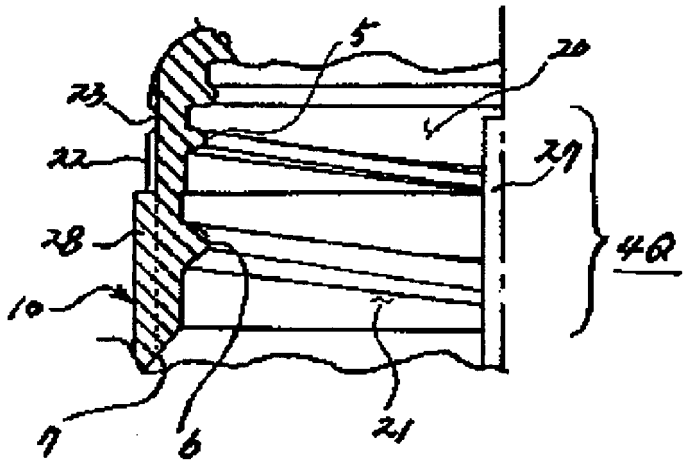
[Fig. 22]



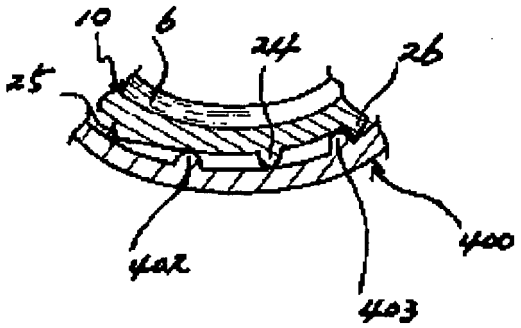
[Fig. 23]



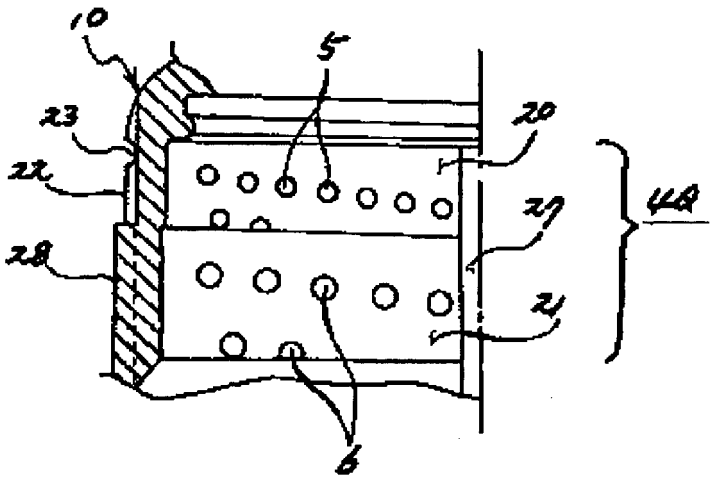
[Fig. 24]



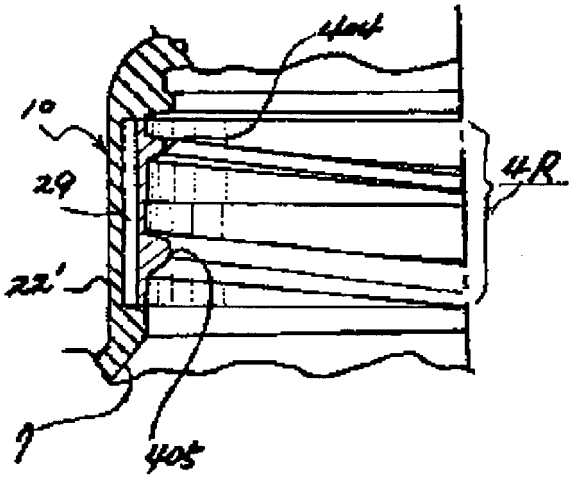
[Fig. 25]



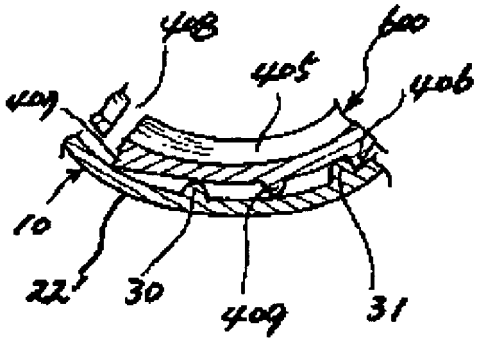
[Fig. 26]



[Fig. 27]



[Fig. 28]



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Patent documents cited in the description

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