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(54) **CAP-DISPENSER THAT CAN BE FITTED TO DRINKS CANS WITH STAY-ON TAB OPENING.**

ABGABEKAPPE DIE AUF GETRÄNKEDOSEN MIT NICHT ABNEHMBAR LASCHENÖFFNUNG MONTIERBAREN IST

BOUCHON-DISTRIBUTEUR ADAPTABLE AUX CANNETTES DE BOISSON AYANT UNE OUVERTURE À LANGUETTE NON AMOVIBLE

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Description

OBJECT OF THE INVENTION

[0001] This invention relates to cap-dispenser that can be fitted to beverage cans with stay-on tab according to the preamble of claim 1. Said device is intended to be placed in the opening of the lid and takes its characteristic configuration to adapt to its surface so that no leakage of liquid between the device and the lid occurs when pouring the beverage, the device also being firmly secured to prevent unwanted movements from occurring. Advantageously, the device also has a top closure for closing an already opened can in order to preserve the properties of the liquid contained therein.

FIELD OF APPLICATION

[0002] The cap-dispenser that is proposed is configured as an accessory element for the consumption of canned beverages, so its field of application will be the manufacturing industry of this type of packaging.

BACKGROUND

[0003] One of the main advantages of easy-open beverage cans is that they are easy to store, distribute and consume, which has led to their growth since their inception in the 1960s to date, clearly prevailing over other types of packaging.

[0004] Nevertheless, different problems with regard to the consumption from these cans are known, such as the risk of contamination of the lid during any stage of distribution or storage from its manufacturing until it reaches the end consumer, or the fact that the lid cannot be closed once opened.

[0005] With regard to the first of the problems cited, although each can is subject to a sanitation process immediately after it is manufactured, contamination of the surface of the lid can occur, and in fact, this occurs with relative frequency due to incorrect storage or possible knocks or breakages during transportation. Since the consumption of these cans is mostly undertaken by means of directly drinking the content therein, possible contamination poses a hygiene problem that becomes apparent with regard to the existence of many proposed solutions that try to resolve such in very different ways. For the other problem cited, there is also a wide range of devices that can close an already opened can. Normally the two solutions are complementary, finding that many existing devices solve both problems simultaneously.

[0006] However, to date, all proposed solutions for the aforementioned problems present disadvantageous aspects ranging from the fact that while several models prevent direct lip contact with the surface of the lid, the liquid itself does enter in contact with said surface, thus carrying contaminants that it may have, which will be in-

gested by the consumer. For other devices, excessive size or complexity of use due to being made up of several pieces assembled together makes them uncomfortable to use.

[0007] The advent of a device that could be easily and quickly attached to and removed from a can would therefore be desirable, preferably being of a reduced size and which also prevents the liquid from being in contact with the surface of the lid of said can.

[0008] A series of devices that partially solve the problems that have been described is known to the author of this invention, although said solutions have clear disadvantages with regard to the cap-dispenser proposed in this report. Some of the devices are described in the following documents:

- ES 1058995_U. It refers to a device with a lid and mouthpiece for beverage cans, which consists of a tab which is inserted in the opening of the lid of the can by pressure and to which a second device that functions as a lid is coupled by guides. It has the disadvantage of its complexity, being formed of more than one piece, having to perform several operations of insertion and arrangement of the device to finally use it.
- ES 1073249_U. It describes a pouring cap for soft drinks cans consisting of a single-pieced body that is made up of a sort of bowl circular mouthpiece that is coupled to the perimetral rim of the can and that is attached by means of a tongue-and-groove coupling. Said body has a hole that extends in an oblique neck that penetrates inside the opening of the can. In addition to lacking a closing system, the tongue-and-groove fastening to the perimetral rim of can is difficult.
- ES 1058287_U. A safety cap for cans is described, consisting of a cover that attaches to the upper perimetral rim of the can in a similar way as the previously described invention. It has a screw closure that can be attached to a cap to close the can when drinking is no longer desired. It has the same arrangement difficulties as mentioned above and it does not prevent the liquid from entering into contact with the surface of the lid.
- ES 1057458_U. It is a device to facilitate the consumption of canned beverages, consisting of an arch that attaches to the perimetral rim of the can, which has joined thereto a cap of similar geometry to the opening of the lid. Between the arch and the cap is a hinge that allows movement of the cap and to close the opening when the drink is not being consumed.

[0009] Document GB 2 342 917 discloses a cap-dispenser that can be fitted to beverage cans with stay-on tab opening according to the preamble of claim 1.

DESCRIPTION OF THE INVENTION

[0010] To overcome the said disadvantages the present invention provides a cap-dispenser that can be fitted to beverage cans with stay-on tab according to claim 1.

[0011] Additional features are disclosed in the depending claims.

[0012] This device is formed of a main body with an external cylindrical or hollow frustoconical shape, where the walls of said body have a non-uniform thickness, there being a hole of circular or elliptical geometry at the top and another circular or elliptical hole at the bottom.

[0013] At the bottom of the main body there is a recess or hollowed-out area, with an almost rectangular geometry and which adapts to the contour of the tab of the can so that said hollow space can house the part of the tab that goes from the rivet that secures said tab to the lid until its front end, i.e., the end that once the can is opened projects over the hole of the opening.

[0014] Thus, the walls of this main body will be visibly thicker at the rear (wherein said recess is located) than at the front to house said recess or hollow space.

[0015] Attached to the bottom of the main body is a fastening base configured as a flat sheet which has a hole coinciding with the existing hole at the bottom of the main body, and whose geometry is similar to that of the underside of the main body although its dimensions are slightly greater at least at the rear. If the cap-dispenser is observed in plan view, the base protrudes several millimetres, with its contour parallel to the contour of the underside of the main body. At the rear there will be a semicircular recess of the same diameter as the rivet that attaches the tab to the lid of the can, wherein said recess is intended to allow the insertion of the base until said semicircular recess is inserted in the contour of the can so that the base is located under the tab and nipped thereby.

[0016] The underside of the base has a rim which protrudes from said underside and which has a perimeter whose geometry is coinciding with that of the hole in the lid, the rim has a hole for the passage of liquid and an end projection of greater diameter than that of the hole, which is inserted through the hole folding it and once it has been inserted secures the device also preventing vertical movements of the device. Therefore, its mission adjusting the device with the hole of the can so that accidental displacement between the two is prevented. The thickness of this lower rim may be slightly greater at the front, so that when the base is inserted under the tab of the can, the latter is forced to exert pressure on said tab which it transmits to the front of the base causing the joint to be compressed in that area, thereby improving the contact with the surface of the can.

[0017] The top of the main body may have attached thereto a cap that will allow the closure, consisting of a lid of dimensions coinciding with those of the hole on the top of the main body, being able to insert said cap into

the hole, which will be subject to simple pressure on the walls of the inner hollow of the main body.

[0018] The cap can be attached to the main body by a strip of material or have a hinge which enables the movement of the cap in relation to the main body.

DESCRIPTION OF THE DRAWINGS

[0019]

Fig. 1. Perspective view of the cap-dispenser, where the top can be observed.

Fig. 2. Perspective view this time from the bottom, where the base and the bottom seal can be observed.

Fig. 3. Section view of the cap-dispenser where the cutting plane is located on the longitudinal symmetry axis of the piece.

Fig. 4. Perspective view of the cap-dispenser arranged on a beverage can with stay-on tab opening.

Fig. 5. Plan view of the cap-dispenser assembled on the can.

Fig. 6. Section view of the device assembled on the lid of the can, where the lower rim with its projection fitted over the hole in the lid of the can is observed, the inner surface of the can being represented with shading.

DESCRIPTION OF THE PREFERRED REALISATION

[0020] According to the aforementioned figures, the present invention is illustrated by the following example, developed with descriptive object and not attempting to limit its scope in any way:

The cap-dispenser is formed of a main body (1), with hollow frustoconical geometry, leading to an upper hole (2) and a lower hole (4) which are connected.

[0021] The main body (1) has at its rear a hollow space (6) of large enough dimensions to insert the tab (11) of the can (7) with stay-on tab type closure. The formation of said hollow space (6) means that the wall thickness of the main body is not uniform, being greater at the rear than the front.

[0022] At the bottom of the main body (1) there is a fastening base (3), in whose bottom there is a lower rim (10), where both elements have holes of matching geometry with the bottom hole (4). In addition, said lower rim (10) has such dimensions that it can be inserted into the hole and its side walls remain in contact with the perimeter of the hole in the lid. Said rim (10) has at its bottom a projection or enlarged area whose dimensions are greater than those of the hole, which needs to be folded to enter through it and which to be introduced through it

needs to be folded and once passed the hole is left securing the device to the bottom of the lid of the can.

[0023] The base (3) has a semicircular recess (5) of the same diameter as the rivet (12) that secures the tab (11) to the lid of the can (7). The base (3) is configured as a flat sheet of the same geometry as the underside of the main body (1), but whose dimensions are slightly larger so that in plan view said base (3) overhangs between 3 and 4 mm in relation to the main body (1).

[0024] Attached to the main body (1) by means of a strip (9) is a cap (8) that is adapted by pressure to the upper hole (2), closing the assembly and preventing the liquid from leaving once the can (7) is opened.

[0025] The present invention is only limited by the appended claims.

Claims

1. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING, comprising a main body (1) with external cylindrical or frustoconical shape, where the walls of said body have a non-uniform thickness, there being a hole (2) at the top and another hole (4) at the bottom which are connected so that said main body is hollow; **characterized in that** said main body (1) has at its rear a hollow space (6) of sufficient space to insert the ring (11) of a can (7); where at the bottom of the main body (1) has a fastening base (3) that has a semicircular recess (5) of a diameter coinciding with that of the rivet (12) that secures the tab (11) to the lid of the can (7) and a hole of a geometry coinciding with that of the bottom hole (4) of the main body (1).
2. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 1, **characterized in that** the top of the main body (1) may have attached thereto a cap (8) that will allow the closure, consisting of a lid of dimensions coinciding with those of the top hole (2), being able to insert said cap (8) into the top hole (2) closing off the complex and preventing the fluid outlet once the can (7) is opened.
3. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 2, **characterized in that** the union between the cap (8) and the main body (1) it is made by a hinge or a strip (9) of material.
4. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 1, **characterized in that** the base (3) it is configured as a flat sheet with an analogous geometry to the lower side of the main body (1), but its dimensions are slightly higher so that the base

seen from above (3) projects between 3 and 4 millimeters with respect of the main body.

5. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 1, **characterized in that** the lower side from the support base (3) there is a rim (10) that projects from the said lower side and it will have a perimeter whose geometry will be coincident with the cap hole, having the rim (10) from the corresponding hole to the digestion fluid.
6. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 5, **characterized in that** the rim (10) thickness is bigger at the front.
7. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 5, **characterized in that** the rim (10) has at its bottom a projection or enlarged area whose dimensions are greater than those of the hole, which needs to be folded to enter through it and which once passed the hole is left securing the device to the bottom of the lid of the can.
8. CAP-DISPENSER THAT CAN BE FITTED TO BEVERAGE CANS WITH STAY-ON TAB OPENING according to claim 1, **characterized in that** the hollow space (6) has a approximately rectangular geometry and it is adapted to the ring (11) of the can (7) so that allows hosting the mentioned emptying (6) the part of the ring (11) which goes from the rivet (12) that holds the ring (11) to the cap until its front end.

Patentansprüche

1. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, umfassend einen Hauptkörper (1) mit äußerer zylindrischer Form oder kegelstumpfförmig, wobei die Wände des Körpers eine ungleichmäßige Dicke aufweisen, wobei sich oben ein Loch (2) und unten ein weiteres Loch (4) befindet, die so verbunden sind, dass der Hauptkörper hohl ist; **dadurch gekennzeichnet, dass** der Hauptkörper (1) an seiner Rückseite einen Hohlraum (6) mit ausreichendem Raum zum Einsetzen des Rings (11) einer Dose (7) aufweist; wobei an der Unterseite des Hauptkörpers (1) ein Befestigungssockel (3) vorgesehen ist, der eine halbkreisförmige Aussparung (5) mit einem Durchmesser aufweist, der mit dem des Nietes (12) übereinstimmt, der den Ring (11) am Deckel der Dose (7) befestigt, und ein Loch mit einer Geometrie, die mit derjenigen der Bodenöffnung (4) des Hauptkörpers (1) übereinstimmt.

2. DECKEL-DISPENSER, DER AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 1, **dadurch gekennzeichnet, dass** an der Oberseite des Hauptkörpers (1) eine zum Verschließen geeignete Kappe (8) befestigt sein kann, bestehend aus einem Deckel mit Abmessungen, die mit denen des oberen Lochs (2) übereinstimmen, wobei die Kappe (8) in das obere Loch (2) eingesetzt werden kann, um so nach dem Öffnen der Dose (7) den Komplex zu verschließen und den Flüssigkeitsauslass zu verhindern. 5 10
3. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 2, **dadurch gekennzeichnet, dass** die Verbindung zwischen der Kappe (8) und dem Hauptkörper (1) aus einem Scharnier oder einem Materialstreifen (9) besteht. 15 20
4. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 1, **dadurch gekennzeichnet, dass** der Sockel (3) als eine flache Platte mit einer zur Unterseite des Hauptkörpers (1) analogen Geometrie ausgebildet ist, aber seine Abmessungen etwas höher sind, so dass der Sockel von oben gesehen (3) zwischen 3 und 4 Millimetern in Bezug auf den Hauptkörper vorsteht. 25 30
5. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 1, **dadurch gekennzeichnet, dass** die Unterseite vom Befestigungssockel (3) ein Rand (10) aufweist, der von der Unterseite vorsteht und einen Umfang aufweist, dessen Geometrie mit der Öffnung der Kappe übereinstimmt, die den Rand (10) aus der entsprechenden Öffnung zur Verdauungsflüssigkeit aufweist. 35 40
6. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 5, **dadurch gekennzeichnet, dass** die Dicke des Randes (10) an der Vorderseite größer ist. 45
7. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 5, **dadurch gekennzeichnet, dass** der Rand (10) an seinem Boden einen Vorsprung oder eine vergrößerte Fläche aufweist, dessen Abmessung größer als die der Öffnung ist, der zum Passieren der Öffnung gefaltet werden muss und der nach dem Passieren der Öffnung die Vorrichtung am Boden des Dosendeckels befestigt. 50 55

8. SPENDERKAPPE, DIE AUF GETRÄNKEDOSEN MIT AUFGESETZTER RINGÖFFNUNG ANGEBRACHT WERDEN KANN, nach Anspruch 1, **dadurch gekennzeichnet, dass** der Hohlraum (6) eine annähernd rechteckige Geometrie aufweist und an den Ring (11) der Dose (7) angepasst ist, so dass es möglich ist, den Teil des Rings (11), der von dem Niet (12), der den Ring (11) an der Kappe hält, bis zu seinem vorderen Ende reicht, in den genannten Hohlraum (6) aufzunehmen.

Revendications

1. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE, comprenant un corps principal (1) de forme extérieure cylindrique ou tronconique, où les parois dudit corps ont une épaisseur non uniforme, un orifice (2) à l'extrémité supérieure et un autre orifice (4) à l'extrémité inférieure qui sont reliés de sorte que ledit corps principal est creux ; **caractérisé en ce que** ledit corps principal (1) est doté à l'arrière d'un espace creux (6) de grandeur suffisante pour insérer l'opercule (11) d'une canette (7) ; où la base du corps principal (1) est doté d'une embase de fixation (3) présentant un évidement semi-circulaire (5) d'un diamètre correspondant à celui du rivet (12) qui fixe l'opercule (11) au couvercle de la canette (7) et d'un orifice de géométrie identique à celle de l'orifice de l'extrémité inférieure (4) du corps principal (1). 15 20 25 30
2. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 1, **caractérisé en ce que** le dessus du corps principal (1) peut être muni d'un bouchon (8) qui permettra la fermeture, constitué d'un couvercle de dimensions identiques à celles de l'orifice supérieur (2), ledit bouchon (8) pouvant être inséré dans l'orifice supérieur (2) fermant le tout et empêchant la fuite de fluide lors de l'ouverture de la canette (7). 35 40
3. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 2, **caractérisé en ce que** la jonction entre le bouchon (8) et le corps principal (1) est réalisée par une charnière ou une bande (9) de matériau. 45 50
4. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 1, **caractérisé en ce que** l'embase (3) est constituée d'une plaque plane de géométrie similaire à celle de la face inférieure du corps principal (1), mais dont les dimensions sont légèrement plus grandes de sorte que l'embase (3) vue de dessus dépasse de 3 et 4 millimètres par 55

rapport au corps principal.

5. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 1, **caractérisé en ce que** la face inférieure de l'embase de fixation (3) comporte un anneau (10) qui est en relief par rapport à ladite face inférieure et qui aura un périmètre dont la géométrie sera identique à celle de l'orifice du bouchon, l'anneau (10) correspondant à l'orifice vers le contenu de la canette. 5 10
6. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 5, **caractérisé en ce que** L'anneau (10) est plus épais sur le devant. 15
7. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 5, **caractérisé en ce que** L'anneau (10) présente sur sa face inférieure une surface en relief ou agrandie dont les dimensions sont supérieures à celles de l'orifice de la canette, qui doit être repliée pour pénétrer dans l'orifice et qui, une fois introduite, permet de fixer le dispositif à la base du couvercle de la canette. 20 25
8. APPLICATEUR DE BOUCHON POUR CANETTES DE BOISSON AVEC OUVERTURE À OPERCULE FIXE selon la revendication 1, **caractérisé en ce que** l'espace creux (6) a une géométrie à peu près rectangulaire et est adapté au contour de l'opercule (11) de la canette (7) de manière à pouvoir héberger dans ledit espace creux (6) la partie de l'opercule (11) qui va du rivet (12) maintenant l'opercule (11) au couvercle jusqu'à son extrémité avant. 30 35

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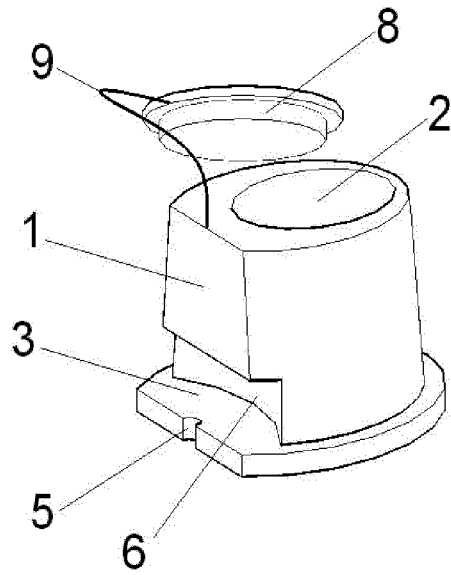


Figure 1.

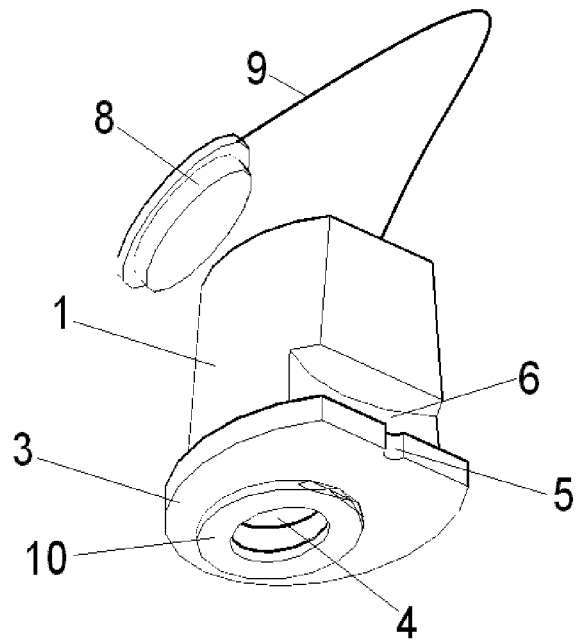


Figure 2.

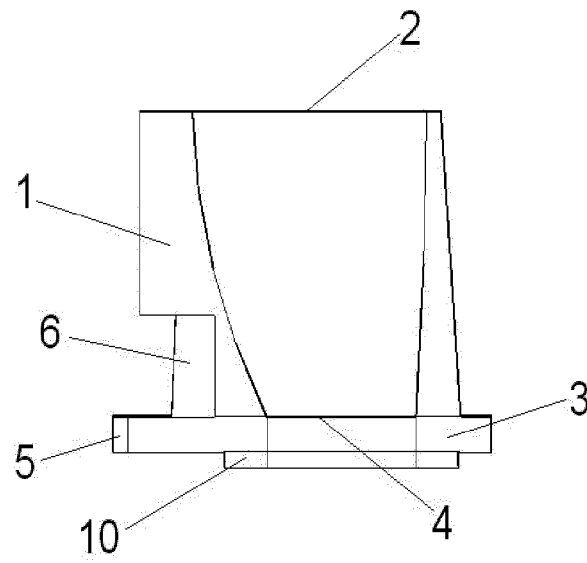


Figure 3.

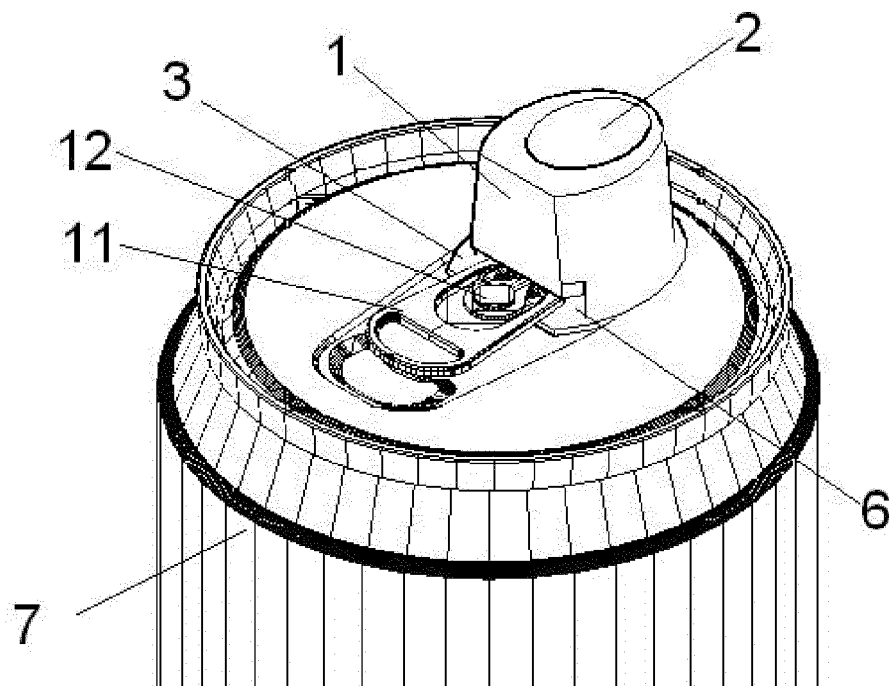


Figure 4.

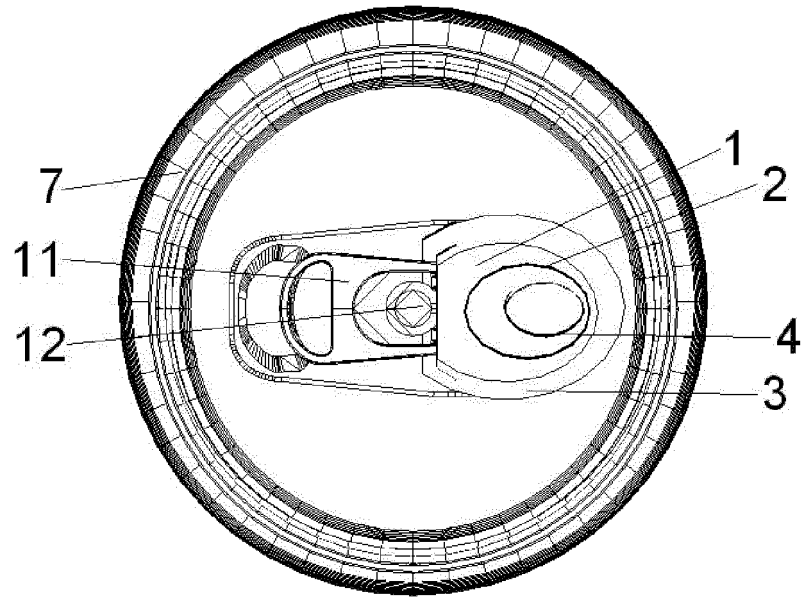


Figure 5.

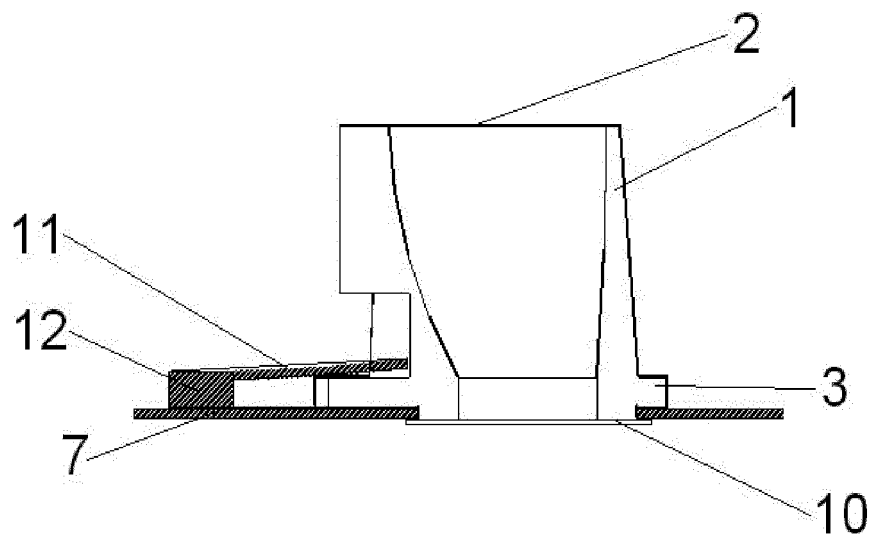


Figure 6.

REFERENCES CITED IN THE DESCRIPTION

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