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(54) Liquid dispenser

Flüssigkeitsspender

Distributeur de liquides

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Description

BACKGROUND OF THE INVENTIONS

Field of the Invention

[0001] The present invention is directed to dispensers for liquids, such as ingredients of cocktails, and more particularly, carbonated ingredients or ingredients that are to be kept refrigerated or otherwise chilled in, for example, an ice-water bath or other cooled environments.

Description of the Related Art

[0002] Aluminum cans have long been used for containing carbonated drinks, such as sodas, energy drinks, and other pressurized beverages. Typically, these cans include a tab-type opener in which the tab is used to depress a portion of the top of the can outlined by a frangible portion such that the frangible portion is broken when the can is opened. However, after the can is opened, the carbonation is released gradually over time. Thus, these cans are intended to be used in the manner in which the entire contents of the can are used soon after the can is opened.

[0003] In order to slow the release of carbonation from such cans, various devices have been developed for forming a seal over the opening of these types of cans. Some of these devices include removable caps that fit on the top end of the beverage can and include lip seals that form a gas-tight seal over the top of a can so as to prevent carbonation from escaping from the beverage.

[0004] European Patent Application Publication No. 0438789A1 discloses a device for closing an opened carbonated beverage can. The device comprises a base and an upper portion that define a cavity dimensioned to receive a beverage can. When the upper portion is screwed onto the base, an annular ridge engages the rim of the can to form a seal. In one embodiment, the upper portion includes a pressure-release passage closed by a screw-on cap to permit the release of pressure built-up in the device and thereby allow the upper portion to be unscrewed from the base.

[0005] U.S. Patent No. 4,823,975 discloses a can closure for a cylindrical can containing a carbonated beverage or drink typically to be opened at the can top which suitably has a rim thereabout. A can cover plate is provided having an underside surface sealably engagable with the can top rim. A can support plate is oriented below and opposing the can cover plate and is designed for supporting the can. An expansible back connects the can cover and support plates in expansible and contractible opposing relation to permit the can closure to close down upon and sealably engage the can top rim. A locking mechanism is provided to secure the expansible back once the can cover plate is sealably engaged with the can top rim.

[0006] U.S. Patent No. 3,719,305 discloses a holder for holding a beverage can in such a manner that one may use the holder as a stein in drinking the beverage from the can. The holder includes a dish for supporting the can, a post extending upwardly of the dish, a handle pivoted to the top of the post and a bar slidably mounted for inward-outward movement in the top of the post. A latch is provided at the bottom of the handle that, when the handle is swung downwardly, extends through a slot on the post and bears against the can to restrain the can against movement on the dish. A connection is provided between the handle and the bar that is so constructed as to move the bar inwardly over the top of the can when the handle is swung downwardly to also restrain the can against movement on the dish.

[0007] U.S. Patent No. 5947324 describes a bottle-like adapter for a beverage can comprising a drinking spout and two differently-sized recesses in the base of the adapter for releasable attachment to a beverage can.

SUMMARY OF THE INVENTION

[0008] According to the present invention these is provided a canned cocktail ingredient dispenser, and a method of dispensing a cocktail ingredient, as defined by the claims.

[0009] In an embodiment, a dispenser is configured to extend around and engage a container which includes an opening. The dispenser includes a seal that surrounds the opening. Additionally, the dispenser includes at least one opening on a portion thereof, so as to allow fluid to move into thermal communication with the container.

[0010] A canned cocktail ingredient dispenser comprises a metal can containing a carbonated cocktail ingredient, the metal can comprising a top portion and a frangible portion disposed on the top portion and configured to allow a user to open the top portion. A top tensioning member has a first connector, the top tensioning member including a sealing arrangement configured to form a seal with the top portion of the metal can around the frangible portion. A bottom tensioning member has a bottom abutment portion configured to abut against a bottom of the metal can. A second connector is configured to releasably engage the first connector. A middle portion is disposed between the bottom abutment portion and the second connector, the top tensioning member, the bottom tensioning member and the first and second connectors being arranged such that the bottom tensioning member presses the top portion of the metal can into engagement with the seal on the top tensioning member with sufficient force so as to maintain a gas tight seal between the seal and the top portion of the can that is sufficiently strong to maintain the carbonation in the can. The middle portion has openings such that fluid can freely flow into thermal communication with portions of the metal can below the seal.

[0011] A carbonated liquid dispenser comprises a top member including a seal configured to form a seal with a top portion of a carbonated liquid container and around

an opening in the top portion of the carbonated liquid container. A bottom member has a bottom portion configured to abut against a bottom of the carbonated liquid container. A middle portion connects the bottom portion and the top member. The middle portion has openings such that fluid can freely flow into thermal communication with portions of the carbonated liquid container.

[0012] A carbonated liquid dispenser comprises a top member including a seal configured to form a seal with a top portion of a carbonated liquid container and around an opening in the top portion of the carbonated liquid container. A bottom member has a bottom portion configured to abut against a bottom of the carbonated liquid container. A middle portion connecting the bottom member and the top member and the dispenser also includes openings for allowing fluid to freely flow into thermal communication with portions of the carbonated liquid container.

[0013] Preferably, a method of sealing an opened carbonated liquid container can be provided. The method comprises inserting the carbonated liquid container into a bottom member which includes at least one opening in a side thereof and abutting a bottom portion of the bottom member against a bottom of the carbonated liquid container. The method further includes connecting a top member to the bottom member with the carbonated liquid container disposed between the top and bottom members such that a seal is formed between the top member and a top of the carbonated liquid container, the seal being positioned around an opening in the top of the carbonated liquid container. The method also includes inserting at least the bottom member into a cooled fluid such that the cooled fluid flows through the at least one opening and into thermal communication with the carbonated liquid container.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] Certain embodiments of the present inventions are discussed below in detail with reference to the following figures. These figures are provided for illustrative purposes only, and the inventions are not limited to the subject matter illustrated in the figures.

[0015] Figure 1 is a perspective and partial exploded view of a cocktail ingredient dispenser in accordance with an embodiment.

[0016] Figure 2 is an exploded perspective view of the dispenser illustrated in Figure 1.

[0017] Figure 3 is an enlarged sectional view of a carbonated liquid container disposed within the ingredient dispenser of Figures 1 and 2.

[0018] Figure 4 is a partial sectional view of a lower end of the dispenser illustrated in Figure 1.

[0019] Figure 5 is another partial sectional view of a lower end of the dispenser illustrated in Figure 1, and including a drain.

[0020] Figure 6 is a partial sectional view of an upper end of the dispenser illustrated in Figure 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0021] Figures 1-5 illustrate embodiments of a liquid dispenser 10. The liquid dispenser 10 is illustrated and described in the context of a dispenser for use with carbonated beverages contained in aluminum cans. However, this is merely one exemplary environment in which the present inventions can be used. The inventions and embodiments disclosed herein can be used in other contexts as well.

[0022] With reference to Figure 1, a liquid dispenser 10 includes a lower portion 12 and an upper portion 14. The lower and upper portions 12, 14 are configured to retain a carbonated beverage container 16 therebetween. In some embodiments, the carbonated liquid container 16 can be a soda can, a juice container, etc.

[0023] For example, with reference to Figure 2, the carbonated liquid container 16 can be in the configuration of the long known and widely used "soda can" configuration. The illustrated container 16 can be an aluminum can having a top 18 connected to a sidewall 20. The top 18 includes a frangible portion 22. A snap top lever 24 can also be attached to the top 18 so as to provide a convenient device allowing a user to break the frangible portion 22 to open the top 18 of the container 16.

[0024] The dispenser 10 can be used with other types of cans. For example, pineapple juice cans are available in a large size format. Typically, these cans are opened with a piercing-type can opener. Once opened, however, bartenders often transfer this type of juice into an opaque plastic juice container with an elongated neck. However, because of the opacity of these types of plastic containers, it is difficult to determine the precise color of the contents. For example, it is difficult to distinguish pineapple juice from orange juice in the low-light environment of a bar or night club.

[0025] Thus, by taking a large pineapple can which was opened using a piercing-type can opener, and placing it into the dispenser, the original label on the pineapple can is still visible to the bartender and thus more easily distinguishable from an orange juice container. Additionally, the bartender is not required to transfer the pineapple juice to another container, thereby saving time. Additionally, the dispenser 10 can be used with other types of cans as well.

[0026] With reference to Figure 3, as is typical in the carbonated beverage container arts, the sidewall 20 of the container 16 can be connected to the top 18 along an upstanding wall 26. The upstanding wall 26 can include a bead 28 along its top edge and inwardly facing wall 30.

[0027] The top 18 can also include a central area 32 upon which the frangible portion 20 and lever 24 (Figure 2) can be disposed. The central portion 32 and the inwardly facing wall 30 can meet along a channel 34. As illustrated in Figure 3, the channel 34 can be defined by an outwardly facing wall 36 disposed along the peripheral

edge of the central portion 32 and a lower portion 38 of the inwardly facing wall 30.

[0028] The container 16 can be any size. For example, the container 16 can be 238, 247, 356, 475, 713 or 950 ml (8, 8.3, 12, 16, 24, or 32 fluid ounces), although any size container 16 can be used. Further, advantages can be achieved where the container 16 is about 950 ml (32 ounces). For example, "on premises" alcohol establishments are serving many new cocktails.

[0029] Energy drinks are now being used as mixers for cocktails. Many of these energy drinks come in various sized aluminum cans. Some of these energy drinks come in cans as small as 238 ml (8 ounces). However, such a small can generates a large amount of waste, i.e., a 238 ml (8 ounce) can contains enough soda for only about 1-2 cocktails. In some establishments, bartenders keep large garbage cans behind the bars to collect used cans.

[0030] Using a larger can greatly reduces the amount of used cans generated per cocktail. For example, a larger can has a greater volumetric efficiency than a smaller can. More particularly, the ratio of aluminum mass per fluid ounce is lower for a larger can than it is for a smaller can. As such, more aluminum is required to manufacture eight 238 ml (8-ounce) aluminum cans (totaling 1900 ml (64 ounces)) than that required to make two 950 ml (32-ounce) cans (totaling 1900 ml (64 ounces)).

[0031] However, a 950 ml (32 ounce) can can be used to make as many as eight or more cocktails. Thus, once a 950 ml (32-ounce) can is opened, it may remain open for an extended period of time, until enough cocktails have been ordered to deplete the liquid from the 950 ml (32-ounce) can. The longer the can is opened, the more carbonation will be lost unless it is sealed. Additionally, the contents of the can will become warmer over time. Thus, in some embodiments, the liquid dispenser 10 can maintain the carbonation within the can and allow the can to be cooled using equipment already existing in the on-premises alcohol market. Thus, with reference to Figure 1, further advantages can be achieved where the dispenser 10 is configured to receive a container 16 that is larger than 475 ml (16 fluid ounces), for example, cans having capacities up to about 950 ml (32 ounces) or more.

[0032] Additionally, further advantages can also be achieved where the dispenser 10 is configured to allow fluid to flow into thermal communication with the container 16. As such, a bartender can keep the container 16 chilled using existing equipment, such as refrigerators or ice water baths that are widely used in on-premises alcohol establishments.

[0033] With reference to Figure 2, the lower portion 12 can have an inner diameter configured to receive any size container 16. In some embodiments, the inner diameter of the lower portion 12 is sized to receive a container of about 6.4 cm (2½ inches). Further, in some embodiments, the lower portion 12 is configured to receive a container 16 having a diameter of 7.6 cm or more (3 or more inches). In an exemplary embodiment, where the container 16 has a capacity of about 950 ml (32 fluid ounces), the inner diameter of the lower portion 12 can be about 8.9 cm (3 1/2 inches). However, this is merely an exemplary and non-limiting embodiment.

[0034] With reference to Figure 2, the lower portion 12 includes an abutment portion 40 that is configured to abut against a bottom 42 of the container 16. In some embodiments, the abutment portion 40 can include a generally flat inner surface 44. However, in other embodiments, the inner surface 44 can have any shape. Additionally, the lower portion 12 can include an outermost peripheral wall 48 that extends around the entire periphery of the lower surface 44.

[0035] When the container abuts against the surface 44, it can contact the surface along a contact area, schematically represented by phantom line 49. This contact area can form a liquid barrier when the container 16 is pressed against the surface 44. As such, water or other liquids can accumulate between the peripheral wall 48 and the side of the container 16 (Figures 4 and 5).

[0036] The lower portion 12 includes an opening 46 (illustrated in phantom line in Figure 4 and solid line in Figure 5). As such, any water that may flow into the lower portion 12, can quickly drain out therefrom. Additionally, with reference to Figure 4, the opening 46 can allow fluid, such as air or water, to contact a lower surface of the container 16, in the vicinity of the recess 47, and thereby aid in cooling the contents of the container 16. Additionally, in some embodiments, the lower portion 12 can also include one or more drain holes 45 (Figure 5) so aid in draining water from the dispenser 10.

[0037] As noted above, water or other liquids can accumulate between the peripheral wall 48 and the side of the container 16 (Figure 4). Thus, the dispenser 10 is configured to allow such liquid pass across the contact area.

[0038] For example, in some embodiments, the surface 44 can include a drain 51. In some embodiments, the drain 51 can be in the form of a channel disposed in the surface 44 and extending across the contact area 49. Water trapped between the peripheral wall 48 and the side wall of the container 16 can flow downwardly into the drain 51, under the lower edge of the container 16 contacting the contact area 49, and toward the opening 46. As such, this water can drain out of the dispenser 10 more quickly.

[0039] With reference again to Figure 4, in some embodiments, the peripheral wall 48 can be omitted (as illustrated in phantom line). Omitting the peripheral wall 48 can provide further advantages. For example, if the dispenser 10 is partially submerged in an ice-water bath, and water flows into the lower portion 12, as noted above, the peripheral wall 48 can retain some of that water when the dispenser is raised out of the bath. Thus, when a user, such as a bartender, tips the dispenser over to pour out the contents of the container 16 into a cocktail glass, the water retained by the peripheral wall 48 will spill out onto the bar or possibly into the cocktail glass. Thus, eliminating the peripheral wall 48 reduces or eliminates

such spillage.

[0040] With reference to Figure 2, the lower portion 12 includes a connector 50 at its upper end and at least one connection member 52 structurally connecting the lower surface 44 with the connector 50. In some embodiments, the connector members 52 are in the form of struts 54. However, this is merely one type of connector that can be used as the connector member 52.

[0041] Generally, the connector member 52, in operation, will only be subjected to tensile forces. Thus, the connector 52 can take any form, such as, for example, but without limitation, cable, chain, strap, or any other device or structure that can provide resistance against tensile forces. In the illustrated embodiment, the dispenser 10 includes three struts 54. However, any number of struts can be used.

[0042] A further advantage is provided where the connector member 52 is configured so as to provide for a free flow of fluid, such as ice water or air, into thermal communication with an outer surface of the container 16. In the illustrated embodiment, the arrangement of the three struts 54 creates three large openings 60 around the periphery of the lower portion 12.

[0043] Such a construction can allow fluids, such as ice water or refrigerated air, to freely flow into thermal contact with the outer surface of the container 16. As such, when the container 16 is held within the dispenser 10, the container 16 can be readily cooled in any manner, such as an ice water bath, a refrigerator, or any other cooling method.

[0044] In some embodiments, the size of the openings 60 can be maximized so as to allow for the maximum thermal communication between the walls of the container 16 and the surrounding fluid. The larger the openings 60, the higher the flow rate of fluid through the openings 60 and thus, the higher the rate thermal transfer between the liquid in the container 16 the fluid surrounding the container 16.

[0045] Additionally, the openings 60 allow a user to easily see the sides of the container 26 which will often include some type of description of the contents of the container 16. This is advantageous in the environment of many types of on-premises establishments that are use low lighting which can make it more difficult for bartenders to see the labels on such containers. The label on a container 16 might indicate that the contents are a diet version of one particular liquid, but otherwise using the same logos and trademarks as the non-diet version of that liquid. Thus, using large openings 60 allows the bartenders to more easily see the labels on the container 16, even in low light conditions and help prevent accidental mix-ups of cocktail ingredients.

[0046] Thus, in some embodiments, the dimensions used for the connector members 52 can be minimized according to the minimum material thicknesses needed to withstand the tensile forces generated by the dispenser 10 when fully assembled. This allows the openings 60 to be made as large as possible.

[0047] With continued reference to Figure 2, the connector 50 can be any type of connector. In the illustrated embodiment, the connector 50 includes internal threads on an inwardly facing surface thereof. These threads are configured to engage with external threads on a lower end of the upper portion 14. However, any type of connection can be used.

[0048] As noted above, the upper portion 14 can have a lower end 70 that is configured to engage with the connector 50. In the illustrated embodiment, the lower end 70 includes a connector 72 which can be in the form of threads (not shown) configured to engage with internal threads in the connector 50. These threads can be of any type, for example, national coarse or national fine, or have any other pitch and size. In some embodiments, other connectors are used, including but not limited to, an interference fit, slip fit, latches, or any other connector. As such, the upper portion 14 can be releasably engaged with the lower portion 12. The connection between the connector 50 and the connector 72 has sufficient strength to prevent carbonation from escaping the container 16, described below in greater detail.

[0049] With reference to Figure 6, the upper portion 14 also includes a sealing arrangement 80 that can be configured to form a seal with the channel 34 on the top of the container 16. The seal arrangement 80 can take any form. In the illustrated embodiment, the seal arrangement 80 includes an annular wall 82 extending downwardly from the lower end 70 of the upper portion 14.

[0050] The wall 82 can be made from any material. In some embodiments, the wall 82 can be made monolithically with the remainder of the upper portion 14 or it can be made from separate pieces connected to the remainder of the upper portion 14. In the illustrated embodiment, the annular wall 82 is made monolithically with the lower portion 70 of the upper portion 14. In other words, it is molded as a portion of the upper portion 14. Additionally, in this embodiment, the annular wall 82 is sized such that an inwardly facing surface 84 of the annular wall 82 contacts the outwardly facing surface 36 of the channel 34.

[0051] With this configuration, when the upper portion 14 is connected as a lower portion 12 through the interaction of the connectors 50, 72, tension is generated in the connector member 52 so as to pull the annular wall 84 downwardly into the channel 34 to thereby create a seal between the inner surface 84 and the outwardly facing surface 36 and/or other portions of the channel 34.

[0052] Other configurations can also be used. For example, the wall 84 can be arranged to contact other parts of the channel 34 or other parts of the container 16 around the opening 22. For example, some cans, such as large pineapple juice cans, do not have a deep channel 34. Thus, in some embodiments, the wall 84 can be configured to press against an upstanding wall 30, which is the type of wall that exists on the typical pineapple juice can. In this type of environment of use, the wall 84 does not need to generate a seal that is sufficiently strong to maintain carbonation in the associated container.

[0053] However, as noted above, the seal generated by the wall 84 can be configured to be sufficiently strong to prevent carbonation within a carbonated liquid disposed in the container 16 from escaping the dispenser 10. As such, the carbonation can be better maintained within such a carbonated liquid disposed in the container 16.

[0054] The upper portion includes an elongated neck 90. The elongated neck 90 has a height H configured to allow a human user to easily grasp the elongated neck 90. For example, the height H can be about 0.2-15.3 cm (4-6 inches). However, this is merely an exemplary dimension.

[0055] With continued reference to Figure 6, the elongated neck 90 defines an interior conduit 92 and an upper outlet opening 94. As such, liquid from the container 16 can flow out of the container 16, through the opening 22, through the conduit 92, and out of the opening 94.

[0056] Thus, a user of the dispenser 10 can grab the elongated neck 90 and pour liquid out of the container 16 and through the outlet 94. In some embodiments, the conduit 92 can be restricted, to thereby reduce the interior volume of the conduit 92 which can aid in maintaining the level of carbonation in the carbonated liquid within the container 16.

[0057] Additionally, the dispenser 10 can include a cap 100. The cap 100 can be configured to fit tightly over a top portion of the elongated neck 90. Additionally, an interior surface 102 of the cap 100 can be configured to form a gas tight seal with an outer surface 104 of the elongated neck 90.

[0058] For example, the surfaces 102, 104 can be configured to form a slip fit such that when the cap 100 is disposed on the neck 90, as illustrated in Figure 6, the surfaces 102, 104 contact each other and thereby generate a seal. In some embodiments, the surfaces 102, 104 can include ridges (not shown) or other surface features configured to form an interference fit. Regardless of the type of technique used to generate a seal between the surfaces 102, 104, the seal can be configured to be sufficiently strong to retain carbonation within the carbonated liquid disposed within the container 16.

[0059] With reference to Figure 1, the neck 90 can include a recess 110 disposed on an upper end thereof, adjacent to the outlet opening 94. Additionally, the cap 100 can include a complimentarily-shaped recess 112. In some embodiments, the recesses 110, 112 can be arranged so as to nest with each other when the cap 100 is connected to the neck 90. Such a nesting of the recesses 110, 112 can provide for a positive engagement of the cap 100 with the neck 90 when the cap 100 is oriented in the correct position to provide the desired seal therebetween. Additionally, in some embodiments, the cap 100 can be tethered to a portion of the dispenser so as to prevent the cap 100 from being lost.

[0060] In use, for example, in an on-premises establishment such as a bar or night club, when a customer orders a cocktail with an ingredient that is not in the bartenders hose-dispenser, the bartender must open another type of container. Many such cocktail ingredients are delivered to the on-premises establishment in a can, such as a soda can or a juice can (e.g., pineapple juice). Thus, the bartender opens a can such as container 16.

[0061] Because the container 16 contains a sufficient amount of ingredient to make more than one cocktail, after the bartender makes one cocktail, the bartender inserts the container 16 into the lower portion 12, as illustrated in Figure 2. The bartender then attaches the upper portion 14 to the lower portion 12 by connecting the connectors 50 and 70 to each other. As the connectors 50, 70 are brought into engagement with each other, the surface 44 abuts against the lower surface of the container 16. This movement also brings the wall 84 into a sealing engagement with the wall 36 (Figure 6).

[0062] In this configuration, the cap 100 seals the opening 94 and thus any liquid in the container 16 is preserved. For example, if the liquid is a juice, the cap 100 helps to keep the juice fresh. Additionally, if the liquid is a carbonated beverage, the cap 100 prevents or slows the loss of carbonation from the liquid.

[0063] The bartender can then place the dispenser in an cooled environment, such as a refrigerator or an ice-water bath. The openings 60 in the sides of the dispenser 10 allow the cooled fluid, whether it is cooled air from a refrigerator or water from an ice-water bath, to freely flow into thermal communication with the sides of the container, and thus with any liquid in the container 16. As such, the liquid can be further preserved and maintained at the desired temperature.

[0064] When another customer orders a cocktail with the same ingredient, the bartender can remove the dispenser from the cooled environment. If the cooled environment is an ice-water bath, the water can drain out of the opening 46 (Figure 2), drain 45 (Figure 5), through the drain 51, and/or through the opening 60 where the peripheral wall 48 has been omitted (Figure 4). The bartender can also remove the cap 100 and pour the liquid ingredient from the container 16 and into a cocktail glass. However, other methods can also be performed with the dispenser.

[0065] Any features of the embodiments show and/or described in the figures that have not been expressly described in this text, such as distances, proportions of components etc. are also intended to form part of this disclosure. Additionally, although these inventions have been disclosed in the context of certain various embodiments, features, aspects, and examples, it will be understood by those skilled in the art that the present inventions extend beyond the specifically disclosed embodiments to other alternative embodiments under uses of the inventions and obvious modifications and equivalents thereof. Accordingly, it should be understood that the various features and aspects of the disclosed embodiments can be combined with, or substituted for, one another in order to perform varying modes of the disclosed inventions. Thus, it is intended that the scope of

the present inventions herein disclosed should not be limited by the particular disclosed embodiments described above.

Claims

1. A canned cocktail ingredient dispenser (10) comprising:

   a metal can (16) containing a carbonated cocktail ingredient, the metal can comprising a top portion (18) and a frangible portion (22) disposed on the top portion and configured to allow a user to open the top portion;
   a top tensioning member (14) having a first connector (72), the top tensioning member including a sealing arrangement (80) configured to form a seal with the top portion (18) of the metal can around the frangible portion;
   a bottom tensioning member (12) having a bottom abutment portion (40) configured to abut against a bottom of the metal can;
   a second connector (50) configured to releasably engage the first connector; and
   a middle portion (52) disposed between the bottom abutment portion and the second connector, the top tensioning member (14) and the bottom tensioning member (12) and the first and second connectors (72,50) being arranged such that the bottom tensioning member (12) presses the top portion of the metal can (16) into engagement with the seal on the top tensioning member (14) with sufficient force so as to maintain a gas tight seal between the seal and the top portion of the can that is sufficiently strong to maintain the carbonation in the can; and
   openings (60) in sides of the dispenser (10) that are configured to allow cooled liquid to freely flow into thermal communication with the sides of the can (16), and thus with any liquid in the can;
   characterized by the top tensioning member including an elongated neck (90), the elongated neck sized to be graspable by a human hand and the elongated neck (90) having a conduit (92) ending at an outlet opening (94) on a distal end of the elongated neck (90), the conduit (92) being configured to allow the carbonated cocktail ingredient to flow from the can (16), through the conduit (92), and out through the outlet opening (94);
   wherein the bottom abutment portion (40) includes an opening (46) such that cooled liquid entering the bottom tensioning member (12) through the openings (60) can flow out of the opening (46) in the bottom abutment portion (40).

2. The ingredient dispenser according to Claim 1, wherein the bottom tensioning member (12) includes struts (54) connecting the abutment portion (40) and the second connector (50).

3. The ingredient dispenser according to any one of the preceding Claims, additionally comprising a cap (100) configured to form a seal over the outlet opening (94), the seal being sufficiently strong to slow the loss of carbonation from the carbonated cocktail ingredient.

4. The liquid dispenser according to any one of Claims 1 to 3, wherein the conduit (92) is restricted, to thereby reduce the interior volume of the conduit (92) to aid in maintaining the level of carbonation in the carbonated cocktail ingredient.

5. The liquid dispenser according to any one of Claims 1 to 4, wherein the dispenser (10) is configured to allow a user to see a description of the contents on the side of the metal can (16).

6. The liquid dispenser according to Claim 3, wherein the elongated neck (90) includes a recess (110) that is disposed on an upper end of the neck (90) and is adjacent to the outlet opening (94), and the cap (100) includes a complimentarily-shaped recess (112), the recesses (110, 112) being arranged so as to nest with each other when the cap (100) is connected to the elongated neck (90).

7. The liquid dispenser according to any one of Claim 3 or Claim 6, wherein the cap (100) is tethered to a portion of the dispenser (10).

8. A method of dispensing a cocktail ingredient from an opened carbonated liquid container (16), the method comprising:

   inserting the carbonated liquid container (16) into a bottom tensioning member (12);
   abutting a bottom portion (40) of the bottom tensioning member (12) against a bottom of the carbonated liquid container;
   connecting a top tensioning member (14) to the bottom tensioning member (12) with the carbonated liquid container disposed between the top and bottom tensioning members such that a seal is formed between the top tensioning member (14) and a top of the carbonated liquid container (16), the seal being positioned around an opening in the top of the carbonated liquid container; the bottom tensioning member (12) including at least one opening (60) in a side thereof and an opening (46) such that any liquid that may flow into the bottom tensioning member (12) can quickly drain out therefrom;

the top tensioning member including an elongated neck (90), the elongated neck sized to be graspable by a human hand and the elongated neck (90) having a conduit (92) ending at an outlet opening (94) on a distal end of the elongated neck (90);
inserting at least the bottom tensioning member (12) into a cooled liquid such that the cooled liquid flows through the at least one opening (60) and into thermal communication with the carbonated liquid container (16) and out of the opening (46) in the bottom tensioning member (12); and
grasping the elongated neck (90) and allowing the carbonated cocktail ingredient to flow from the can (16), through the conduit (92), and out through the outlet opening (94).

9. The method according to Claim 8 additionally comprising placing a cap (100) over an opening (94) in the top tensioning member (14).

Patentansprüche

1. Spender (10) für konservierte Cocktail-Inhaltsstoffe, der Folgendes umfasst:

eine Metalldose (16), die einen karbonisierten Cocktailinhaltsstoff enthält, wobei die Metalldose einen oberen Teil (18) und einen zerbrechlichen Teil (22) umfasst, der auf dem oberen Teil angeordnet und so konfiguriert ist, dass ein Benutzer den oberen Teil öffnen kann;
ein oberes Spannelement (14) mit einem ersten Verbinder (72), wobei das obere Spannelement eine Dichtungsanordnung (80) aufweist, die zum Bilden einer Dichtung mit dem oberen Teil (18) der Metalldose um den zerbrechlichen Teil herum konfiguriert ist;
ein unteres Spannelement (12) mit einem unteren Widerlagerteil (40), das zum Anliegen an einem Boden der Metalldose konfiguriert ist;
einen zweiten Verbinder (50), der zum lösbaren Eingreifen in den ersten Verbinder konfiguriert ist; und
einen mittleren Teil (52), der zwischen dem unteren Widerlagerteil und dem zweiten Verbinder angeordnet ist, wobei das obere Spannelement (14) und das untere Spannelement (12) sowie der erste und der zweite Verbinder (72, 50) so angeordnet sind, dass das untere Spannelement (12) den oberen Teil der Metalldose (16) mit einer Kraft in Eingriff mit der Dichtung am oberen Spannelement (14) drückt, die ausreicht, um eine gasundurchlässige Dichtung zwischen der Dichtung und dem oberen Teil der Dose zu halten, die stark genug ist, um das Doseninnere karbonisiert zu halten; und
Öffnungen (60) in Seiten des Spenders (10), die so konfiguriert sind, dass sie es zulassen, dass gekühlte Flüssigkeit frei in Wärmeverbindung mit den Seiten der Dose (16) und somit mit Flüssigkeit in der Dose fließt;
dadurch gekennzeichnet, dass das obere Spannelement einen länglichen Hals (90) aufweist, wobei der längliche Hals so bemessen ist, dass er von einer menschlichen Hand ergriffen werden kann, und der längliche Hals (90) einen Kanal (92) aufweist, der an einer Auslassöffnung (94) an einem distalen Ende des länglichen Halses (90) endet, wobei der Kanal (92) so konfiguriert ist, dass er es zulässt, dass der karbonisierte Cocktail-Inhaltsstoff von der Dose (16) durch den Kanal (92) und aus der Auslassöffnung (94) fließt;
wobei der untere Widerlagerteil (40) eine Öffnung (46) aufweist, so dass durch die Öffnungen (60) in das untere Spannelement (12) eintretende gekühlte Flüssigkeit aus der Öffnung (46) im unteren Widerlagerteil (40) fließen kann.

2. Inhaltsstoffspender nach Anspruch 1, wobei das untere Spannelement (12) Streben (54) aufweist, die den Widerlagerteil (40) und den zweiten Verbinder (50) verbinden.

3. Inhaltsstoffspender nach einem der vorherigen Ansprüche, der zusätzlich eine Kappe (100) aufweist, die zum Bilden einer Dichtung über der Auslassöffnung (94) konfiguriert ist, wobei die Dichtung stark genug ist, um den Karbonisierungsverlust aus dem karbonisierten Cocktail-Inhaltsstoff zu verlangsamen.

4. Flüssigkeitsspender nach einem der Ansprüche 1 bis 3, wobei der Kanal (92) eingeschränkt ist, um dadurch das Innenvolumen des Kanals (92) zu reduzieren, um das Halten des Karbonisierungsniveaus in dem karbonisierten Cocktail-Inhaltsstoff zu unterstützen.

5. Flüssigkeitsspender nach einem der Ansprüche 1 bis 4, wobei der Spender (10) so konfiguriert ist, dass er es zulässt, dass ein Benutzer eine Beschreibung des Inhalts auf der Seite der Metalldose (16) sieht.

6. Flüssigkeitsspender nach Anspruch 3, wobei der längliche Hals (90) eine Aussparung (110) aufweist, die an einem oberen Ende des Halses (90) angeordnet ist und sich neben der Auslassöffnung (94) befindet, und die Kappe (100) eine komplementär gestaltete Aussparung (112) aufweist, wobei die Aussparungen (110, 112) so angeordnet sind, dass sie ineinander nisten, wenn die Kappe (100) mit dem länglichen Hals (90) verbunden wird.

7. Flüssigkeitsspender nach Anspruch 3 oder Anspruch 6, wobei die Kappe (100) an einem Teil des Spenders (10) angebunden ist.

8. Verfahren zum Ausgeben eines Cocktail-Inhaltsstoffs aus einem geöffneten karbonisierten Flüssigkeitsbehälter (16), wobei das Verfahren Folgendes beinhaltet:

Einführen des karbonisierten Flüssigkeitscontainers (16) in ein unteres Spannelement (12);
Aufsetzen eines unteren Teils (40) des unteren Spannelements (12) auf einen Boden des karbonisierten Flüssigkeitsbehälters;
Verbinden eines oberen Spannelements (14) mit dem unteren Spannelement (12), wobei der karbonisierte Flüssigkeitsbehälter zwischen dem oberen und dem unteren Spannelement angeordnet ist, so dass eine Dichtung zwischen dem oberen Spannelement (14) und einer Oberseite des karbonisierten Flüssigkeitsbehälters (16) gebildet wird, wobei die Dichtung um eine Öffnung in der Oberseite des karbonisierten Flüssigkeitsbehälters positioniert ist;
wobei das untere Spannelement (12) wenigstens eine Öffnung (60) in einer Seite davon und eine Öffnung (46) aufweist, so dass Flüssigkeit, die in das untere Spannelement (12) fließen kann, schnell daraus abgelassen werden kann;
wobei das obere Spannelement einen länglichen Hals (90) aufweist, wobei der längliche Hals so bemessen ist, dass er von einer menschlichen Hand ergriffen werden kann, und wobei der längliche Hals (90) einen Kanal (92) aufweist, der an einer Auslassöffnung (94) an einem distalen Ende des länglichen Halses (90) endet;
Einführen von wenigstens dem unteren Spannelement (12) in eine gekühlte Flüssigkeit, so dass die gekühlte Flüssigkeit durch die wenigstens eine Öffnung (60) in Wärmeverbindung mit dem karbonisierten Flüssigkeitsbehälter (16) und aus der Öffnung (46) im unteren Spannelement (12) fließt; und
Ergreifen des länglichen Halses (90) und Fließenlassen des karbonisierten Cocktail-Inhaltsstoffs aus der Dose (16) durch den Kanal (92) durch die Auslassöffnung (94) nach außen.

9. Verfahren nach Anspruch 8, das zusätzlich das Setzen einer Kappe (100) über eine Öffnung (94) im oberen Spannelement (14) beinhaltet.

Revendications

1. Distributeur d'ingrédient pour cocktail en conserve (10) comprenant :

une cannette métallique (16) contenant un ingrédient pour cocktail gazéifié, la cannette métallique comprenant une partie supérieure (18) et une partie cassable (22) disposée sur la partie supérieure et configurée pour permettre à un utilisateur d'ouvrir la partie supérieure ;
un élément de tension supérieur (14) ayant un premier connecteur (72), l'élément de tension supérieur incluant un agencement de scellement (80) configuré pour former un joint étanche avec la partie supérieure (18) de la cannette métallique autour de la partie cassable ;
un élément de tension inférieur (12) ayant une partie de butée inférieure (40) configurée pour buter contre le fond de la cannette métallique;
un second connecteur (50) configuré pour mettre en prise de manière amovible le premier connecteur ; et
une partie médiane (52) disposée entre la partie de butée inférieure et le second connecteur, l'élément de tension supérieur (14) et l'élément de tension inférieur (12) et les premier et second connecteurs (72, 50) étant disposés de telle sorte que l'élément de tension inférieur (12) appuie sur la partie supérieure de la cannette métallique (16) pour la mise en prise avec le joint d'étanchéité sur l'élément de tension supérieur (14) avec une force suffisante de manière à maintenir un joint étanche au gaz entre le joint d'étanchéité et la partie supérieure de la cannette qui soit suffisamment fort pour maintenir la carbonatation dans la cannette ; et
des ouvertures (60) sur les côtés du distributeur (10) qui sont configurées pour permettre à du liquide refroidi de s'écouler librement en communication thermique avec les côtés de la cannette (16), et donc avec tout liquide dans la cannette ;
caractérisé par l'élément de tension supérieur incluant un col allongé (90), le col allongé étant dimensionné pour être saisi par une main humaine et le col allongé (90) ayant un conduit (92) se terminant à une ouverture de sortie (94) sur une extrémité distale du col allongé (90), le conduit (92) étant configuré pour permettre à l'ingrédient pour cocktail gazéifié de s'écouler à partir de la cannette (16), à travers le conduit (92), et à l'extérieur à travers l'ouverture de sortie (94) ;
où la partie de butée inférieure (40) inclut une ouverture (46) telle que du liquide refroidi entrant dans l'élément de tension inférieur (12) à travers les ouvertures (60) puisse s'écouler à l'extérieur de l'ouverture (46) dans la partie de butée inférieure (40).

2. Distributeur d'ingrédient selon la Revendication 1, où l'élément de tension inférieur (12) inclut des en-

tretoises (54) reliant la partie de butée (40) et le second connecteur (50).

3. Distributeur d'ingrédient selon une quelconque des Revendications précédentes, comprenant en outre un capuchon (100) configuré pour former un joint d'étanchéité au-dessus de l'ouverture de sortie (94), le joint d'étanchéité étant suffisamment fort pour ralentir la perte de carbonatation de l'ingrédient pour cocktail gazéifié.

4. Distributeur de liquide selon une quelconque des Revendications 1 à 3, où le conduit (92) est restreint, pour réduire ainsi le volume intérieur du conduit (92) afin d'aider à maintenir le niveau de carbonatation dans l'ingrédient pour cocktail gazéifié.

5. Distributeur de liquide selon une quelconque des Revendications 1 à 4, où le distributeur (10) est configuré pour permettre à un utilisateur de voir une description du contenu sur le côté de la cannette métallique (16).

6. Distributeur de liquide selon la Revendication 3, où le col allongé (90) inclut un retrait (110) qui est disposé sur une extrémité supérieure du col (90) et est adjacent à l'ouverture de sortie (94), et le capuchon (100) inclut un retrait de forme complémentaire (112), les retraits (110, 112) étant disposés de manière à s'emboîter l'un avec l'autre lorsque le capuchon (100) est relié au col allongé (90).

7. Distributeur de liquide selon une quelconque de la Revendication 3 ou la Revendication 6, où le capuchon (100) est attaché à une partie du distributeur (10).

8. Procédé de distribution d'un ingrédient pour cocktail à partir d'un récipient de liquide gazéifié ouvert (16), le procédé consistant à :

insérer le récipient de liquide gazéifié (16) dans un élément de tension inférieur (12) ;
faire buter une partie inférieure (40) de l'élément de tension inférieur (12) contre un fond du récipient de liquide gazéifié ;
relier un élément de tension supérieur (14) à l'élément de tension inférieur (12) avec le récipient de liquide gazéifié disposé entre les éléments de tension supérieur et inférieur de telle sorte qu'un joint d'étanchéité soit formé entre l'élément de tension supérieur (14) et un sommet du récipient de liquide gazéifié (16), le joint d'étanchéité étant positionné autour d'une ouverture dans le sommet du récipient de liquide gazéifié ;
l'élément de tension inférieur (12) incluant au moins une ouverture (60) sur un côté de celui-ci et une ouverture (46) telle que tout liquide pouvant s'écouler dans l'élément de tension inférieur (12) puisse rapidement s'évacuer de celui-ci ;
l'élément de tension supérieur incluant un col allongé (90), le col allongé étant dimensionné pour être saisi par une main humaine et le col allongé (90) ayant un conduit (92) se terminant à une ouverture de sortie (94) sur une extrémité distale du col allongé (90) ;
insérer au moins l'élément de tension inférieur (12) dans un liquide refroidi de telle sorte que le liquide refroidi s'écoule à travers l'au moins une ouverture (60) et en communication thermique avec le récipient de liquide gazéifié (16) et à l'extérieur de l'ouverture (46) dans l'élément de tension inférieur (12) ; et
saisir le col allongé (90) et permettre à l'ingrédient pour cocktail gazéifié de s'écouler à partir de la cannette (16), à travers le conduit (92), et à l'extérieur à travers l'ouverture de sortie (94).

9. Procédé selon la Revendication 8 consistant en outre à placer un capuchon (100) au-dessus de l'ouverture (94) dans l'élément de tension supérieur (14).

FIG. 1

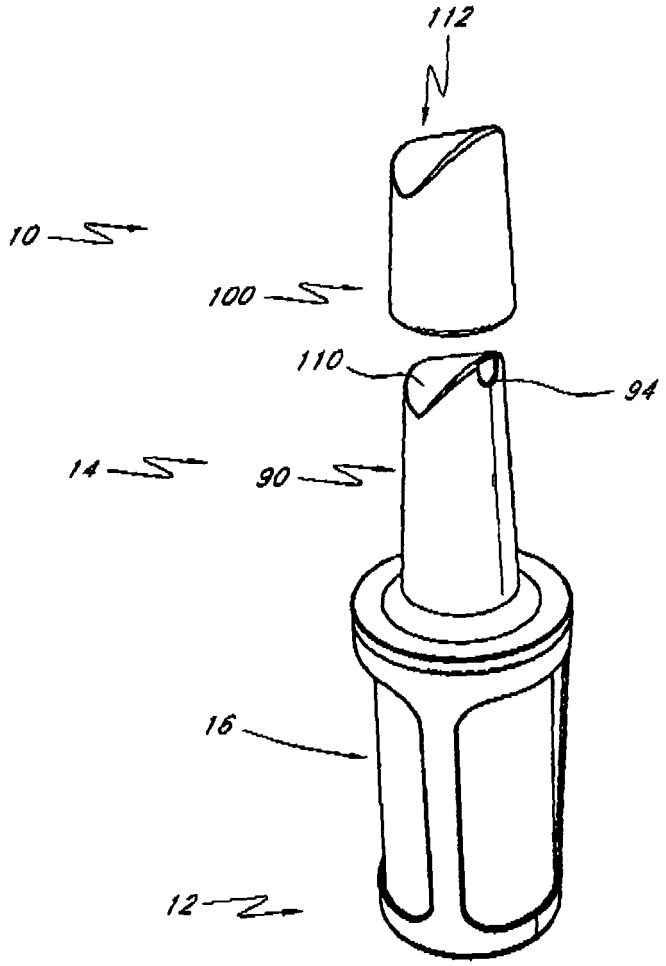
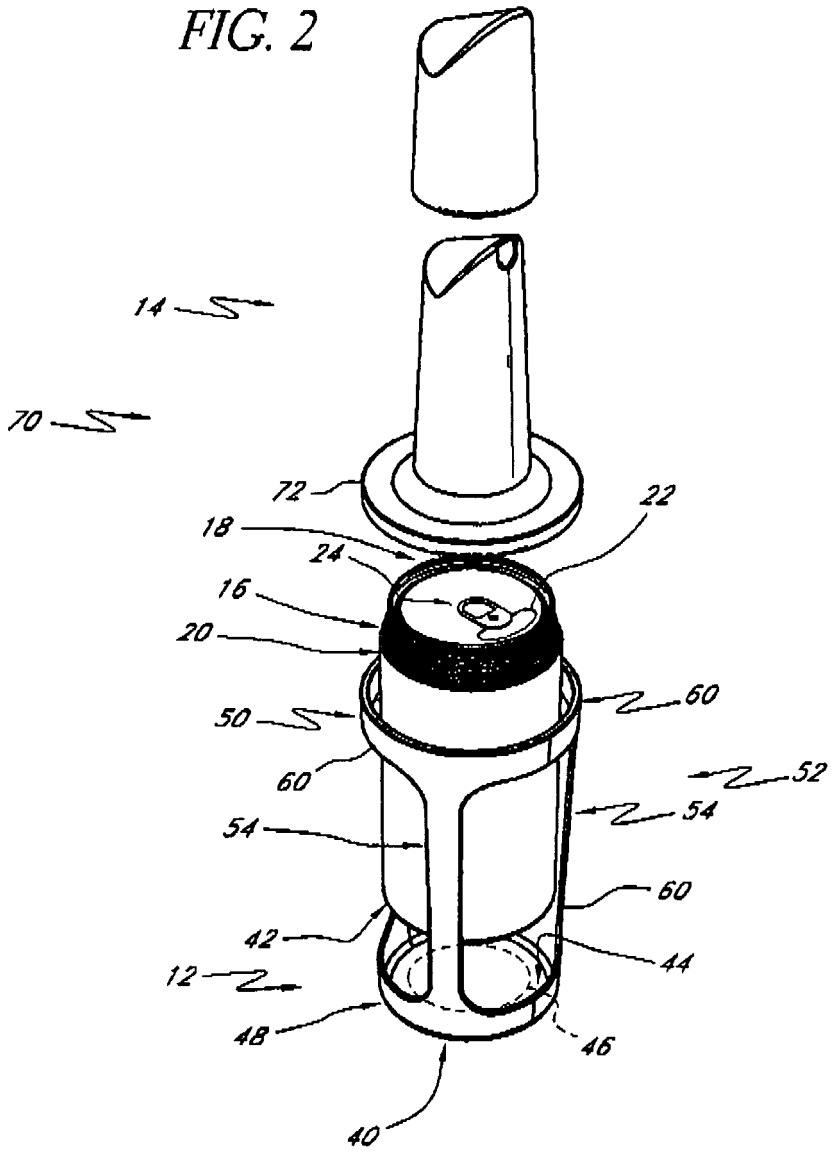


FIG. 2



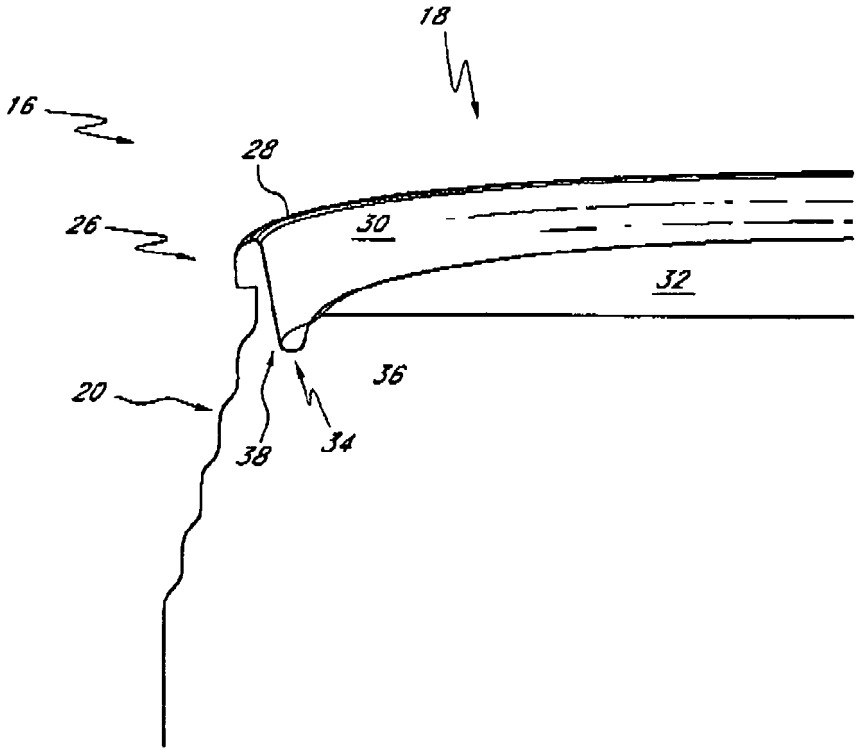


FIG. 3

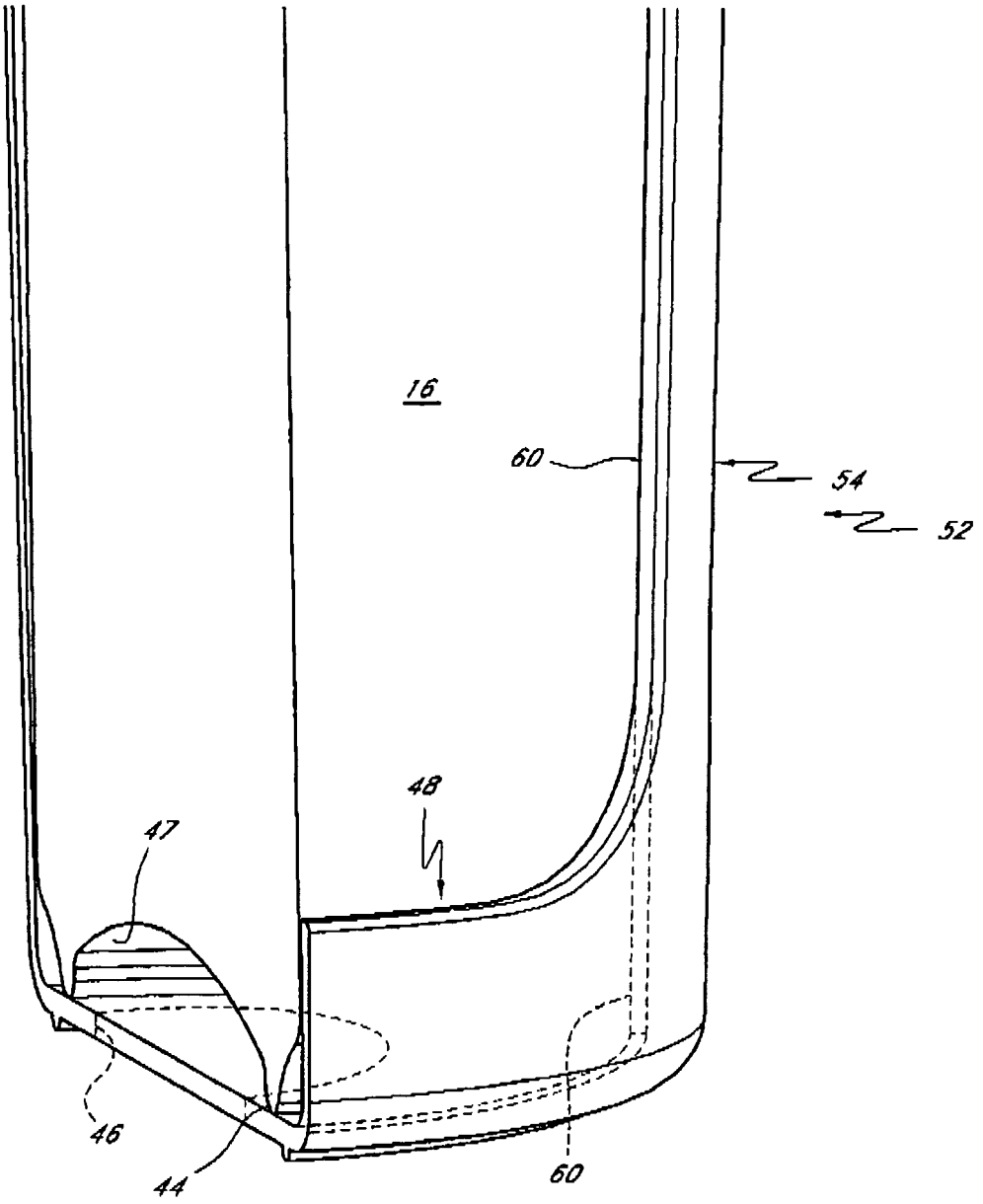


FIG. 4

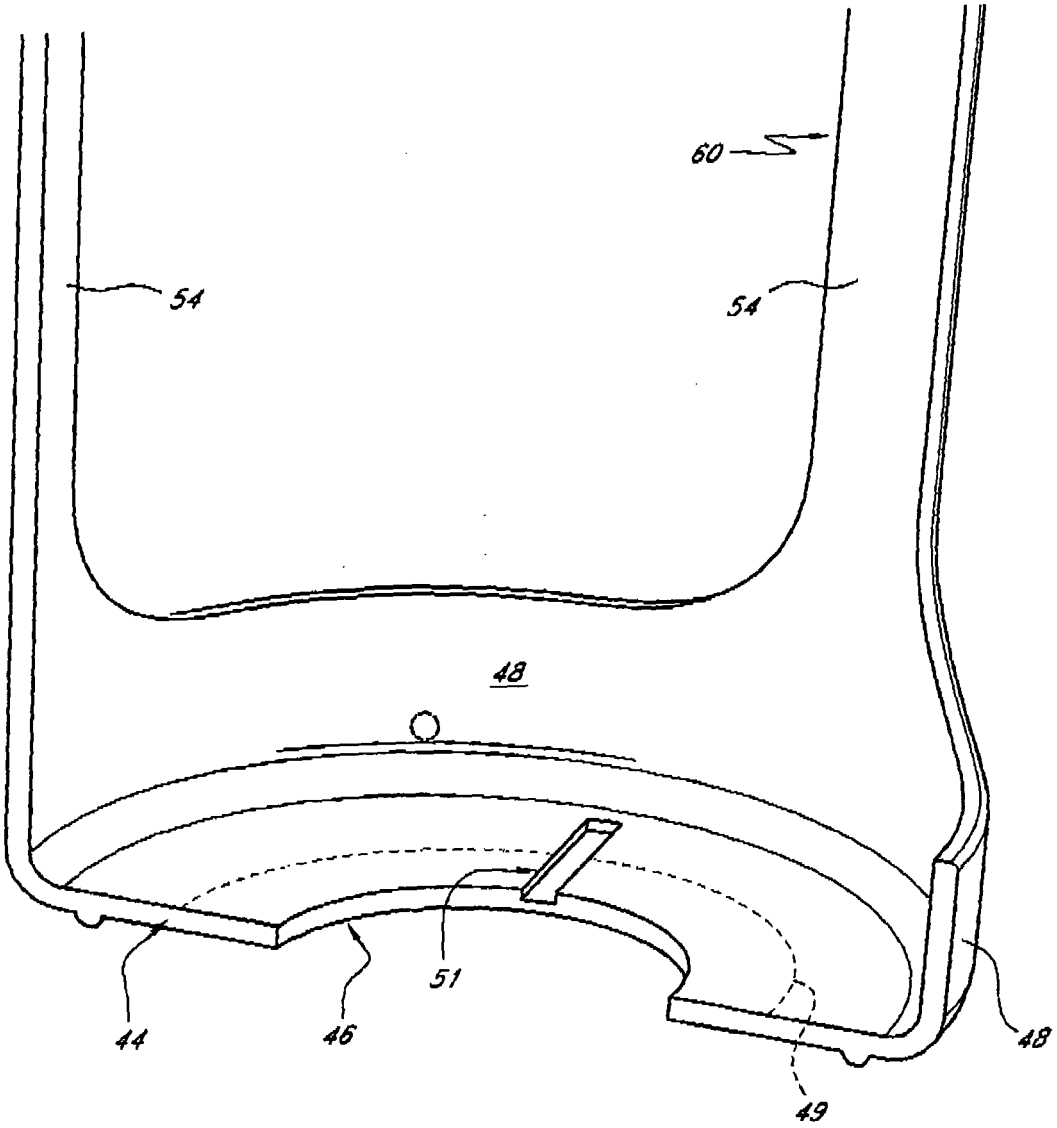


FIG. 5

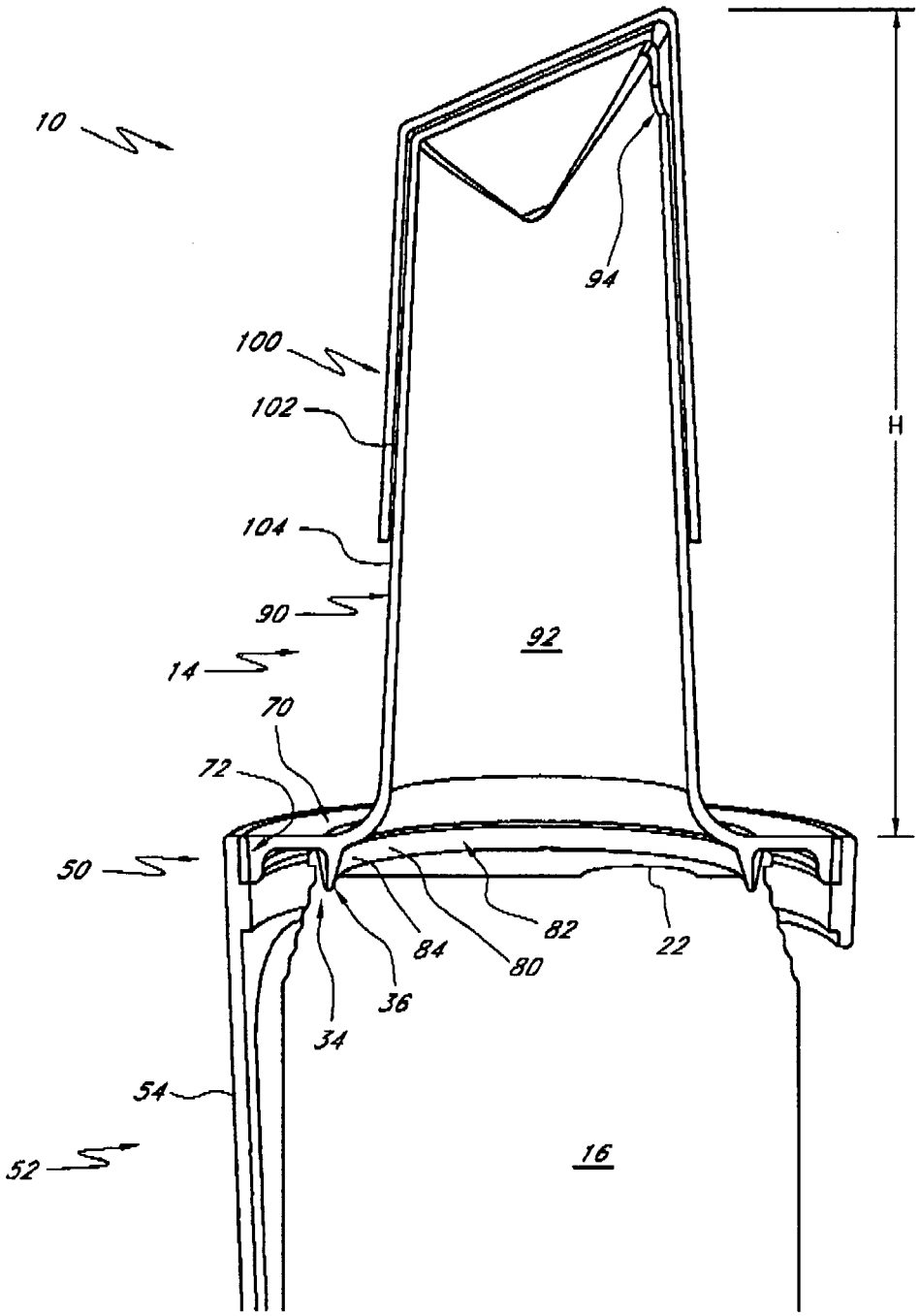


FIG. 6

REFERENCES CITED IN THE DESCRIPTION

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