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CONVERTIBLE BEVERAGE CONTAINER AND DRINKING APPARATUS

(57) A convertible beverage container includes a first pod portion, a second pod portion, and at least one seal. The first and second pod portions are configured to alternately form (a) a pod configuration in which a base element at a base end of the first pod portion is fixably attached to an open orifice at a drinking end of the second pod portion with the at least one seal disposed between the first and second pod portions to form a seal therebetween and (b) a stemware configuration in which an attachment element at an attachment end of the first pod portion is fixably attached to an attachment region of the second pod portion to form a stemware drinking vessel having a foot, a stem, and a bowl in which the first pod portion forms the foot and stem of the stemware drinking vessel and the second pod portion forms the bowl of the stemware drinking vessel.

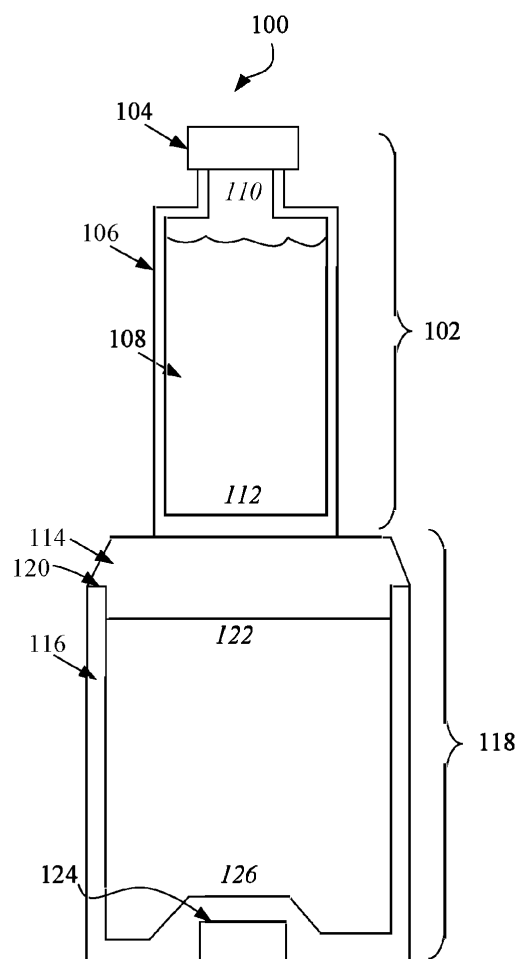


FIG. 1A

Description

FIELD OF THE INVENTION

[0001] The present invention relates generally to beverage containers, more particularly to a convertible beverage container and drinking apparatus that contains a beverage or one or more ingredients for a beverage and converts to a stemware-type drinking vessel.

BACKGROUND OF THE INVENTION

[0002] As is generally known, alcohol is a controlled substance that is highly regulated. To bottle alcohol generally requires substantial regulatory compliance. As a result, distillers often perform their own bottling and they focus their operations on a few alcoholic products that they sell. This regulatory and market constraint limits the choice of beverages and container alternatives to consumers.

[0003] In some cases, it may be necessary or desirable to quickly dispense alcoholic beverages, particularly mixed drinks, in a confined space while offering wide varieties of alternatives to consumers. For example, airlines serve alcoholic beverages on airplanes and stadium concession-stands serve alcoholic beverages during sporting events in single sized servings. Alcoholic beverages may be served at concession stands at concerts, theme parks, and other types of events. In such scenarios, servers generally need to distribute beverages to a large number of consumers in a rapidly-moving and chaotic environment, which can be difficult to do if the server needs to mix a drink or compile various ingredients (e.g., alcohol and a mixer) together with a cup or glass to distribute to the consumer.

[0004] There is a need to provide easily-dispensable beverages that offers wide-varieties of choices to consumers.

SUMMARY OF EXEMPLARY EMBODIMENTS

[0005] In accordance with one aspect of the invention there is provided a convertible beverage container and drinking apparatus comprising a first pod portion configured to secure a bottom end of a container and form a wider base for the container and a second pod portion configured to removably attach to the first pod portion, the second pod portion having an open orifice at a drinking end and an attachment region oppositely disposed to the drinking end, the attachment region configured to fixably engage to a mouth end of the container to form a stemware drinking vessel in which the first pod portion forms the foot of the stemware drinking vessel, the container forms the stem of the stemware drinking vessel, and the second pod portion forms the bowl of the stemware drinking vessel.

[0006] In various alternative embodiments, the convertible beverage container and drinking apparatus may

further include a container secured to the first pod portion, wherein the container contains a beverage or an ingredient for a beverage. For example, the container may be a nip bottle containing alcohol. Alternatively, the container may be another type of container and may contain a liquid, powder, or other substance. The container may be made of virtually any material, such as glass, plastic, or metal. The first pod portion may fixably attach to the base end, for example, by press-fit, adhesive, indentation, ultrasonic welding, or heat fusion.

[0007] The first pod portion and the second pod portion generally form a pod when the first and second pod portions are attached to one another. The second pod portion may be configured to fixably attach to the first pod portion, for example, by a screw-fit, a press-fit, a snap-fit, or a locking tab. The first and second pod portions are typically made of plastic but alternatively may be made from other materials. The attachment region of the second pod portion may be threaded to fixably engage to the mouth end of the container.

[0008] The second pod portion may (and typically does) have a volume greater than the container, e.g., to allow the second pod portion to hold the contents of the container plus one or more additional ingredients such as for a mixed drink, and/or to mix a beverage. The second pod portion may contain an ingredient for a beverage, such as, for example, a mixer such as soda, juice, etc. The second portion may include a removable seal to hold the ingredient in the second pod portion. Additionally or alternatively, the first pod portion may include a hollow cavity containing at least one of (1) an ingredient for the beverage, (2) a drink-related article, or (3) a sanitary-related article. The second pod portion may be shaped as the bowl section of a glass used for a specific type of mixed drink, for example, based on an ingredient contained in the second pod portion or based on the contents of the container. In some embodiments, the second pod portion may be shaped as an ornament.

[0009] In accordance with another aspect of the invention there is provided a method of manufacturing a convertible beverage container and drinking apparatus. The method involves providing a base cover member configured to accommodate a base end of a container, the base cover member forming a wider base thereof, and attaching a bowl member to the base cover member to form a closed pod, the bowl member having an open orifice at a drinking end and an attachment region oppositely disposed to the drinking end, the attachment region being configured to fixably engage to a mouth end of the container to form a stemware drinking vessel in which the first pod portion forms the foot of the stemware drinking vessel, the container forms the stem of the stemware drinking vessel, and the second pod portion forms the bowl of the stemware drinking vessel.

[0010] In various alternative embodiments, the method may further involve attaching the base end of a container to the base cover member. The container typically contains a beverage or an ingredient for a beverage and may

be, for example, a nip bottle containing alcohol for an alcoholic beverage.

[0011] In accordance with yet another aspect of the invention there is provided a method of converting a convertible beverage container to a stemware drinking vessel, the convertible beverage container having a pod fixably attached to a container, the pod having a first pod portion and a second pod portion removably attached thereto, the second pod portion having an open orifice at a drinking end and an attachment region oppositely disposed to the drinking end, the attachment region configured to fixably engage to a mouth end of the container. The method involves disengaging the second pod portion from the first pod portion and fixably engaging the attachment region of the second pod portion to the mouth end of the container to form the stemware drinking vessel in which the first pod portion forms the foot of the stemware drinking vessel, the container forms the stem of the stemware drinking vessel, and the second pod portion forms the bowl of the stemware drinking vessel.

[0012] In various alternative embodiments, the container typically contains a beverage or an ingredient for a beverage (e.g., the container may be a nip bottle containing alcohol for an alcoholic beverage), and the method may further involve, prior to fixably engaging the attachment region of the second pod portion to the mouth end of the container, opening the container and pouring the beverage or ingredient for the beverage into the second pod portion. The second pod portion may include an ingredient for the beverage (e.g., a mixer such as soda or juice) and may include a removable seal to hold the ingredient in the second pod portion, and the method may further involve removing the seal prior to pouring the beverage or ingredient for the beverage from the container into the second pod portion.

[0013] Additional embodiments may be disclosed and claimed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The foregoing features of embodiments will be more readily understood by reference to the following detailed description, taken with reference to the accompanying drawings, in which:

FIG. 1A schematically shows a cross-sectional view of a convertible beverage container and drinking apparatus in an initial pre-packaged form for storage and dispensing;

FIG. 1B schematically shows a cross-sectional view of the convertible beverage container and drinking apparatus of FIG. 1A in a converted form;

FIG. 2A schematically illustrates a cross-sectional view of the first pod portion with a press-fit recess to accommodate a pre-packaged fluid container;

FIGS. 2B-E schematically show various embodiments of the first pod portion with different recess shapes;

FIGS. 3A-B schematically illustrate various configurations of the attachment region of the second pod portion;

FIGS. 4A-C schematically illustrate various types of fixably attaching mechanisms between the first pod portion and the second pod portion;

FIGS. 5A-I schematically illustrate various shapes of the second pod portion;

FIG. 6 schematically illustrates the first pod portion and second pod portion fixably attached to form a sealed pod;

FIG. 7 schematically illustrates the second pod portion having a pre-sealed portion;

FIG. 8 schematically illustrates the first pod portion as a storage container;

FIG. 9 schematically illustrates a convertible-beverage container and drinking apparatus according to an embodiment;

FIG. 10 schematically illustrates the apparatus of FIG. 9 in a converted form;

FIG. 11 schematically illustrates a drinking bowl and a base cover of FIG. 9 being disengaged from each other according to an embodiment;

FIG. 12 schematically illustrates the drinking bowl of FIG. 9 prior to being fixably engaged to the nip bottle;

FIG. 13 schematically illustrates a method of manufacturing a convertible beverage container and drinking apparatus; and

FIG. 14 illustrates a method of converting a convertible beverage container to a drinking apparatus.

FIG. 15 shows a two-piece convertible beverage container and drinking apparatus, in accordance with a first exemplary embodiment.

FIG. 16 shows a two-piece convertible beverage container and drinking apparatus, in accordance with a second exemplary embodiment.

FIG. 17 shows a two-piece convertible beverage container and drinking apparatus, in accordance with a third exemplary embodiment.

FIG. 18 shows yet another exemplary embodiment of a convertible beverage container and drinking apparatus having some additional/alternative features, in accordance with certain exemplary embodiments.

FIG. 19 shows yet another exemplary embodiment of a convertible beverage container and drinking apparatus having additional/alternative features, in accordance with certain exemplary embodiments.

FIG. 20 shows some further additional/alternative features that can be used with the embodiments of FIGS. 18 and 19.

FIG. 21 highlights one of the additional/alternative features of the embodiments of FIGS. 18-20 in which the base element of the first pod portion includes a cropped overhang to accommodate a ring, in accordance with certain exemplary embodiments.

FIG. 22 is a schematic diagram showing a bottom ring configured to screw-fit onto the existing threading of the base element of the first pod portion, in

accordance with one exemplary embodiment.

FIG. 23 shows printing or engraving on the second pod portion, in accordance with certain exemplary embodiments.

FIG. 24 highlights another additional/alternative feature of the embodiments of FIGs. 18-20 in which the attachment element at the attachment end of the first pod portion is configured to attach to the attachment region of the second pod portion via a press-fit attachment rather than being threaded for screw-on attachment, in accordance with certain exemplary embodiments.

FIG. 25 is a schematic diagram showing a top ring configured to screw-fit onto the existing threading of the top-drinking end of the second pod portion, in accordance with one exemplary embodiment.

[0015] It should be noted that the foregoing figures and the elements depicted therein are not necessarily drawn to consistent scale or to any scale. Unless the context otherwise suggests, like elements are indicated by like numerals.

DETAILED DESCRIPTION OF SPECIFIC EMBODIMENTS

[0016] As used herein, the term "convertible" refers to an apparatus being changed from one use or tangible form to another.

[0017] As used herein, the term "fixably attached" refers to two components that are attached so that they remain together either permanently or temporarily (e.g., until they are expressly disengaged).

[0018] In exemplary embodiments, a convertible drinking vessel (referred to herein for convenience as a "pod") is configured to hold an otherwise separate container containing a beverage or ingredient for a beverage (such as a nip bottle of alcohol) in such a way that the pod with container can be distributed as a unit and is convertible to a stemware-type drinking vessel in which a top portion of the pod that secures the container becomes the foot of the stemware, the container becomes the stem of the stemware, and a bottom portion of the pod (which optionally may be pre-packaged with an ingredient for a mixed beverage, such as a liquid or powder mixer) can be attached to the top of the container to become the bowl of the stemware.

[0019] Generally speaking, in order to use the pod for preparing and/or drinking a beverage, the consumer would separate the bottom portion of the pod from the top portion, open the container, pour some or all of the contents of the container into the bottom portion (which optionally may contain an ingredient for a mixed drink, such as soda, juice, or other mixer), and then attach the bottom portion to the opened end of the container to form the stemware drinking vessel. Since the pod with container can be distributed as a unit, distribution should be much faster than, say, distributing separate drink com-

ponents. As a result, it is expected that more beverages can be distributed in a shorter amount of time, which, for example, can reduce the amount of time a consumer needs to wait in line for a beverage and hence may increase overall sales as people who otherwise might have avoided purchasing a beverage due to a long or slow-moving line now might choose to purchase the beverage due to a short or fast-moving line. This may be particularly advantageous during intermissions of an event, such as, for example, between quarters of a football or basketball game, between periods of a hockey game, between innings of a baseball game, at intermissions of a concert or play, etc. Also, since the pod with container can be distributed as a unit, it should be easier for vendors on foot to carry and dispense mixed drinks, such as in the stands of sporting events where mixed drinks often are not currently served.

[0020] FIG. 1A schematically shows a cross-sectional view of a convertible beverage container and drinking apparatus **100** in an initial pre-packaged form for storage and dispensing. The apparatus **100** includes a container **102** that is typically pre-packaged with an ingredient **108** for a beverage, such as a liquid (e.g., alcohol), powder, or other form of ingredient. In the illustrative embodiment, the container **102** may be a small bottle (e.g., a nip bottle) that has been pre-packaged with an ingredient such as liquor, although the container **102** can be other types of containers, such as, for example, a small can. The container **102** may be made of any material, such as plastic or glass or metal. In this illustrative embodiment, the container **102** has a top-mouth end **110**, an elongated body **106**, and a bottom-base end **112** oppositely disposed to the top-mouth end **110**. The mouth end **110** forms an orifice, which is sealed by a sealing cap **104**. The sealing cap **104** is fixably engaged to mouth end **110**, such as by means of a twist-off cap, a cork, or a locking tab, which are configured to be removed during use.

[0021] The apparatus **100** also includes a pod **118** having a first pod portion **114** fixably attached to the base end **112** of the container **102**. The first pod portion **114** forms a wider base for the container **102** than the base end **112** and extends from the base end **112**. The first pod portion **114** may fixably attach to the base end **112**, at the bottom thereof, and may be held by at least one of press-fit, adhesives, indentation, ultrasonic welding, and heat fusion. According to one exemplary embodiment, the first pod portion **114** is configured for simple attachment (to be discussed) to the container **102**, such as by press-fitting the container **102** into a receptacle in the first pod portion **114**.

[0022] The apparatus **100** also includes a second pod portion **116** fixably attached to the first pod portion **114** to form a closed pod **118**. The second pod portion **116** and first pod portion **114** are configured to disengage from one another. The second pod portion **116** includes an elongated body having a drinking orifice **120** at the top-drinking end **122** and an attachment region **124** at the bottom end **126** oppositely disposed to the drinking

end **122**. The attachment region **124** is configured to fixably engage to the container **102**. According to one exemplary embodiment, the attachment region **124** can be fixably engaged to the top-mouth end **110** of the pre-packaged fluid container **102** after the sealing cap **104** is removed. The attachment region **124** may be configured to seal the container **102**. In an alternate embodiment, the attachment region **124** may be fixably engaged to the sealing cap **104** of the pre-packaged fluid container **102**.

[0023] To provide easily-dispensable and pre-packaged mixed alcoholic beverages, a server or vendor may readily dispense pre-packaged beverages in apparatus **100**, as shown in FIG. 1A.

[0024] FIG. 1B schematically shows a cross-sectional view of the convertible beverage container and drinking apparatus **100** of FIG. 1A in a converted form. To prepare the beverage for consumption, a consumer would disengage the second pod portion **116** from the first pod portion **114**. The consumer then opens the container **102** by removing the sealing cap **104** and pours some or all of the contents **108** into the second pod portion **116** (which may contain a mixer as discussed below). The consumer may then attach the second pod portion **116** to the top-mouth end **110** of the container **102**. The resulting converted drinking apparatus is shown in FIG. 1B and essentially forms an article of stemware in which the first pod portion **114** forms the foot of the stemware, the container **102** forms the stem, and the second pod portion **116** forms the bowl.

[0025] The second pod portion **116** typically has a volume greater than that of the container **102** (e.g., at least twice the volume). This larger volume may accommodate additional ingredients to be added to make the mixed drinks as well as for mixing.

[0026] Alternatively, for certain type of mixed drinks, the apparatus **100** may be configured to allow the first pod portion **114** to fixably attach to and disengage from the second pod portion **116** multiple times. In such configuration, the consumer may first disengage the first and second pod portions **114**, **116** to allow for the ingredient **108** and other ingredients to be poured therein. Subsequently, the first and second pod portions **114**, **116** may be reengaged to allow the consumer to mix a cocktail beverage by shaking the engaged pod portions.

[0027] The first and second pod portions **114**, **116** may be made of the same material, such as a thermoplastic, or glass. It should be apparent that various types of plastic materials may be used, including, for example, high density polyethylene, low density polyethylene, polyethylene terephthalate, polyvinyl chloride, polypropylene, or polystyrene.

[0028] The apparatus **100** may be configured to provide great flexibility. In some embodiments, the apparatus **100** may be configured with topographical features to allow for easy attachment of the container **102** with the first pod section **114**.

[0029] FIG. 2A schematically illustrates the first pod

portion **114** with a press-fit recess **202** to accommodate a container **102**. Here, the first pod portion **114** has a recess **202** that is configured to fit the base end **112** of the container **102**. The recess **202** may have a plurality of fins **204** to protrude into the recess **202** to provide the press-fit contact. The fins **204** may be compliant in that they may have certain elasticity characteristic to allow a container **102** to fit into the recess **202** while providing sufficient rigidity to frictionally secure the container **102**.

[0030] FIG. 2B-E schematically show various alternative embodiments of the first pod portion **114** with different recess shapes to form a press-fit to accommodate variously shaped containers **102**. In FIG. 2B, the first pod portion **114** is schematically shown having a recess **202** that is generally square **206**. The recess **202** may have fins **204** located circumferentially therein. The fins **204** may be compliant to the container **102** placed within the recess **202**. Here, being compliant refers to being able to vary or deform from an initial position **208** to a complied position **210**.

[0031] The fins **204** may comply to form the press-fit with the base-end **112** of the container **102**. Alternatively, the walls of the recess **202** may be made sufficiently thin to allow for it to flex when the container **102** is placed within the recess **202**. Accordingly, both the fins **204** and the walls may deform to form the press-fit with the base-end **112** of the container **102**.

[0032] FIG. 2C schematically illustrates an alternate recess shape in the first pod portion **114**. Here, the recess **202** is generally circular **212** and may accommodate a circular-shaped container **102**. The circular shaped recess **212** may have fins **214** located circumferentially along its inner perimeter.

[0033] FIG. 2D schematically illustrates another alternate recess shape in the first pod portion **114**. Here, the recess **202** is generally a square **216** and may accommodate a square shaped container **102**. The square shaped recess **216** may have fins **218** located along its inner perimeter.

[0034] FIG. 2E schematically illustrates another alternate recess shape in the first pod portion **114**. Here, the recess **202** includes a circular component **220** and square component **222** to accommodate either a square shaped or circular shaped container **102**, such as to allow this configuration of first pod portion **114** to be used with certain different types of containers **102** (e.g., different sizes, shapes, types, brands, etc.).

[0035] It should be apparent to those skilled in the art that the various recess shapes provided are merely illustrative to show a press-fit contact between the first pod portion **114** and the base-end **112** of the container **102**. The recess shapes may be configured to accommodate various alternate shapes of the base-end of the containers.

[0036] FIGS. 3A-B schematically illustrate various configurations of the attachment region **124** of the second pod portion. The attachment region **124** may fixably attach to the container **102** by any of various mechanisms,

such as, for example, pressure-fit, recess screw, locking tab, or recess with a compliant gasket. FIG. 3A schematically illustrates the attachment region **124** as a recess screw **304**. Where the top-mouth end **110** of the container **102** is a screw **302**, the attachment region **124** may be shaped as a corresponding screw recess **304** at the bottom end **126** of second pod portion **116**, including a threaded protrusion.

[0037] FIG. 3B schematically illustrates the attachment region **124** as a recess **306** with a compliant gasket **308**. The compliant gasket **308** may have, for example, a round, rectangular, or oval cross section. In this exemplary embodiment, the compliant gasket **308** is placed in the recess **306** and retained in place with a retaining ring **310**. The recess **306** and compliant gasket **308** provides a pressure-fit engagement with the mouth end **110** of the container **102**.

[0038] Alternatively, the attachment region may include a locking tab to engage with the mouth end **110** of the container **102**.

[0039] The first pod portion **114** or the second pod portion **116** may be configured to be fixably attached to one another by any of various mechanisms, such as a pressure-fit, a screw-fit, a snap-fit, or a locking tab. FIG. 4A-C schematically illustrate various types of fixably attaching mechanisms between the first pod portion **114** and the second pod portion **116**. In FIG. 4A, a cross-sectional view of a schematic assembly of the first pod portion **114** being fixably attached to the second pod portion **116** by a screw-fit is shown. The first pod portion **114** has a first retaining screw portion **402** and the second pod portion **116** has a second retaining screw portion **404**. The first retaining screw portion **402** corresponds to the second retaining screw portion **404**.

[0040] FIG. 4B schematically illustrates the first pod portion **114** being fixably attached to the second pod portion **116** by a locking tab assembly. Here, the first pod portion **114** forms a mounting ring **406** having a set of retaining tabs **408**. The second pod portion **116** forms a corresponding retaining tab **410**. The tabs **408**, **410** may align the first pod portion **114** and the second pod portion **116** during assembly. Either the first pod portion **114** or the second pod portion **116** may include the retaining component with the corresponding pod portion having the corresponding retaining component.

[0041] FIG. 4C schematically illustrates the first pod portion **114** being fixably attached to the second pod portion **116** by press-fit. Here, the first pod portion **114** may include an angled cross section **412** that is configured to deform or comply (shown in dash lines) to the second pod portion **116**. As a result, as the second pod portion **116** is inserted into the first pod portion **114**, the angled cross section **412** wedges against the inner mouth part of the second pod portion **116** to form the press-fit.

[0042] It should be noted that the present invention is not limited to any particular way for fixably attaching the first and second pod portions.

[0043] In various alternative embodiments, the second

pod portion **116** may be shaped as any of various types of drinking vessels, e.g., so that the shape of the drinking vessel matches the type of beverage being consumed (e.g., shaped like a margarita glass for margarita beverages, shaped like a martini for martini beverages, etc.). FIGS. 5A-I schematically illustrate, without limitation, various possible shapes of the second pod portions **116**. For example, the second pod portions may be shaped as a bowl portion of a wine glass (FIG. 5A and FIG. 5B), a cocktail glass (FIG. 5C and FIG. 5D), a champagne flute (FIG. 5E), a polygonal shaped glass (FIG. 5F), a brandy glass (FIG. 5G), or a martini glass (FIG. 5H). Of course, the second pod portion **116** may be shaped like other types of drinking vessels, such as, for example, margarita glass, hurricane glass, etc. Alternatively, the second pod portion **116** may be decoratively shaped in other ways, such as parts of animals or people. FIG. 5I illustrates the second pod portion **116** shaped as part of an animal. Here, a horse head is shown. It should be apparent that various shaped themes may be employed, such as sports equipment, celebrity faces, airplanes, company logos, etc.

[0044] In certain embodiments, the first pod portion **114** and second pod portion **116** may fixably attach to each other to form a sealed pod. FIG. 6 schematically illustrates the first pod portion **114** and second pod portion **116** fixably attached to form a sealed pod **602**. Here, second pod portion **116** is configured to fixably attach to the first pod **114** portion, for example, by at least one of a screw-fit, a press-fit, or a locking tab. The second pod portion **116** may be pre-filled with a beverage or ingredient for a beverage **608** (e.g., a fluid, powder, syrup, or crystals, etc.).

[0045] In certain embodiments, the second pod portion **116** may be pre-sealed with a beverage ingredient. FIG. 7 schematically illustrates the second pod portion **116** having a pre-sealed portion **702**. Here, the second pod portion **116** includes a sealing lid **704** to fixably engage a lip **706** proximal or near the top-drinking end **122** of the second pod portion **116** to seal a mixer **708** within (e.g., a fluid, powder, syrup, or crystal, etc.). The mixer **708** may be carbonated beverage or juice to be combined with the contents **108** in the container **102**. The second pod portion **116** may have a portion **710** extending from its elongated body to fixably connect with the first pod portion **114**. The sealing lid **704** may be any of various single-use types, such as, for example, a peel-back foil cover or other seals. The sealing lid **704** may be configured for re-use, such as, for example, a locking tab or a screw-fit, to allow for assembly or sealing prior to use.

[0046] In certain embodiments, the first pod portion **114** may be configured to store one or more ingredients and/or related items for the drink. FIG. 8 schematically illustrates the first pod portion **114** as a storage container. Here, the first pod portion **114** may include a hollow underside cavity **802**. The hollow cavity **802** of the first pod portion **114** may house, for example, a sealed packet **804** and/or any of various types of drink-related articles

806, such as a cocktail parasol, garnish (e.g., citrus slice, olives), a napkin or a coaster. The hollow cavity **802** may additionally or alternatively house sanitary-related articles, such as a wet-nap or hand sanitizer. Multiple items may be housed within the sealed pod. It should be apparent to one skilled in the art that the first pod portion **114** may house a packet as the second pod portion **116** houses a sealed fluid. The cavity **802** may be sealed (e.g., using a peel-back foil seal or other seal) and may contain packaged and/or unpackaged items.

[0047] An exemplary embodiment is now described. FIG. 9 schematically illustrates a convertible-beverage container and drinking apparatus **900** containing a pre-packaged sealed fluid **902**, such as may be dispensed in an airplane or other transportation-related setting or at a large crowd setting (e.g., a stadium, a concert hall, or a theme park). The apparatus **900** includes a nip bottle **904** having a sealing cap **906**, a fluid-containing elongated body **908**, and liquor or alcoholic spirits **902** sealed within. The fluid-containing elongated body **908** has a mouth end **910** oppositely disposed to a base end **912** and forms an orifice **914** at the mouth end **910**. The sealing cap **906** fixably engages to the orifice **914** to seal the sealed fluid **902** in the nip bottle **904**.

[0048] The apparatus also includes a base cover **916** fixably attached to the base end **912**. The base cover **916** forms a wider base for the nip bottle **902**.

[0049] The apparatus **900** also includes a drinking bowl **918** configured to fixably attach to the base cover **916** to form a closed container **920**. The base cover **916** and drinking bowl **918** are configured to disengage from each other. The drinking bowl **918** is an elongated body **922** having an open orifice **924** forming a drinking mouth at a top-drinking end **928** and having a screw recess **930** at a bottom end **932** that is oppositely disposed to the top-drinking end **928**. The screw recess **930** is configured to fixably engage to the mouth end **910** of the nip bottle **904**. The drinking bowl **918** may be shaped with a narrowing bottom for easier assembly with the nip bottle **904**.

[0050] FIG. 10 schematically illustrates the apparatus of FIG. 9 in a converted form of a drinking vessel, i.e., with the drinking bowl **918** separated from the base cover **916** and attached to the nip bottle to form an article of stemware.

[0051] FIG. 11 schematically illustrates the drinking bowl **918** and base cover **916** of FIG. 9 being disengaged **1102** from one other according to one exemplary embodiment.

[0052] FIG. 12 schematically illustrates the drinking bowl **918** of FIG. 9 prior to being fixably engaged **1202** to the nip bottle **904**.

[0053] In another embodiment, a method of manufacturing a convertible beverage container and drinking apparatus having a pre-packaged sealed fluid is provided. FIG. 13 illustrates a method **1300** of manufacturing a convertible beverage container and drinking apparatus. The method includes providing a base cover member, which is configured to fixably attach to a base end of a

pre-packaged fluid container (Step **1302**). The base cover member may fixably attach to the container at the base end by at least one of press-fitting, adhesives, indentation, ultrasonic welding, and heat fusion. For example, the base cover member may fixably attach to the container **102** by frictional contact. For example, during assembly, the container may be press-fit into a receptacle of the base cover member. In some embodiments, heat may be applied to the base cover member to expand its size by thermal expansion, in which case the container **102** may be pressed into the expanded base cover member, which may be rapidly or allowed to cool to secure the container **102**. Alternatively, the base cover member may include a recess portion having compliant fins that are configured to accommodate the base-end of container.

[0054] The method also includes attaching a bowl member to the base cover member to form a closed container (Step **1304**). The bowl member being an elongated body having an open orifice forming a drinking mouth at a drinking end and having an attachment region oppositely disposed to the drinking end. The attachment region is configured to fixably engage to a mouth end of the pre-packaged fluid container.

[0055] In another embodiment, a method of converting a convertible beverage container to a drinking apparatus is provided. FIG. 14 illustrates a method of converting a convertible beverage container to a drinking vessel. The method includes providing a pod fixably attached to a container (Step **1402**). The pod may have a first pod portion and a second pod portion fixably attached to one another to form a closed container. The first pod portion and second pod portion are also configured to disengage from one another. The container may have a sealing cap, an elongated body, and an ingredient within the container. The elongated body may have a mouth end oppositely disposed to a base end. The elongated body may form an orifice at the mouth end. The sealing cap may fixably engage to the orifice to seal the sealed ingredient in the container. The first pod portion may form a wider base of the container. The second pod portion may have a second elongated body that forms (i) an open orifice at a drinking end and (ii) an attachment region oppositely disposed to the drinking end. The attachment region may be configured to fixably engage to a mouth end of the container.

[0056] The method also includes disengaging the second pod portion from the first pod portion (Step **1404**). The method then includes fixably engaging the attachment region of the second pod portion to the mouth end of the container to form the drinking apparatus (Step **1406**).

[0057] In practice, it is expected that the pod will be manufactured and assembled separately from the container, including, for example, manufacture of the top and bottom portions of the pod (e.g., by a plastics molding manufacturer), any filling and/or sealing of ingredients/items in the top portion and/or bottom portion of the

pod (e.g., filling the bottom portion with a mixer such as soda or juice and optionally sealing the bottom portion such as with a peel-back foil seal), and connecting the top and bottom portions. Assembled pods may be distributed separately and/or may be distributed with containers such as nip bottles installed.

[0058] For example, one company may sell assembled pods to a liquor company or other vendor that in turn installs containers and sells the pods with containers as a unit to either another vendor or directly to the consumer. Thus, in some embodiments, a vendor (e.g., an airline) may purchase pre-assembled pods from one source, purchase nip bottles of alcohol from another source, and attach the nip bottles to the pre-assembled pods to distribute as a unit. In other embodiments, a liquor distributor may purchase or manufacture pods, attach nip bottles of their own alcohol to the pods, and distribute the pods with containers as a unit.

[0059] For another example, a liquor store may sell pods, and customers may purchase a pod along with a nip of alcohol and attach the nip bottle to the pod themselves in order to have a mixed drink in a drinking vessel.

[0060] It should be noted that, generally speaking, pods and containers can be combined in a "mix-and-match" fashion. For example, containers of a particular type of alcohol (e.g., vodka, rum, whiskey, etc.) may mate with any of a variety of pods (e.g., vodka containers may mate with pods filled with orange juice, tomato juice, and other vodka-based drink mixers). Also, pods filled with a particular type ingredient (e.g., pods filled with orange juice, sour mix, etc.) may mate with any of a variety of alcohol containers (e.g., pods filled with sour mix may mate with containers filled with vodka, whiskey, melon liquor, or other alcohols that are typically used with sour mix). Thus, a wide variety of mixed drinks can be distributed using a relatively small number of pod types and container types (e.g., five types of pods and five types of alcohol containers can be combined to form 25 types of mixed drinks).

[0061] While some exemplary embodiments are described above with reference to a bottle-type container (e.g., a nip bottle) that is attached to the pod and is used as the stem of a stemware beverage vessel, it should be noted that alternative embodiments may use a small can or other type of container. For example, juices (e.g., orange, tomato, pineapple, apple, etc.), energy drinks, and other types of beverage are often available in cans, and the pod can be configured such that the top portion of the pod secures the can and the bottom portion of the pod attaches to the top of the can so that the can forms the stem of the stemware beverage vessel.

[0062] While some exemplary embodiments are described above with reference to mixed drinks in which the pod contains a non-alcoholic mixer and the container contains a type of alcohol, it should be noted that pods may contain alcohol and the container may contain a second type of alcohol or a non-alcoholic mixer.

[0063] In various alternative embodiments, a two-

piece convertible beverage container and drinking apparatus is provided in which the first pod portion 114 is configured to include an attachment element that is similar to the configuration of the top-mouth end of the container 102 or otherwise configured to attach to the attachment region 124 of the second pod portion 116, such that the second pod portion 116 can be attached to the attachment element of the first pod portion 114 to form an article of stemware without use of a separate container 102 such as a nip bottle or can acting as the stem of the article of stemware. Without limitation, some exemplary two-piece embodiments are described below.

[0064] In any of the embodiments described herein, including pods described with reference to FIGs. 1-12 or the alternative two-piece embodiments described below, a sealing mechanism can be included to provide a seal between the first pod portion 114 and the second pod portion 116 such as to hold a liquid within the pod during shipment or mixing of a cocktail or to maintain carbonation or freshness of the contents of the pod. Any appropriate sealing mechanism can be included. Without limitation, some exemplary sealing mechanisms are described below.

[0065] FIG. 15 shows a two-piece convertible beverage container and drinking apparatus, in accordance with a first exemplary embodiment. Section A-A shows a cross-sectional view of the first pod portion 1514 attached to the second pod portion 1516 to form an enclosed pod such as for holding a beverage. The first pod portion 1514 has a base element at a base end that is configured to attach to the open orifice at the drinking end of the second pod portion 1516. The first pod portion 1514 includes attachment element 1510 at an attachment end that is configured to attach to attachment region 1524 of the second pod portion 1516. For example, the attachment element 1510 and the attachment region 1524 may include complementary threading or other attachment features. As mentioned above, the first pod portion 1514 and the second pod portion 1516 may be sealed such as to hold a liquid within the pod during shipment or mixing of a cocktail or to maintain carbonation or freshness of the contents of the pod. In this exemplary embodiment, the seal includes two nitrile o-rings 1552 and 1554, as shown in Detail C 1550. In this exemplary embodiment, the first pod portion 1514 includes channels for securing the nitrile o-rings such that the nitrile o-rings contact the second pod portion 1516 when the two pod portions 1514/1516 are attached as shown. Additionally or alternatively, channels can be included in the second pod portion 1516 for securing the nitrile o-rings. It should be noted that one, two, or more o-rings may be used in various alternative embodiments. It also should be noted that other types of o-rings or other types of sealing structures may be used in various alternative embodiments. As discussed above, the first pod portion 1514 can be removed from the second pod portion 1516 and then attached to the second pod portion 1516 to form an article of stemware, for example, as shown in Section B-B. The

interconnection of attachment element 1510 to attachment region 1524 is shown in Detail E 1560.

[0066] FIG. 16 shows a two-piece convertible beverage container and drinking apparatus, in accordance with a second exemplary embodiment. Section J-J shows a cross-sectional view of the first pod portion 1614 attached to the second pod portion 1616 to form an enclosed pod such as for holding a beverage. The first pod portion 1614 has a base element at a base end that is configured to attach to the open orifice at the drinking end of the second pod portion 1616. In this exemplary embodiment, the second pod portion 1616 includes locking pins 1654 that mate with corresponding locking features on the first pod portion 1614 to allow the first pod portion 1614 to be attached and detached from the second pod portion 1616. The first pod portion 1614 includes attachment element 1610 at an attachment end that is configured to attach to attachment region 1624 of the second pod portion 1616. For example, the attachment element 1610 and the attachment region 1624 may include complementary threading or other attachment features. As mentioned above, the first pod portion 1614 and the second pod portion 1616 may be sealed such as to hold a liquid within the pod during shipment or mixing of a cocktail or to maintain carbonation or freshness of the contents of the pod. In this exemplary embodiment, the seal includes a cork gasket 1652 that is positioned between the first pod portion 1614 and the second pod portion 1616, as shown in Detail K 1650. It should be noted that other types of gaskets (e.g., rubber or nitrile) or sealing structures may be used in various alternative embodiments. As discussed above, the first pod portion 1614 can be removed from the second pod portion 1616 and then attached to the second pod portion 1616 to form an article of stemware, for example, as shown in Section H-H. The interconnection of attachment element 1610 to attachment region 1624 is shown in Detail L 1660.

[0067] FIG. 17 shows a two-piece convertible beverage container and drinking apparatus, in accordance with a third exemplary embodiment. Section B-B shows a cross-sectional view of the first pod portion 1714 attached to the second pod portion 1716 to form an enclosed pod such as for holding a beverage. The first pod portion 1714 has a base element at a base end that is configured to attach to the open orifice at the drinking end of the second pod portion 1716. The first pod portion 1714 includes attachment element 1710 at an attachment end that is configured to attach to attachment region 1724 of the second pod portion 1716. For example, the attachment element 1710 and the attachment region 1724 may include complementary threading or other attachment features. As mentioned above, the first pod portion 1714 and the second pod portion 1716 may be sealed such as to hold a liquid within the pod during shipment or mixing of a cocktail or to maintain carbonation or freshness of the contents of the pod. In this exemplary embodiment, the seal includes an o-ring 1752 that is positioned between the first pod portion 1714 and the second pod por-

tion 1716, as shown in Detail C 1750. It should be noted that other types of gaskets (e.g., cork) or sealing structures may be used in various alternative embodiments. As discussed above, the first pod portion 1714 can be removed from the second pod portion 1716 and then attached to the second pod portion 1716 to form an article of stemware, for example, as shown in Section F-F. The interconnection of attachment element 1710 to attachment region 1724 is shown in Detail G 1760.

[0068] FIG. 18 shows yet another exemplary embodiment of a convertible beverage container and drinking apparatus having some additional/alternative features as described below. Some relevant parts corresponding to those in FIGs. 15-17 are highlighted, i.e., first pod portion 1514/1614/1714, second pod portion 1516/1616/1716, Base Element of the first pod portion, and Top-Drinking End of the second pod portion.

[0069] FIG. 19 shows yet another exemplary embodiment of a convertible beverage container and drinking apparatus having additional/alternative features as in FIG. 18 and as described below. Highlighting of parts such as the first pod portion, the second pod portion, the Base Element, and the Top-Drinking End are omitted for convenience.

[0070] The main difference between the embodiments shown in FIGs. 18 and 19 are the dimensions, with perhaps (but without limitation) one being better suited to wines and the other being better suited to Champagne or prosecco.

[0071] FIG. 20 shows some further additional/alternative features that can be used with the embodiments of FIGs. 18 and 19, as described below. In FIG. 20, these additional/alternative features are shown relative to the embodiment of FIG. 19, although it should be clear that similar additional/alternative features can be applied to the embodiment of FIG. 18. Highlighting of parts such as the first pod portion, the second pod portion, the Base Element, and the Top-Drinking End are omitted for convenience.

[0072] FIG. 21 highlights one of the additional/alternative features of the embodiments of FIGs. 18-20, specifically where the base element of the first pod portion includes a cropped overhang. FIG. 21(A) shows Detail C from FIG. 17 in which the base element has an extended overhang that can substantially hide the threading when the apparatus is configured as a drinking vessel, for example, as in Section F-F in FIG. 17. FIG. 21(B) shows corresponding Detail C from FIGs. 19-20 in which the base element has a cropped overhang. FIG. 21(C) shows corresponding Detail L from FIG. 18 in which the base element has a cropped overhang. In exemplary embodiments, these cropped overhangs are specifically configured to allow the base element of the first pod portion to accommodate a bottom ring or other attachment (referred to herein generically as a "bottom ring" although the attachment need not be shaped like a ring) that attaches onto the base element where the extended overhang otherwise would have prevented such attachment

when the apparatus is in the stemware configuration. Also, it is anticipated that a base element having a cropped overhang will be easier and less expensive to manufacture. The bottom ring can attach to the base element in any appropriate way, such as, for example, via screw-fit onto the existing threading or via press-fit onto the base element over the existing threading. FIG. 22 is a schematic diagram showing a bottom ring configured to screw-fit onto the existing threading of the base element of the first pod portion, in accordance with one exemplary embodiment.

[0073] Additionally or alternatively, the top-drinking end of the second pod portion can accommodate a top ring or other attachment (referred to herein generically as a "top ring" although the attachment need not be shaped like a ring) that attaches onto the top-drinking end of the second pod portion when the apparatus is in the stemware configuration. The top ring can attach to the base element in any appropriate way, such as, for example, via screw-fit onto the existing threading or via press-fit onto the top-drinking end over the existing threading. FIG. 25 is a schematic diagram showing a top ring configured to screw-fit onto the existing threading of the top-drinking end of the second pod portion, in accordance with one exemplary embodiment.

[0074] It should be noted that a top and/or bottom ring allows for many possibilities, including, without limitation, as a weight or stabilizer at the bottom of the drinking apparatus in the case of the bottom ring (e.g., for stability), as a decoration to the top and/or bottom of the drinking apparatus, as a marker or indicator of the owner or holder of the drinking vessel (e.g., color-coded), or as a platform for printing or engraving (e.g., for including advertising, or for including a name such as a guest at a party). The top and/or bottom ring can be formed of any appropriate material (e.g., metal, plastic, etc.) and can be embellished in any appropriate manner, for example, engraved, printed, jeweled, etc.

[0075] Without limitation, it is envisioned that convertible beverage containers will be dispensed at various types of functions and events (e.g., weddings/showers, Bar/Bat Mitzvahs, Quinceaneras, banquets, fund raising events, sporting events, etc.), in which case the host could have rings engraved to enhance the guest experience.

[0076] For one example, it is envisioned that rings could be engraved or printed with guest names, in which case the personalized rings could be used as gifts and/or as seating markers (e.g., placed at the event tables and perhaps even used as personalized napkin rings). The user can then place the ring on the drinking apparatus, e.g., to mark or indicate his or her drinking apparatus.

[0077] For another example, it is envisioned that rings could be engraved with one and/or both teams participating in a sporting event such as a championship game (e.g., NFL superbowl, MLB world series, NBA championship, NHL championship, MLS championship, etc.). Without limitation, fans can be given rings with both

teams at the start of the game and/or can pick up their own championship ring (e.g., a ring with just the winning team) after the game.

[0078] It also is envisioned that the first pod portion and/or the second pod portion can include printing or engraving (e.g., for including advertising, or for including an event name, a bride and groom name, a guest of honor name, etc.). FIG. 23 shows printing or engraving on the second pod portion, in accordance with certain exemplary embodiments. Such printing or engraving can be in addition to any printing or engraving on a top and/or bottom ring.

[0079] Overall, the convertible beverage container and drinking apparatus as well as the ring(s) can be wonderful gifts or souvenirs.

[0080] FIG. 24 highlights another additional/alternative feature of the embodiments of FIGs. 18-20, specifically where the attachment element at the attachment end of the first pod portion is configured to attach to the attachment region of the second pod portion via a press-fit attachment rather than being threaded for screw-on attachment. These exemplary embodiments include a clip-in ring that fits in a seat within the attachment region of the second pod portion and that is configured to engage with the attachment element (e.g., a prominent rim) to attach the two pieces together via a press-fit attachment, although other types of press-fit attachment configurations can be used in various alternative embodiments.

[0081] In any of the described embodiments, the second pod portion (e.g., 1516/1616/1716) can include a beverage or an ingredient for a beverage (e.g., a liquid or other ingredient), and a removable seal such as seal 704 can be included to seal the ingredient within the second pod portion (e.g., 1516/1616/1716). Such a removable seal can be used in combination with, or in lieu of, seals such as o-rings or gaskets, in various alternative embodiments.

[0082] In any of the described embodiments, the first pod portion (e.g., 1514/1614/1714) can include a hollow cavity. The hollow cavity can be used to contain an ingredient for the beverage, a drink-related article, a sanitary-related article, or other item. Alternatively, as shown in FIGs. 15-17, the first pod portion (e.g., 1514/1614/1714) can include an opening at the attachment end (i.e., the end including attachment element, e.g., 1510/1610/1710) through which a liquid or other ingredient can be poured into the pod and then sealed (e.g., using a cork or screw-on top) and through which contents of the pod can be dispensed if needed. Thus, for example, the pod can be assembled and then filled with one or more ingredients for a beverage.

[0083] The present invention may be embodied in other specific forms without departing from the true scope of the invention, and numerous variations and modifications will be apparent to those skilled in the art based on the teachings herein. Any references to the "invention" are intended to refer to exemplary embodiments of the invention and should not be construed to refer to all em-

bodiments of the invention unless the context otherwise requires. The described embodiments are to be considered in all respects only as illustrative and not restrictive.

Claims

1. A convertible beverage container and drinking apparatus (100), the convertible beverage container and drinking apparatus comprising:

a first pod portion (114,1514,1614,1714) having a base element at a base end and an attachment element (110,1510,1610,1710) at an attachment end oppositely disposed to the base end; and

a second pod portion (116,1516,1616,1716) having an open orifice (120) at a drinking end, the open orifice configured to fixably attach to the base element at the base end of the first pod portion, and an attachment region (124,1524,1624,1724) oppositely disposed to the drinking end, the attachment region configured to fixably attach to the attachment element (110,1510,1610,1710) at the attachment end of the first pod portion; and

at least one seal, wherein the first and second pod portions are configured to alternately form (a) a pod configuration in which the base element at the base end of the first pod portion (114,1514,1614,1714) is fixably attached to the open orifice at the drinking end of the second pod portion (116,1516,1616,1716) with the at least one seal disposed between the first and second pod portions to form a seal therebetween and (b) a stemware configuration in which the attachment element (110,1510,1610,1710) at the attachment end of the first pod portion (114,1514,1614,1714) is fixably attached to the attachment region of the second pod portion to form a stemware drinking vessel having a foot, a stem, and a bowl in which the first pod portion (114,1514,1614,1714) forms the foot and stem of the stemware drinking vessel and the second pod portion (116,1516,1616,1716) forms the bowl of the stemware drinking vessel, wherein the base element includes a cropped overhang configured to accommodate a bottom ring when the convertible beverage container and drinking apparatus is in the stemware configuration.

2. The apparatus (100) of claim 1, further comprising the bottom ring configured to attach to the base element with cropped overhang such as via screw-on attachment or press-on attachment.
3. The apparatus (100) of any one of the preceding claims, wherein the bottom ring is embellished.

4. The apparatus (100) of any one of the preceding claims, further comprising:
a top ring configured to attach to a top-drinking end of the second pod portion (124,1524,1624,1724) when the convertible beverage container and drinking apparatus is in the stemware configuration such as screw-on attachment or via press-on attachment.

5. The apparatus (100) of claim 4, wherein the top ring is embellished.

6. The apparatus (100) of any one of the preceding claims, wherein the attachment element (110,1510,1610,1710) at the attachment end of the first pod portion is configured to fixably attach to the attachment region (124,1524,1624,1724) of the second pod portion via a press-fit attachment to form the stemware drinking vessel.

7. The apparatus (100) of 6, further comprising a clip-in ring configured to be seated in the attachment region (124,1524,1624,1724) of the second pod portion and to engage with the attachment element (110,1510,1610,1710) of the first pod portion such as a prominent rim of the attachment element to attach the two pieces together via the press-fit attachment.

8. The apparatus (100) of any one of the preceding claims, wherein, in the pod configuration, the second pod portion contains a beverage or an ingredient for a beverage such as a liquid.

9. The apparatus (100) of claim 8, wherein the second pod portion further includes a removable seal to hold the ingredient in the second pod portion.

10. The apparatus (100) of any one of the preceding claims, wherein the first pod portion (114,1514,1614,1714) includes a hollow cavity (802) containing at least one of (1) an ingredient for the beverage, (2) a drink-related article (806), or (3) a sanitary-related article.

11. The apparatus (100) of any one of the preceding claims, wherein the first pod portion (114,1514,1614,1714) and the second pod portion (116,1516,1616,1716) are metal.

12. The apparatus (100) of any one of the preceding claims, wherein the bowl of the second pod portion (116,1516,1616,1716) is configured to have a shape associated with a specific type of drink.

13. The apparatus (100) of any one of the preceding claims, wherein the at least one seal includes at least one o-ring and/or at least one gasket such as a cork gasket.

14. The apparatus (100) of any of the preceding claims, further comprising a cork or cap to seal an opening at the attachment end of the first pod portion in the pod configuration.

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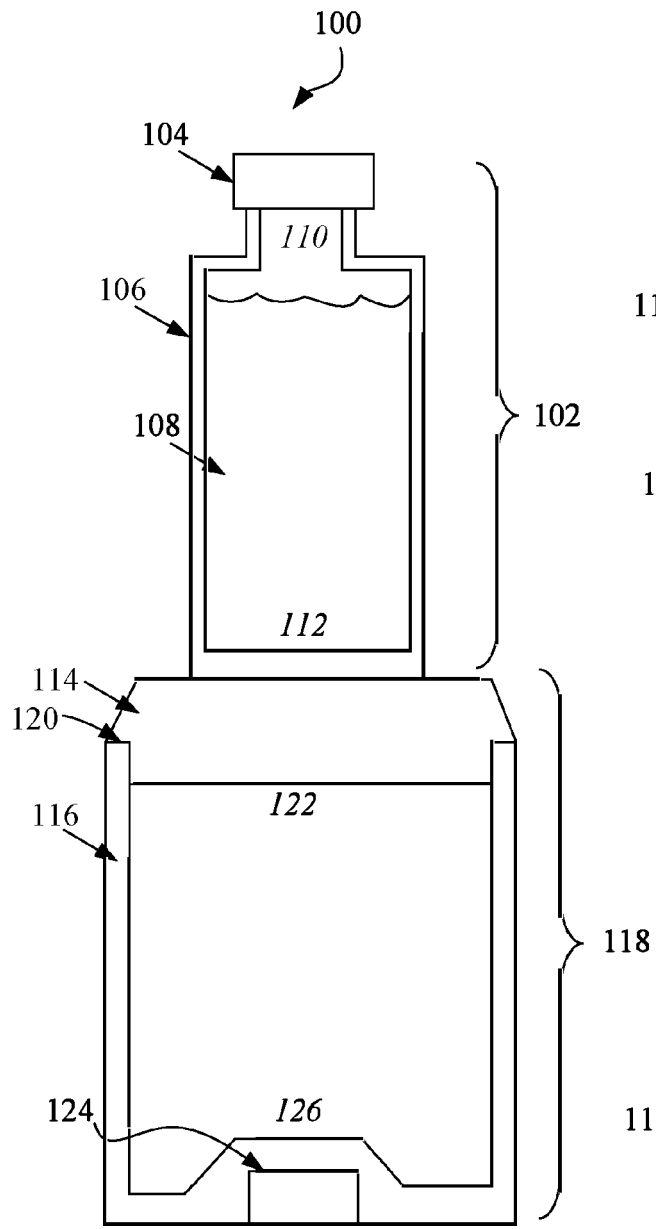


FIG. 1A

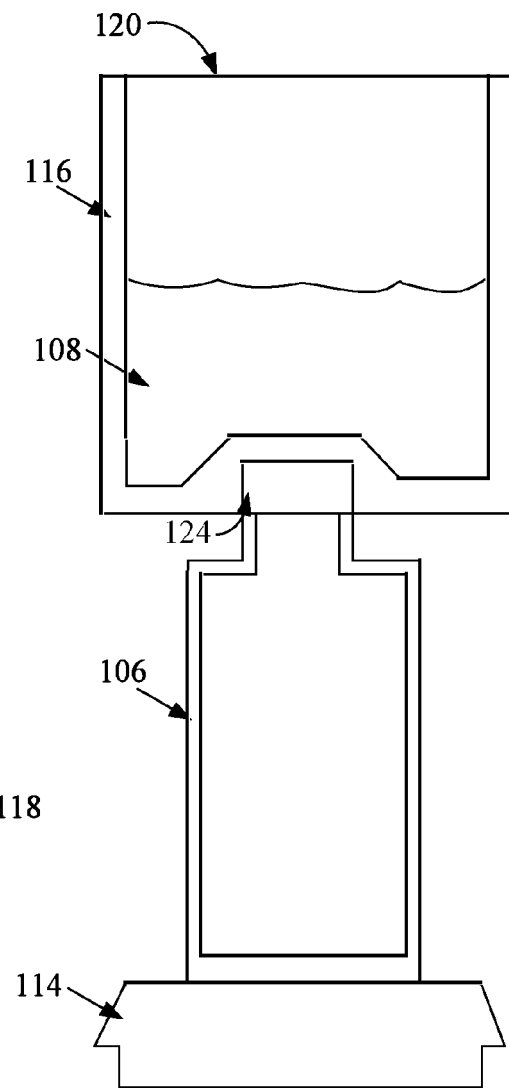


FIG. 1B

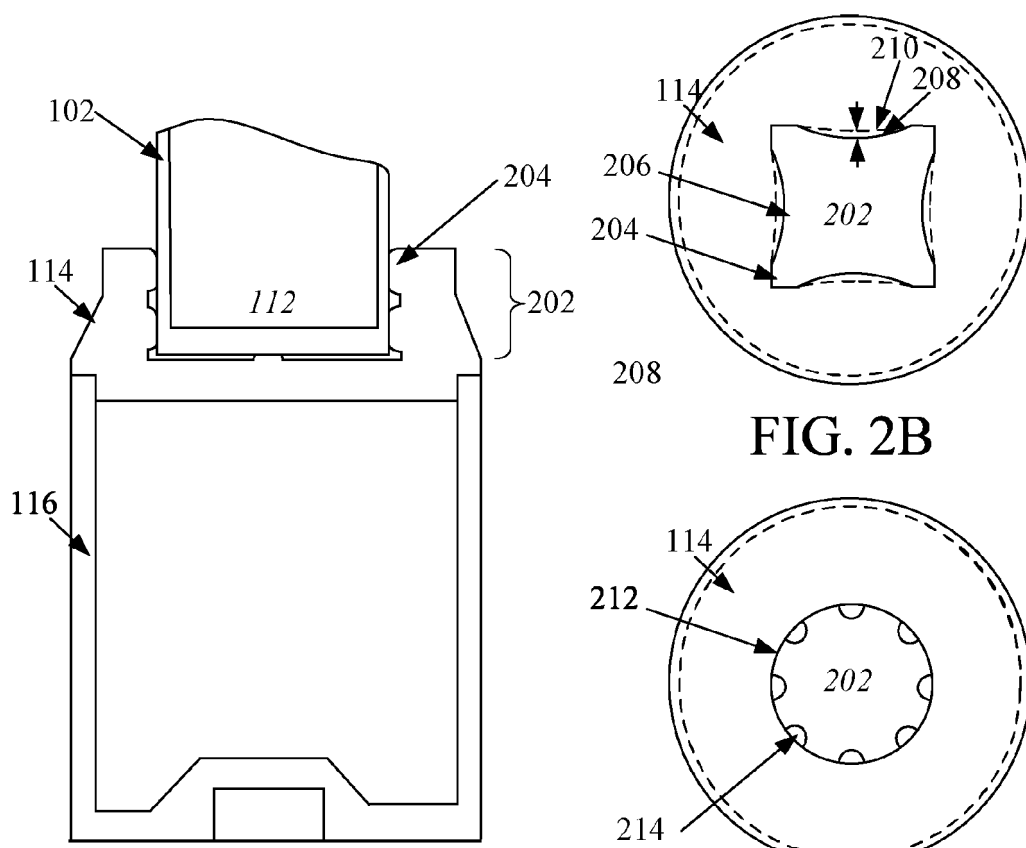


FIG. 2A

FIG. 2B

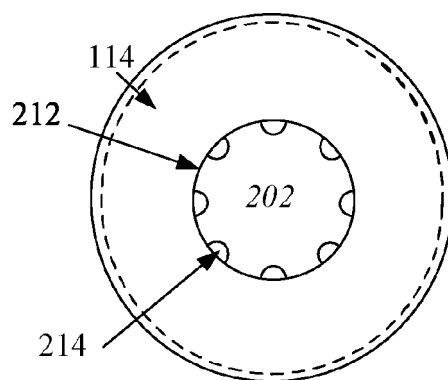


FIG. 2C

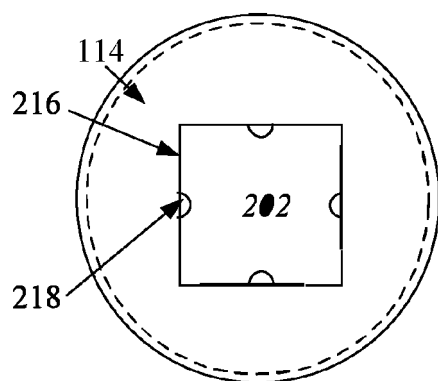


FIG. 2D

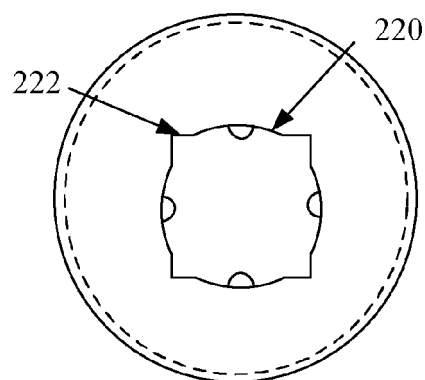


FIG. 2E

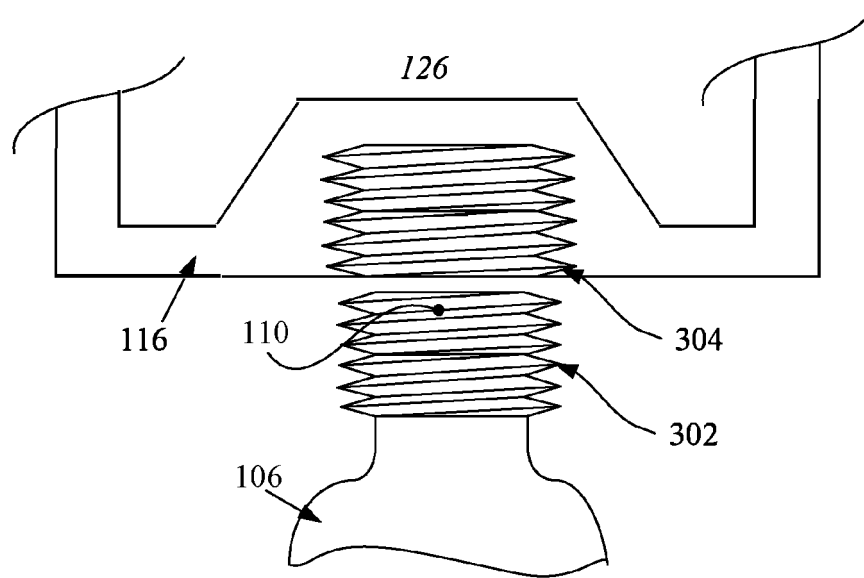


FIG. 3A

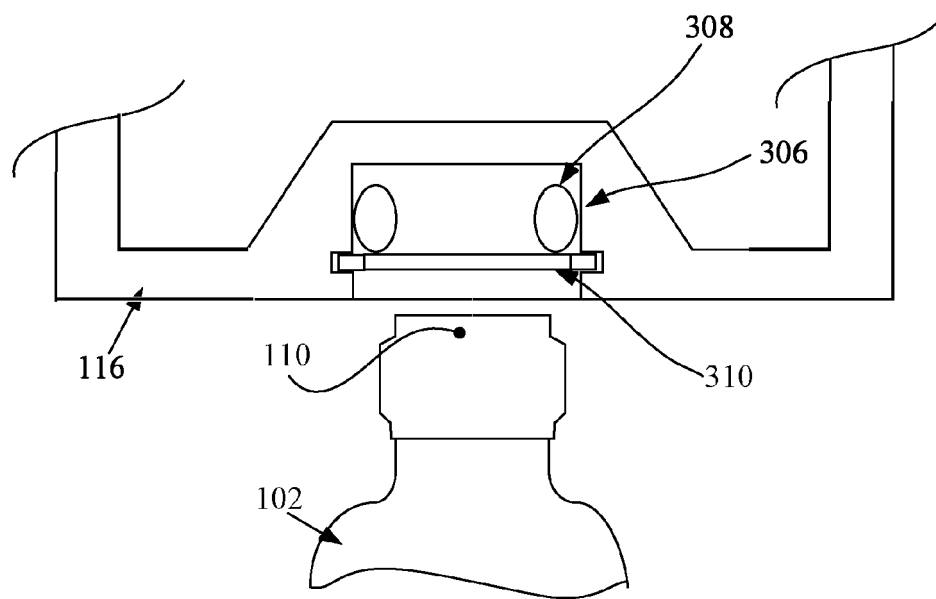


FIG. 3B

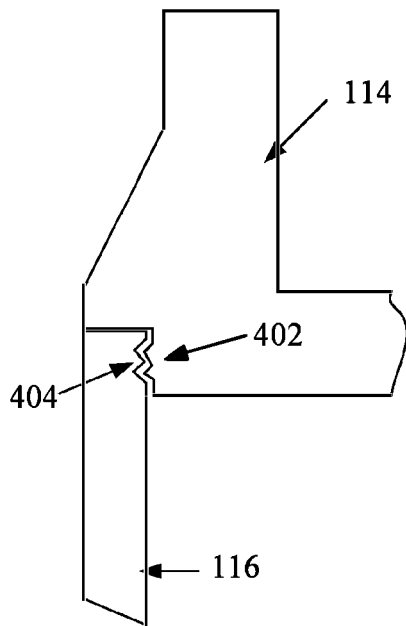


FIG. 4A

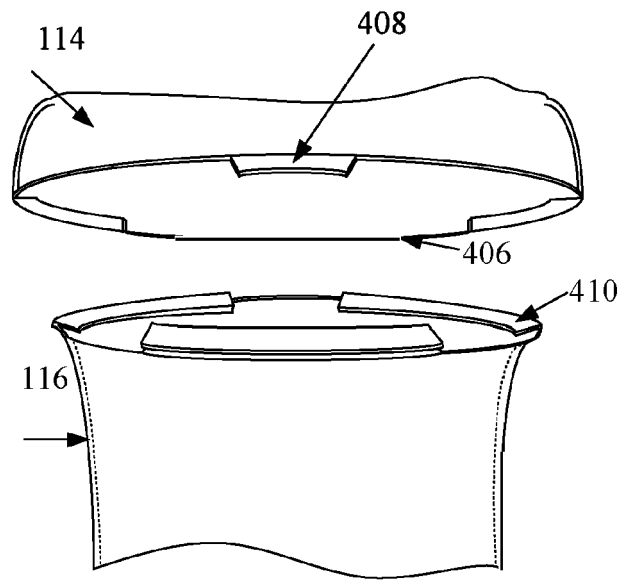


FIG. 4B

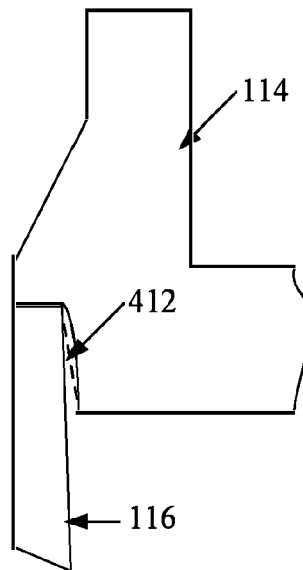


FIG. 4C

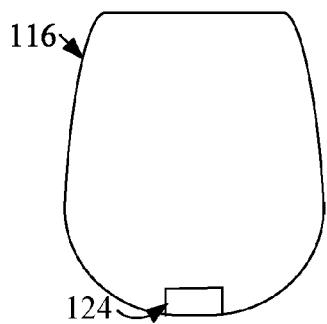


FIG. 5A

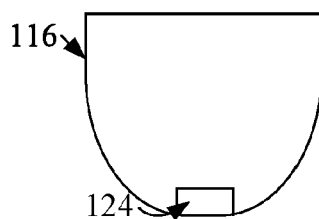


FIG. 5B

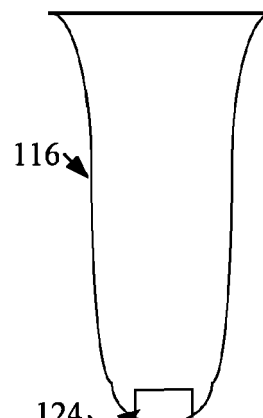


FIG. 5C

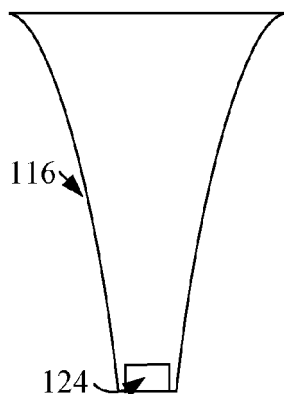


FIG. 5D

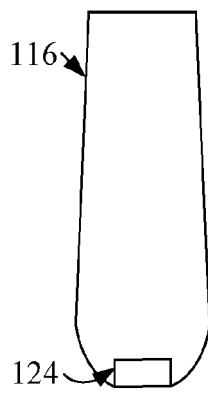


FIG. 5E

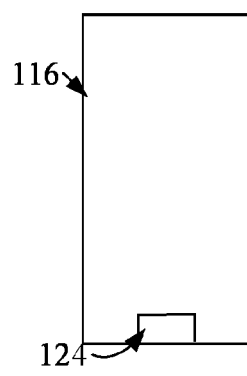


FIG. 5F

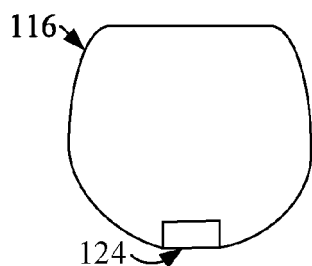


FIG. 5G

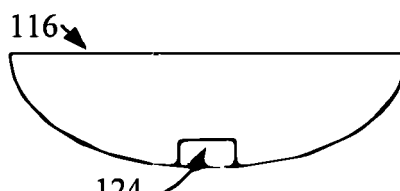


FIG. 5H

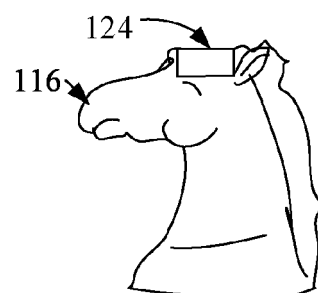


FIG. 5I

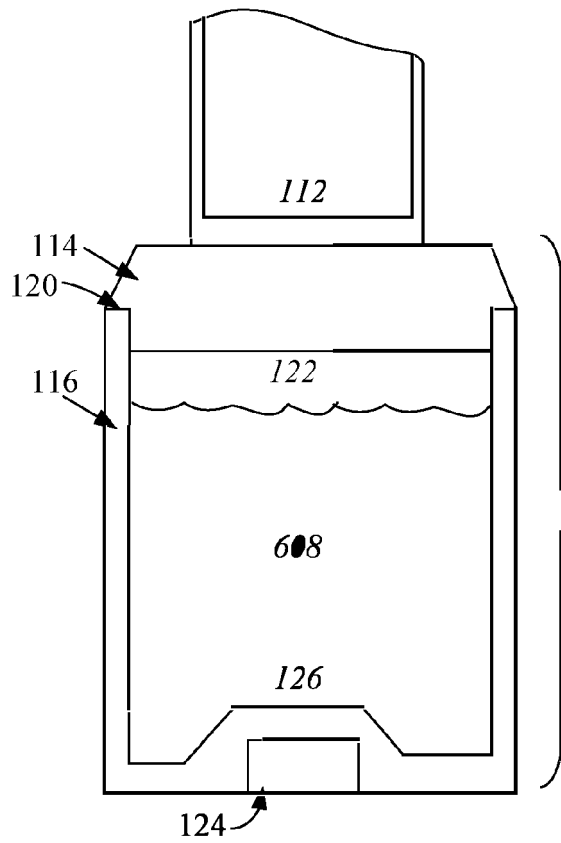


FIG. 6

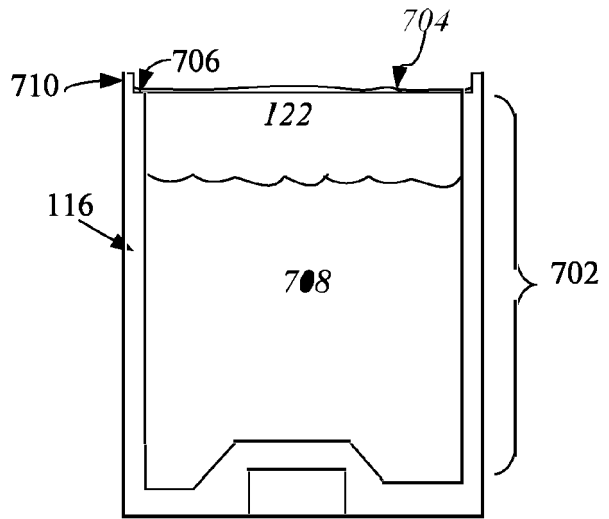


FIG. 7

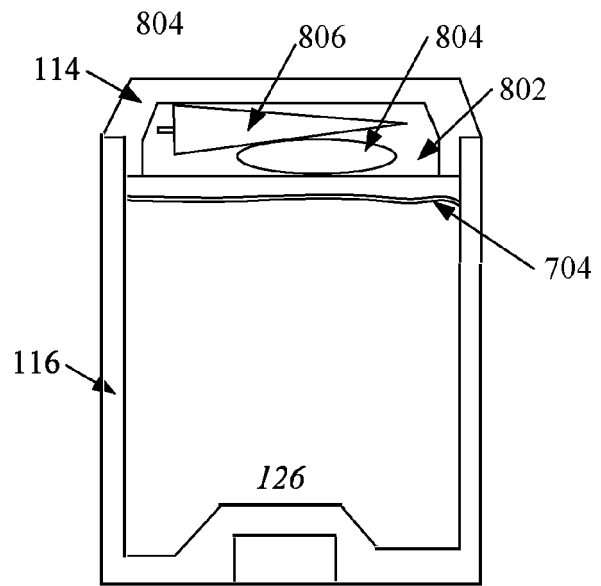


FIG. 8

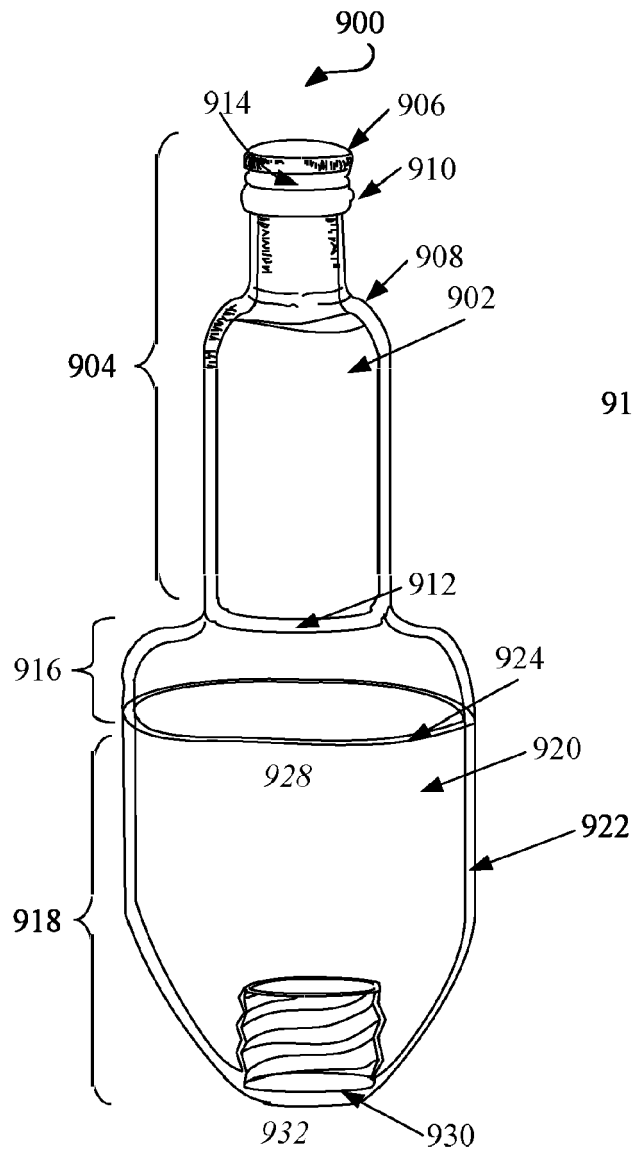


Fig. 9

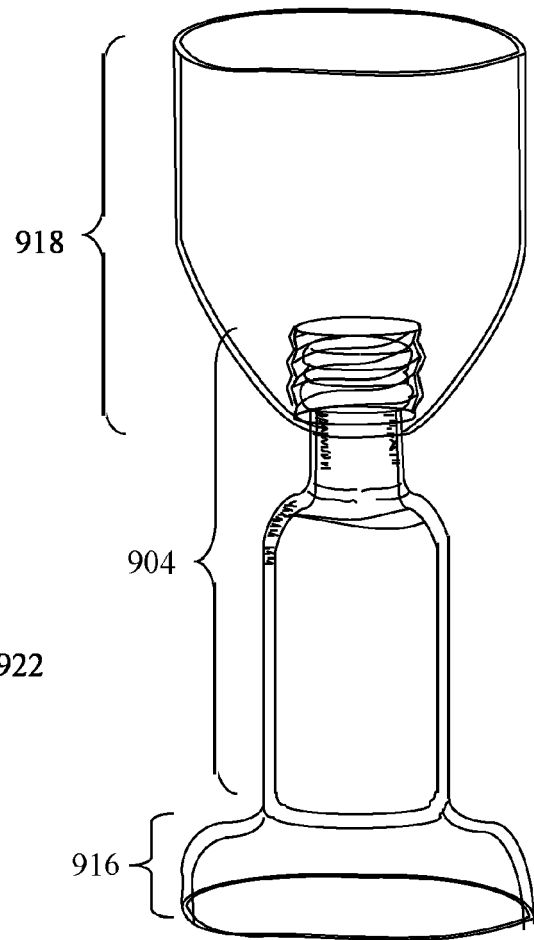


Fig. 10

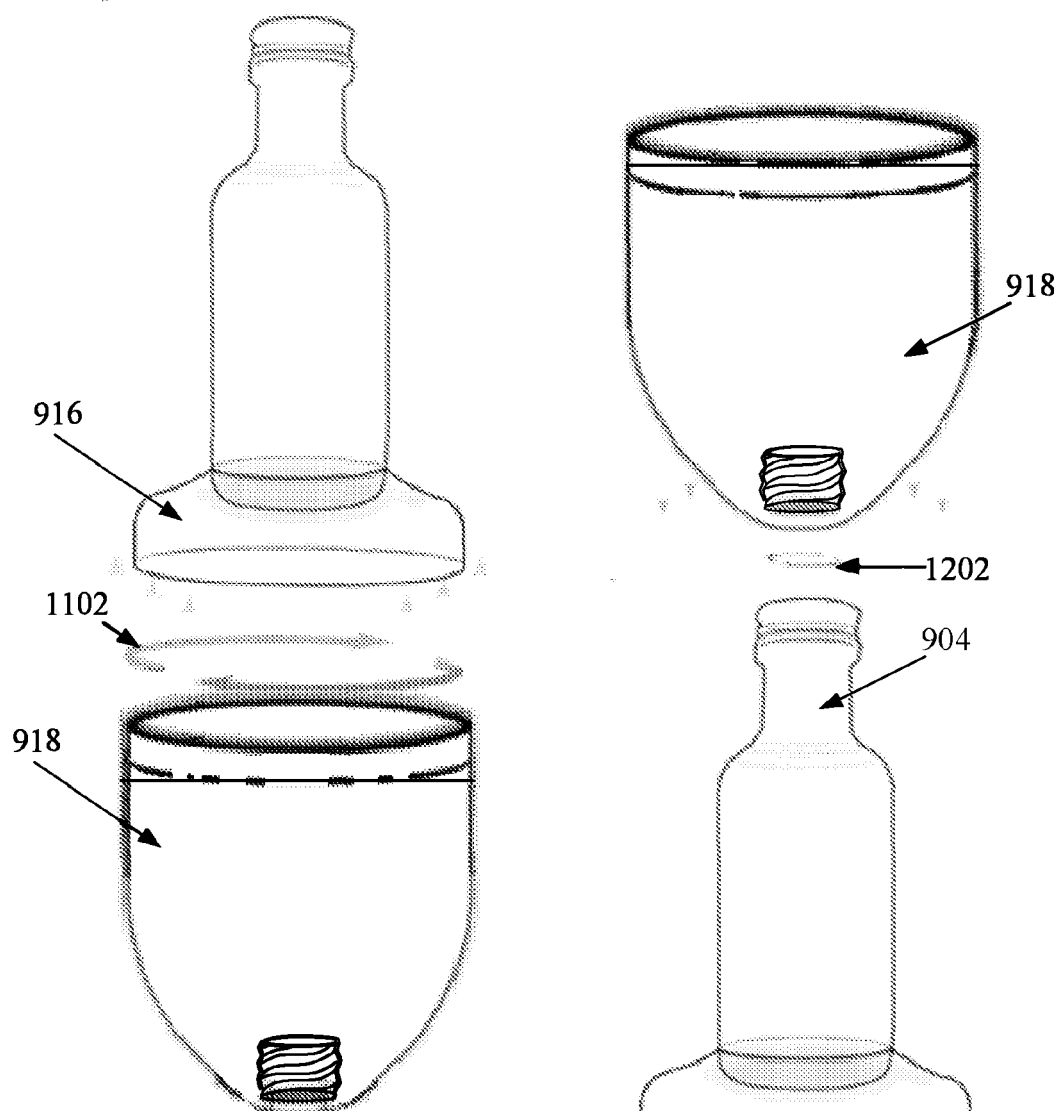


Fig. 11

Fig. 12

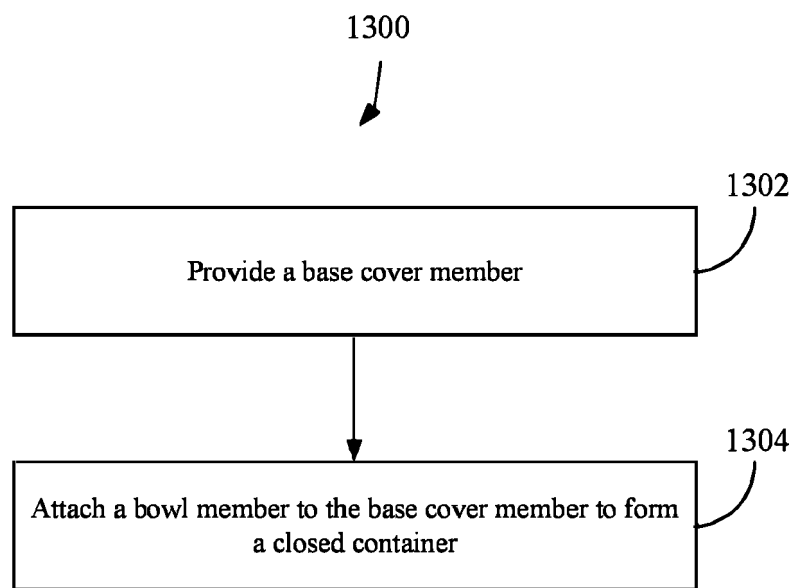


Fig. 13

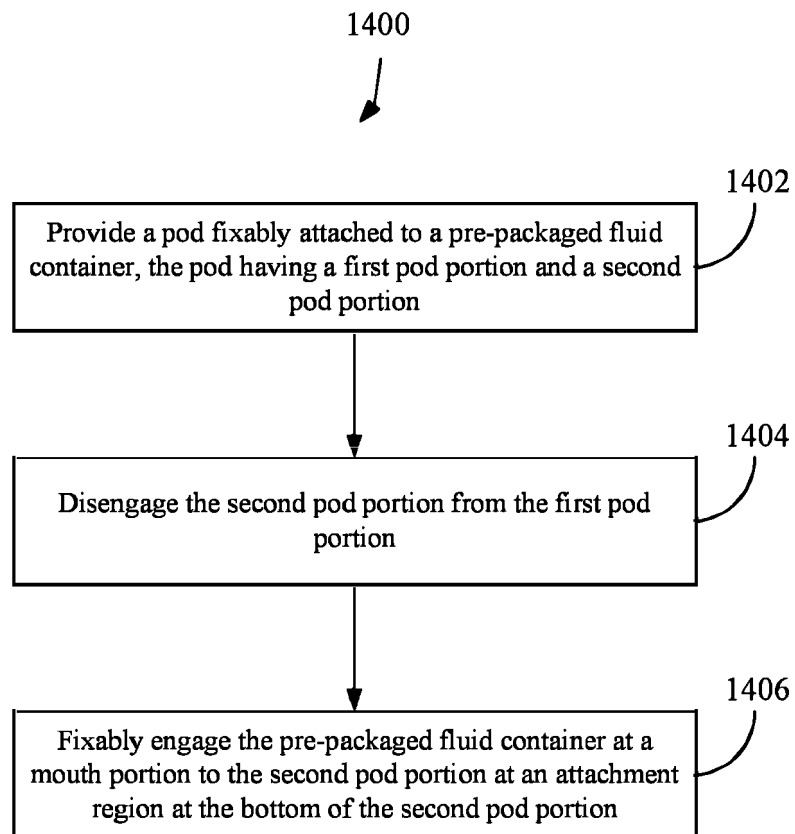
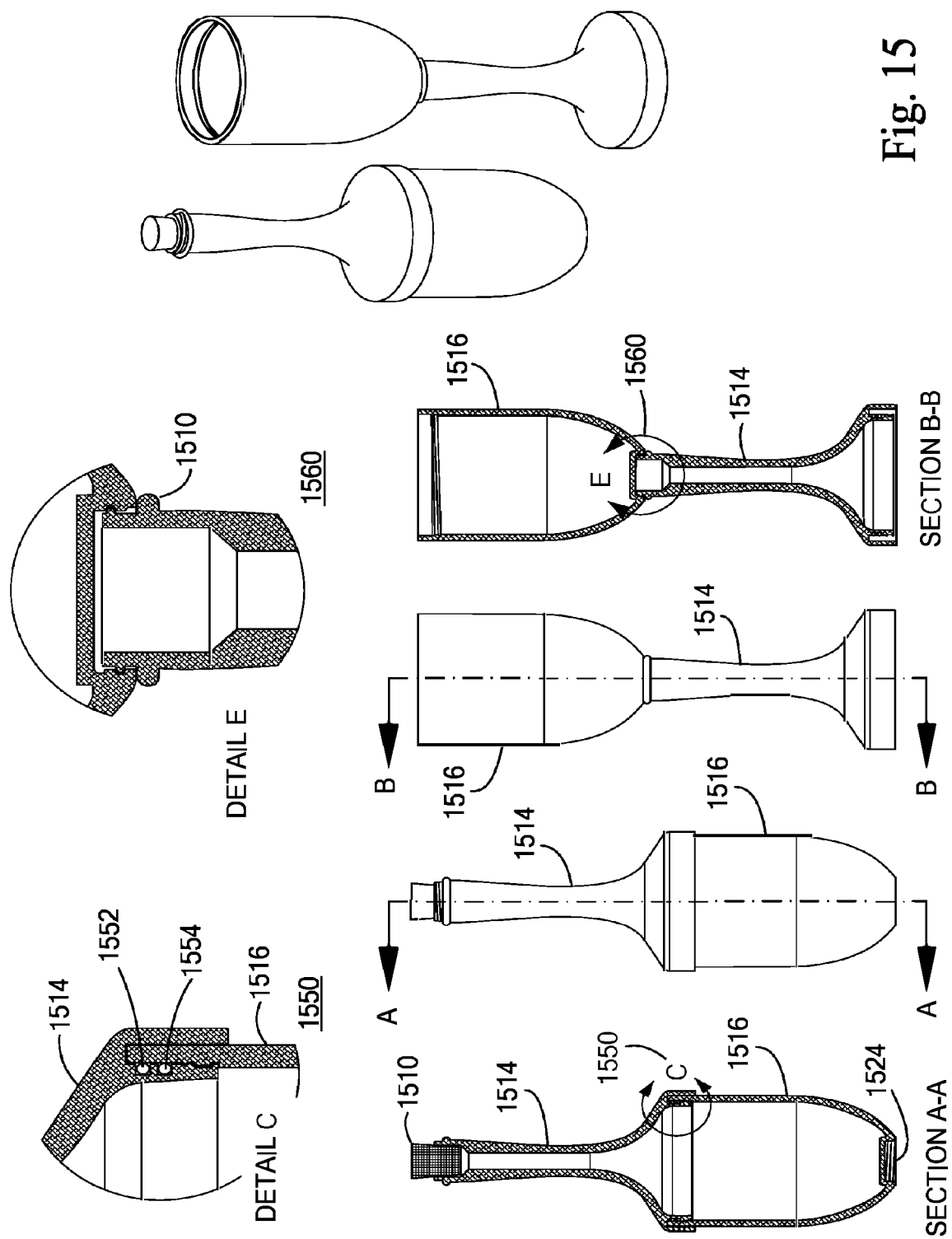


Fig. 14



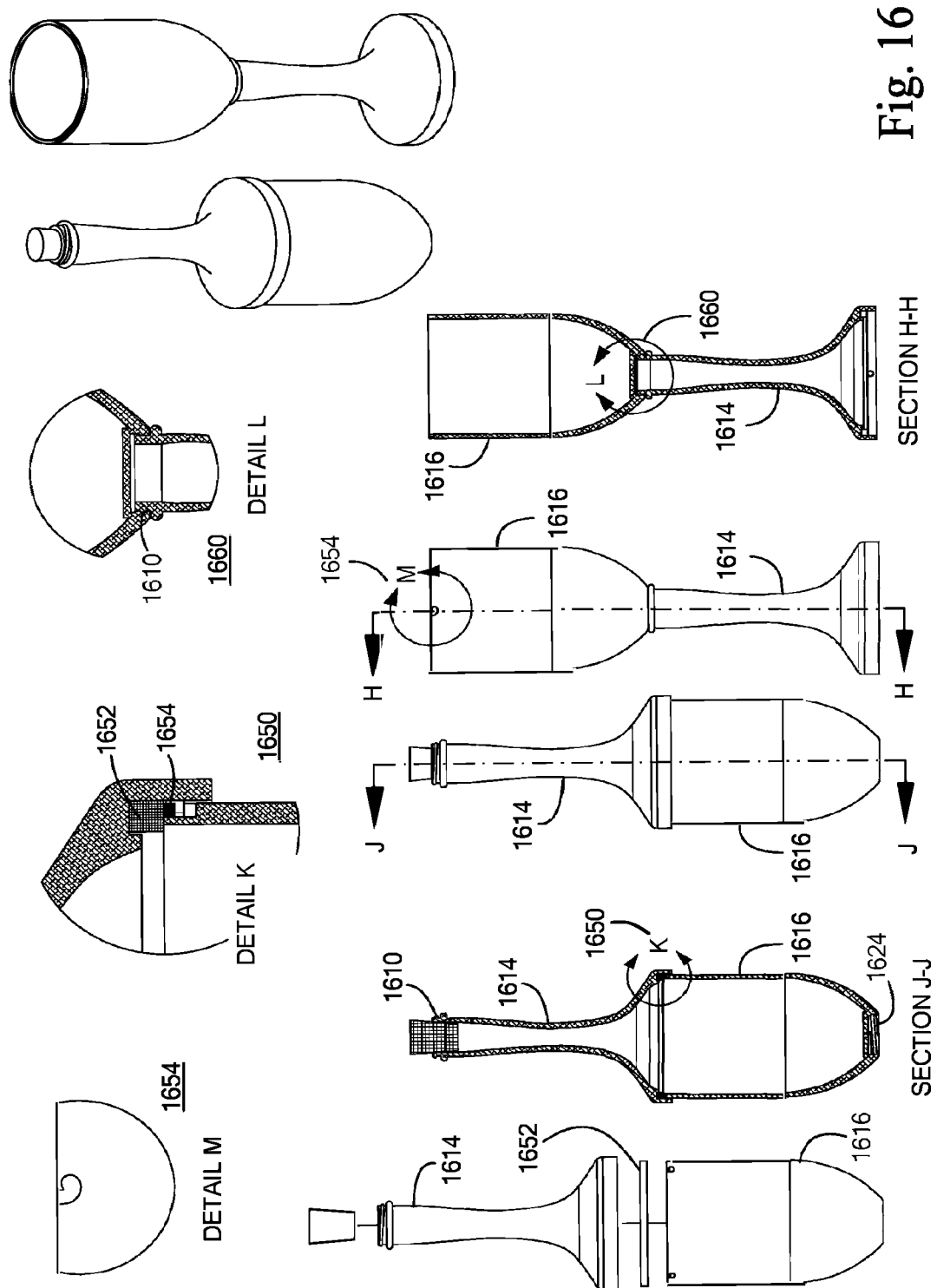
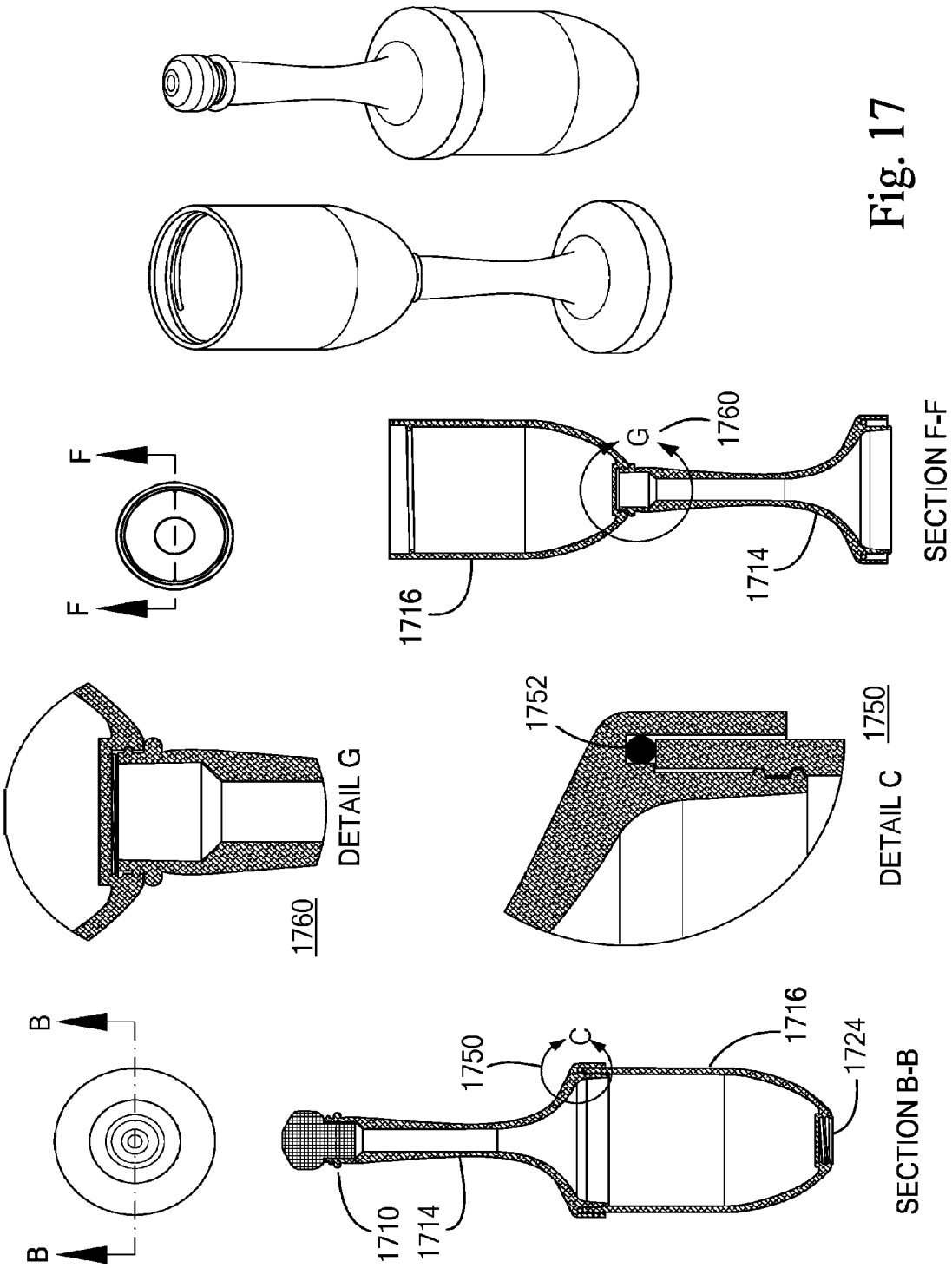


Fig. 16



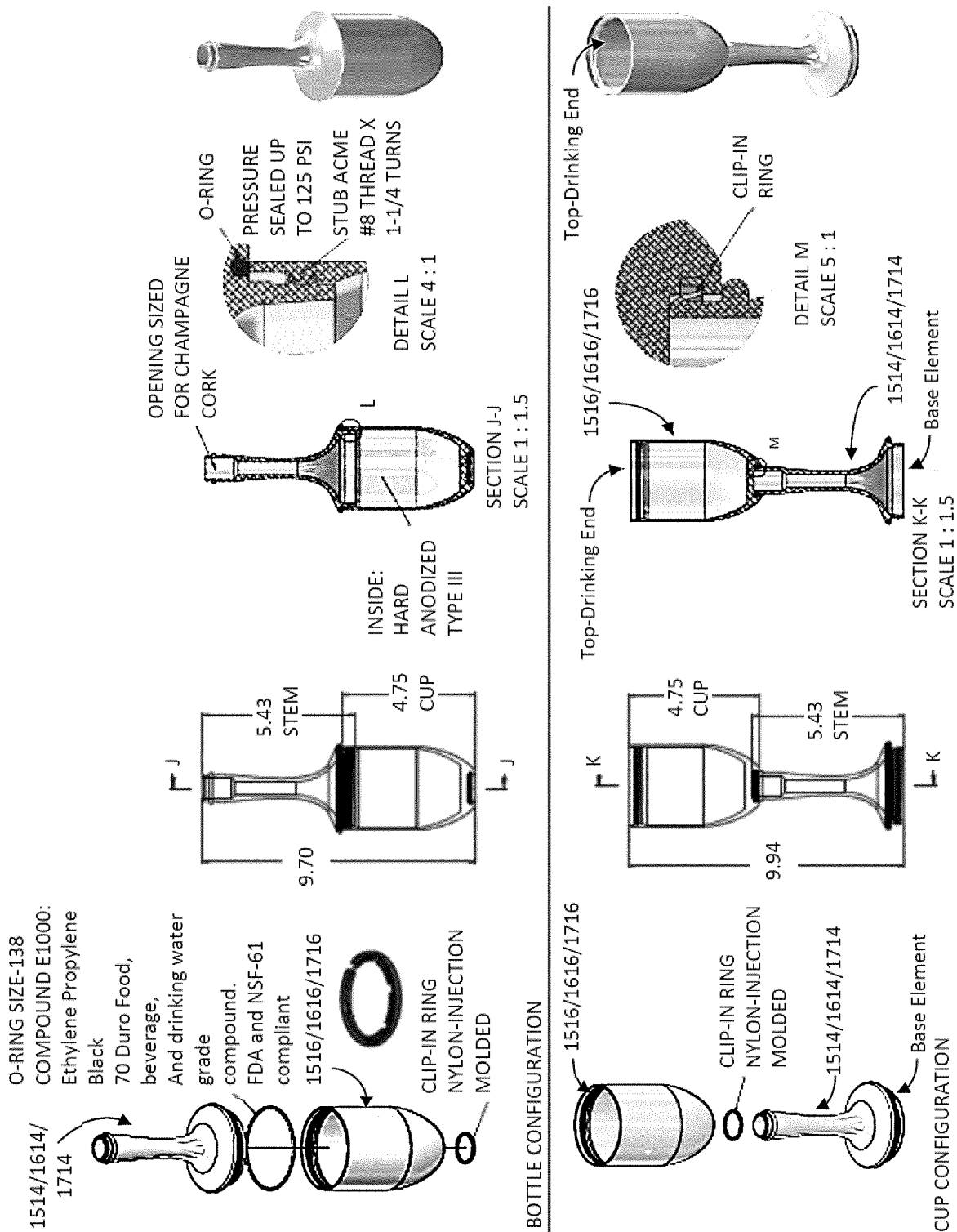


FIG. 18

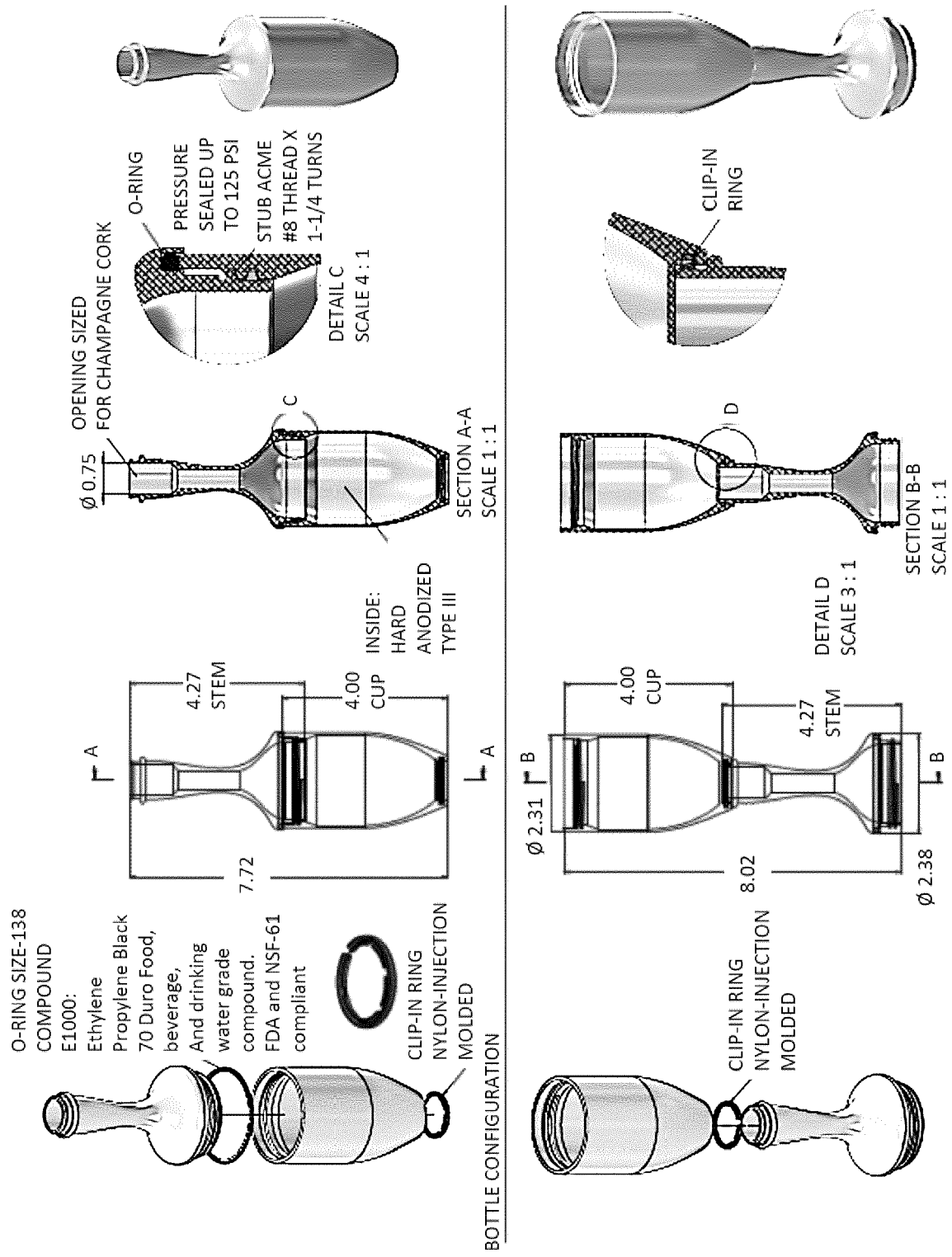


FIG. 19

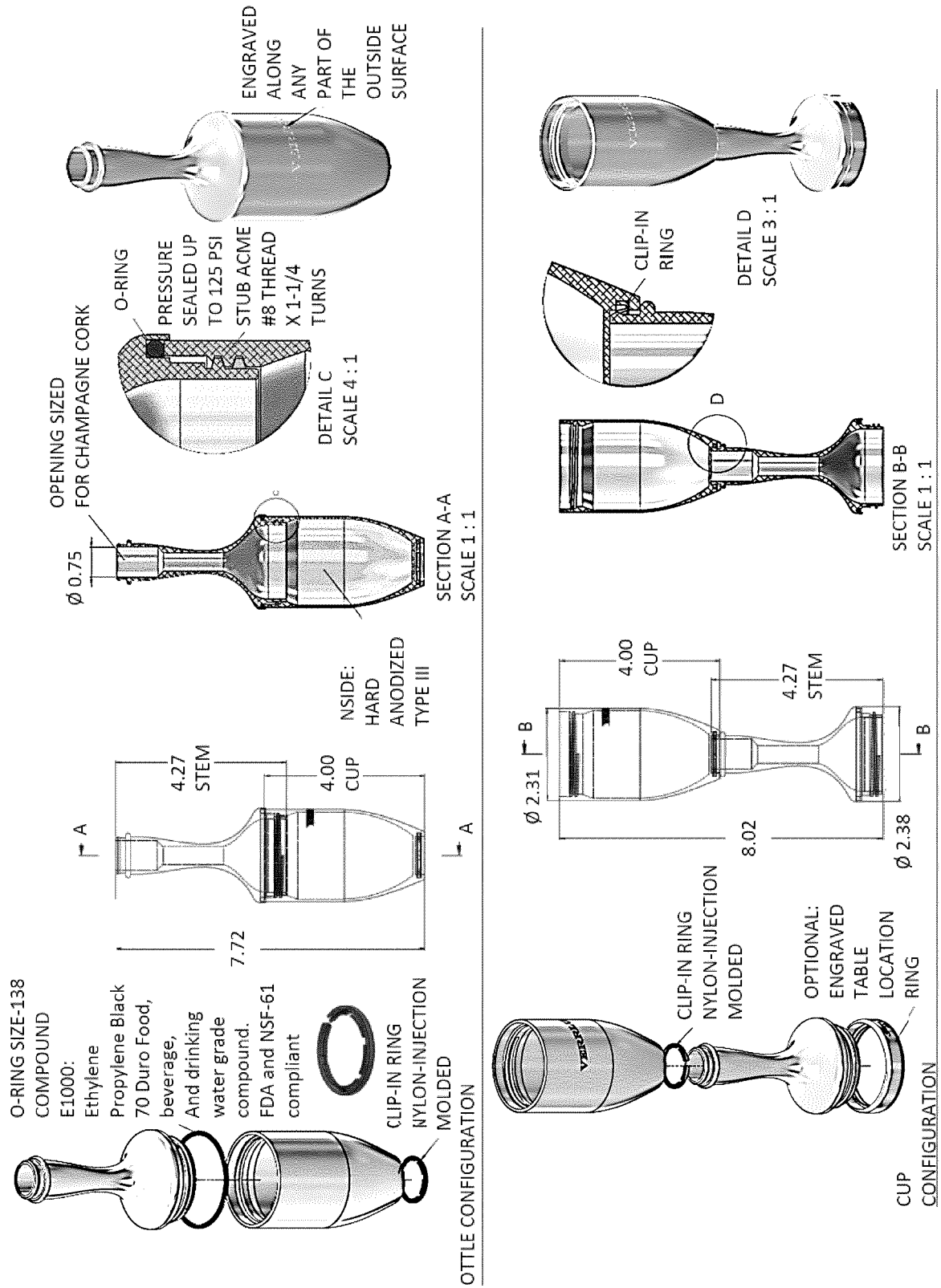
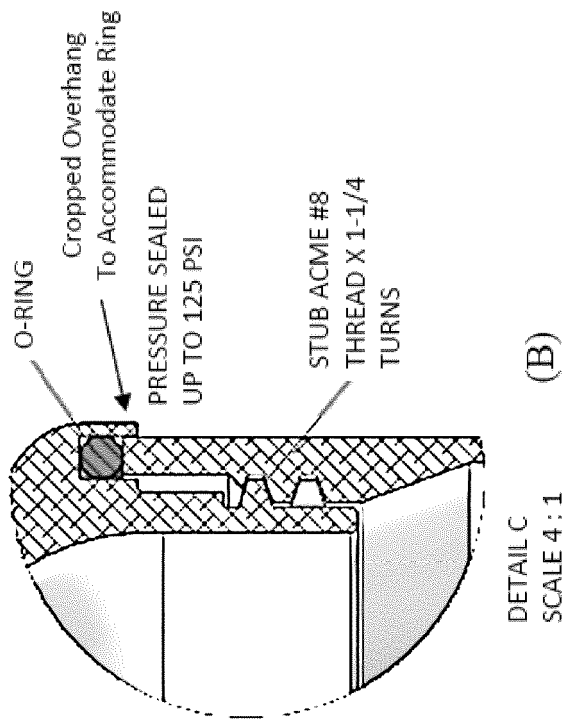
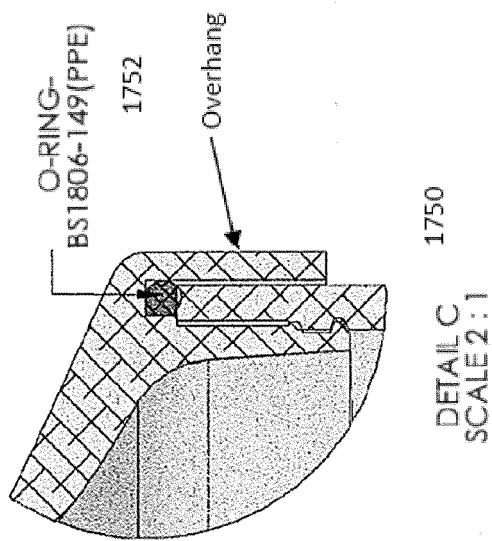


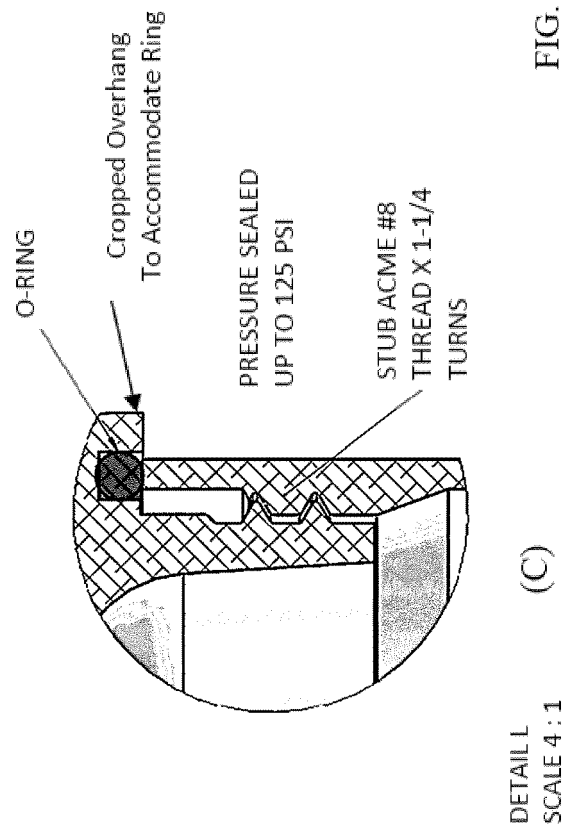
FIG. 20



(B)

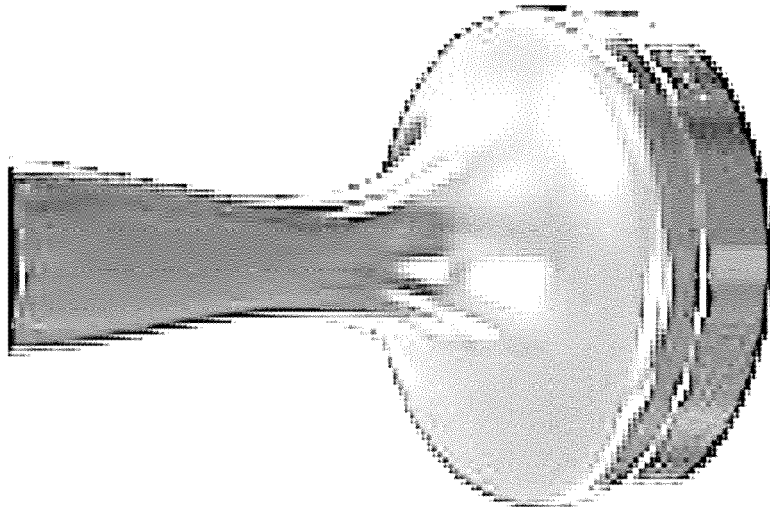


(A)

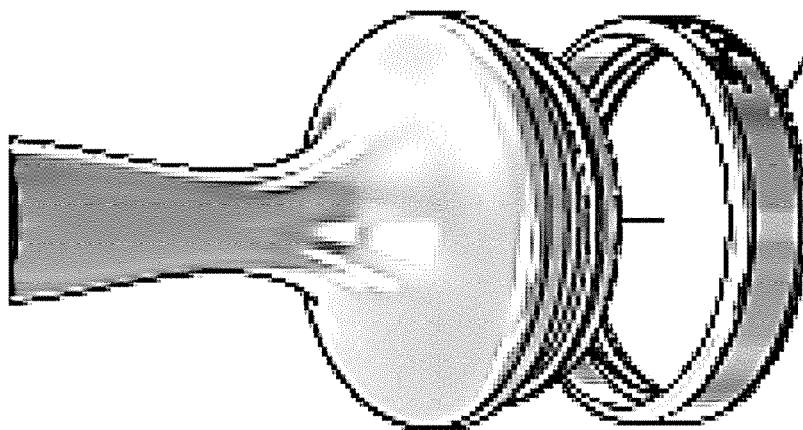


(C)

FIG. 21



DETAIL D
SCALE 3 : 1



OPTIONAL: ENGRAVED
TABLE LOCATION RING

FIG. 22

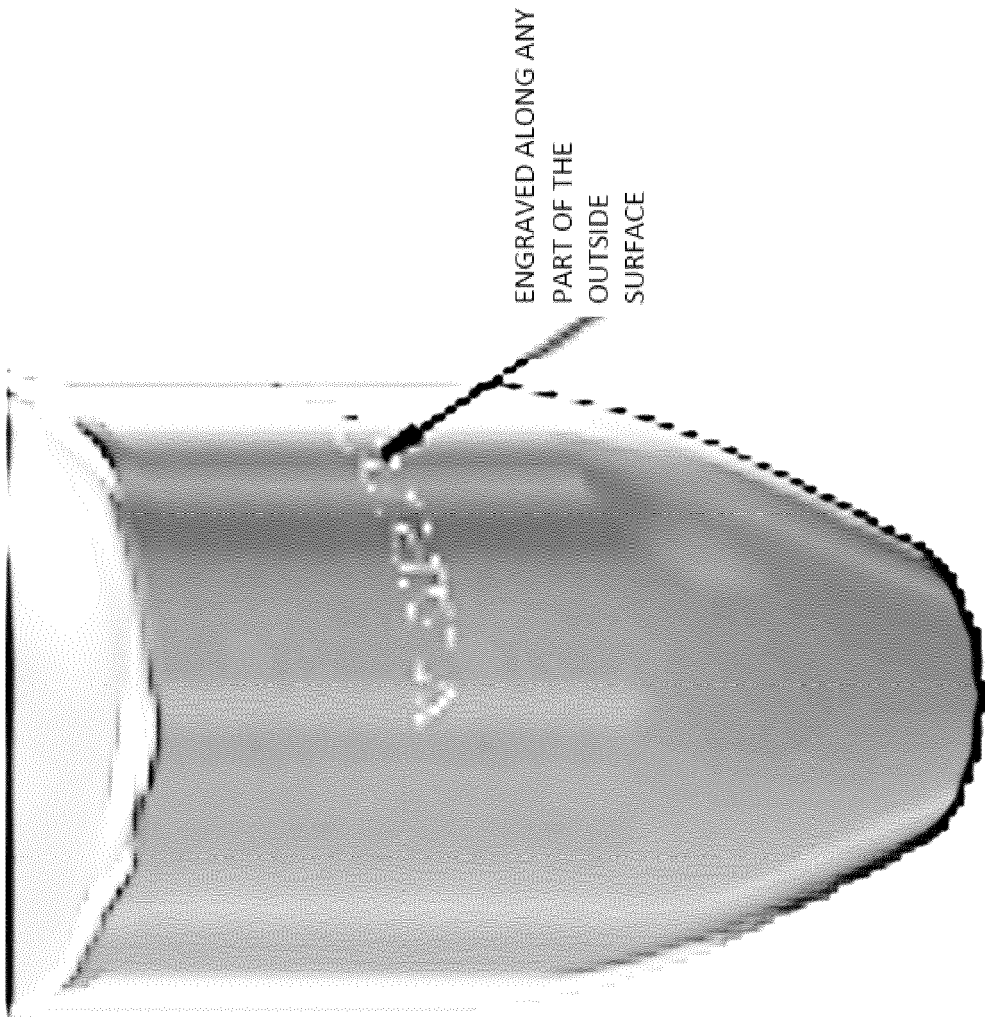
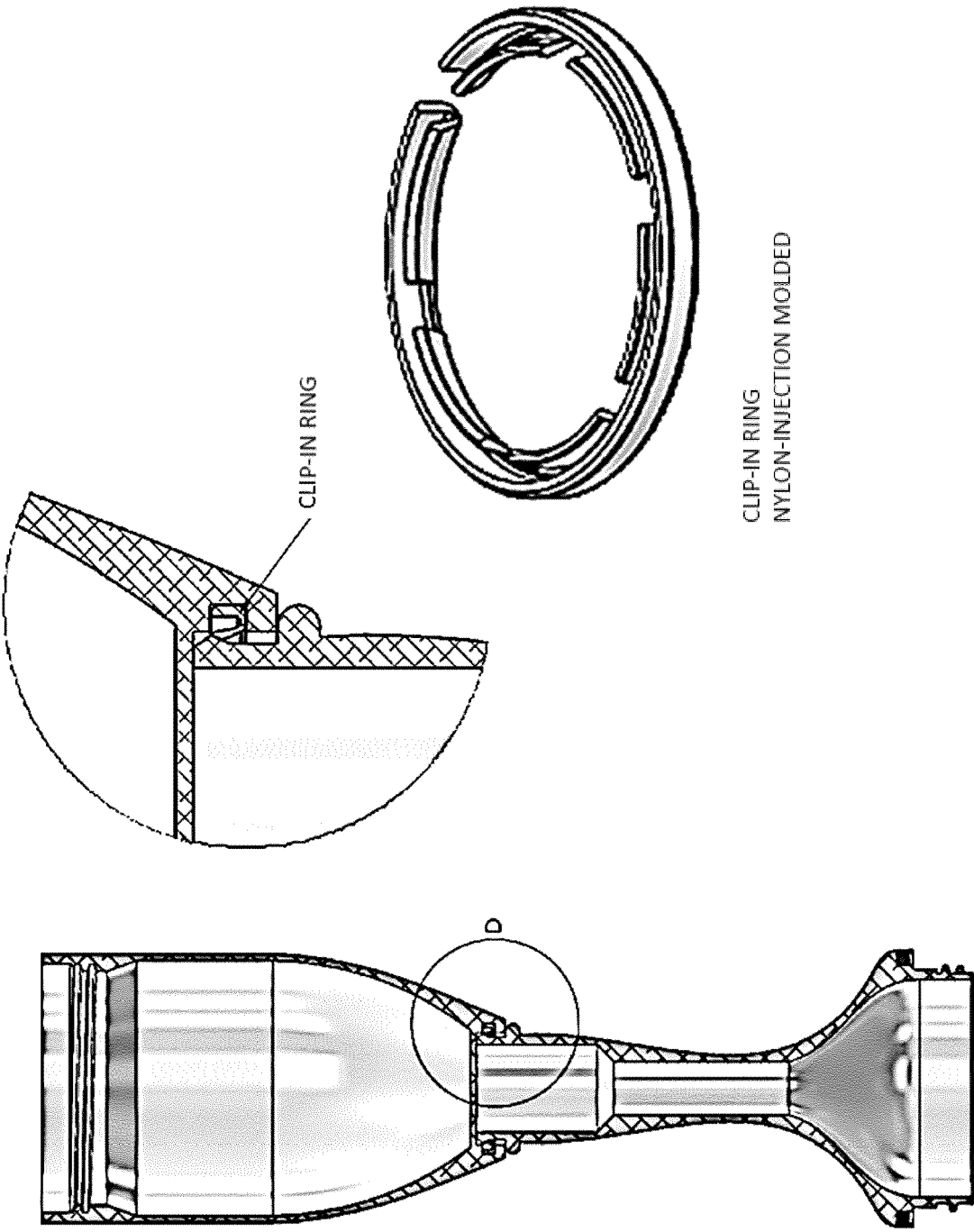


FIG. 23



CLIP-IN RING
NYLON-INJECTION MOLDED

FIG. 24

SECTION B-B
SCALE 1 : 1

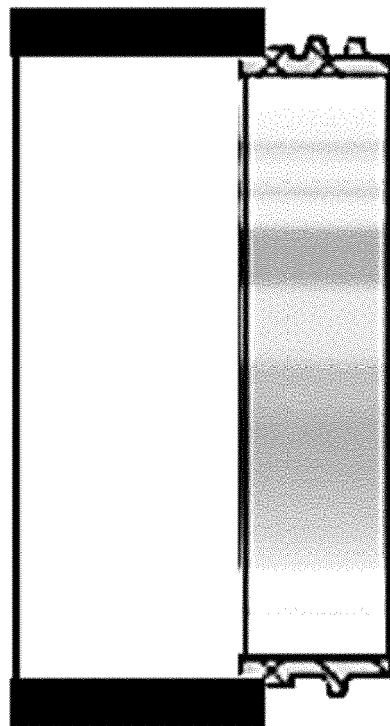


FIG. 25



EUROPEAN SEARCH REPORT

Application Number
EP 20 15 4176

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X	US 2019/008296 A1 (SUPRINA SCOTT F [US]) 10 January 2019 (2019-01-10)	1,4-14	INV. A47G19/22 B65D1/02 B65D8/00
Y	* paragraph [0059]; figures 1-17 * -----	2,3	
X	US 2014/165847 A1 (SUPRINA SCOTT F [US]) 19 June 2014 (2014-06-19)	1,4-14	
Y	* paragraph [0055]; figures 1-12 * -----	2,3	
	US 6 164 473 A (WALDRIP R LELAND [US]) 26 December 2000 (2000-12-26)		
	* column 5, line 37 - line 51; figure 6 * -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A47G B65D
Place of search		Date of completion of the search	Examiner
Munich		30 March 2021	Fritsch, Klaus
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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The members are as contained in the European Patent Office EDP file on
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30-03-2021

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82