



US 20150175308A1

(19) **United States**

(12) **Patent Application Publication**
Christian

(10) **Pub. No.: US 2015/0175308 A1**

(43) **Pub. Date: Jun. 25, 2015**

(54) **BUCKET ASSEMBLY**

(52) **U.S. Cl.**

CPC **B65D 25/20** (2013.01)

(71) Applicant: **Steven Christian**, Houston, TX (US)

(72) Inventor: **Steven Christian**, Houston, TX (US)

(57)

ABSTRACT

(21) Appl. No.: **14/138,108**

(22) Filed: **Dec. 22, 2013**

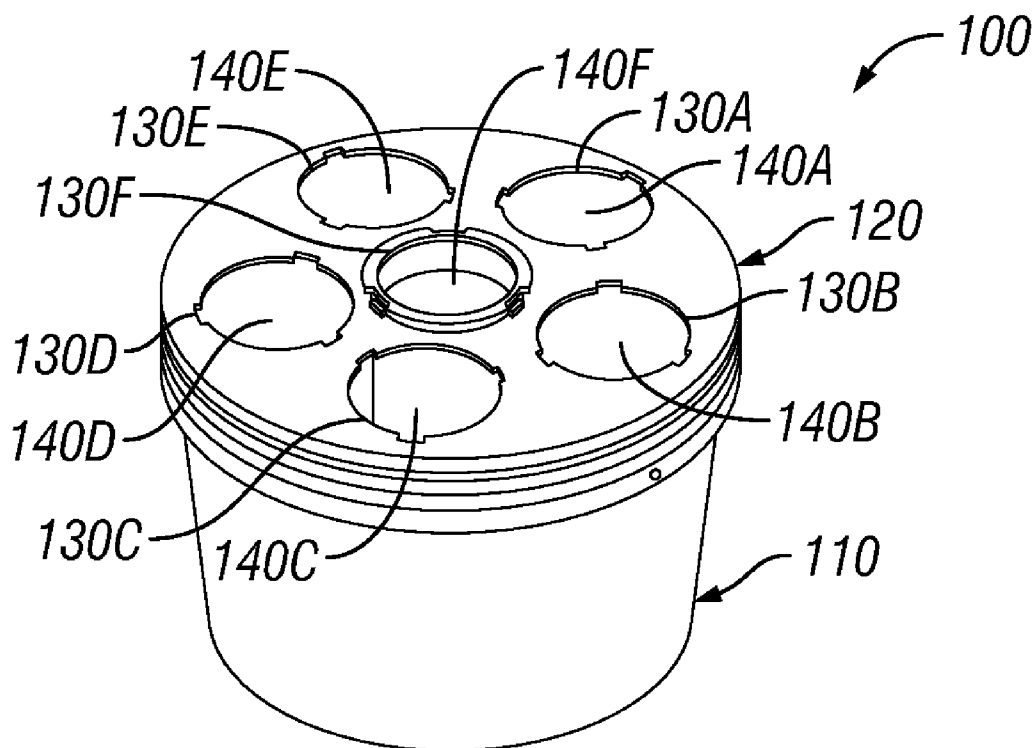
A bucket assembly includes a bucket, a lid, and a beverage holding insert that extends outwardly from the lid and into the bucket. The bucket can include ice to keep a beverage located in the beverage holding insert cold. The beverage holding insert provides a watertight seal such that liquids, ice, or contaminants cannot pass into the bucket and contaminate ice located therein.

Publication Classification

(51) **Int. Cl.**

B65D 25/20

(2006.01)



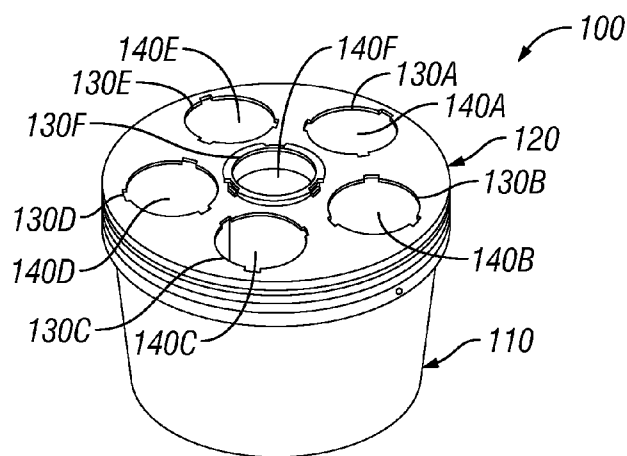


FIG. 1

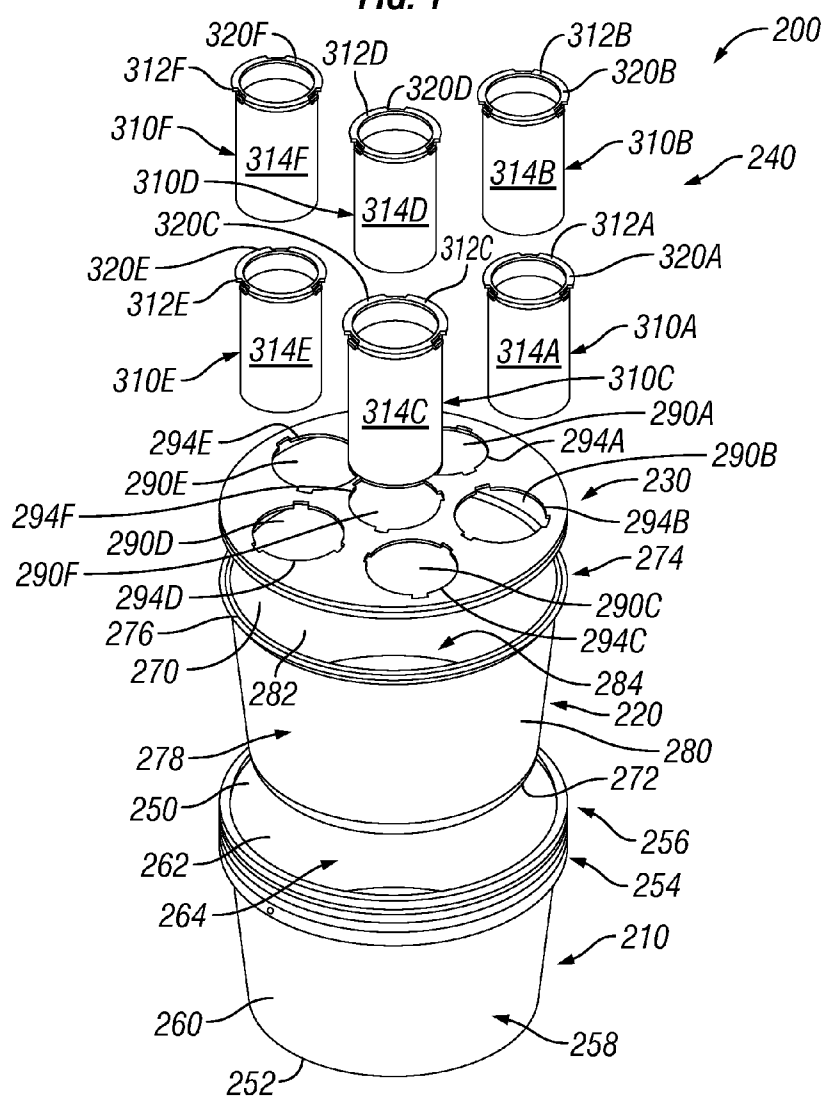


FIG. 2

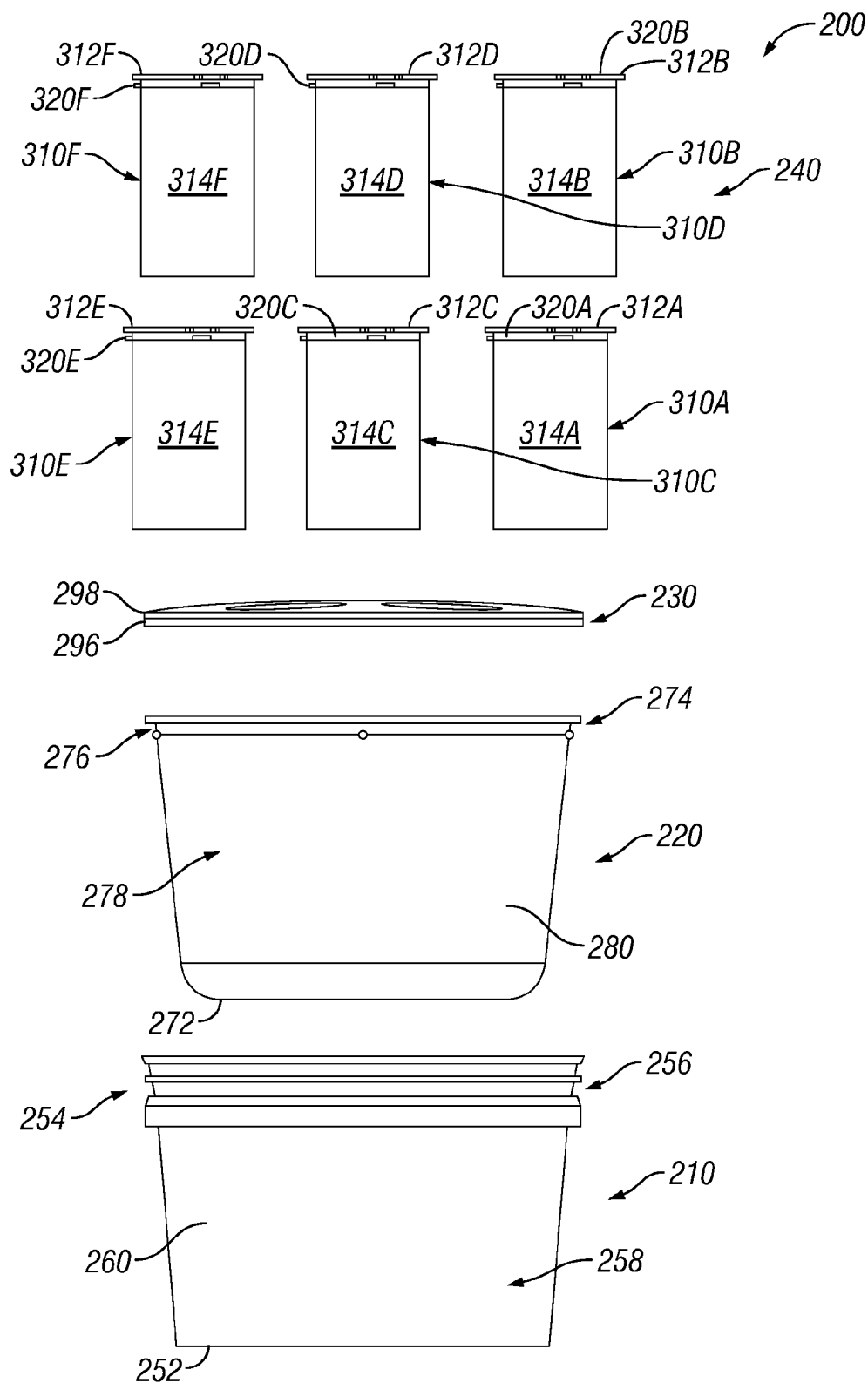


FIG. 3

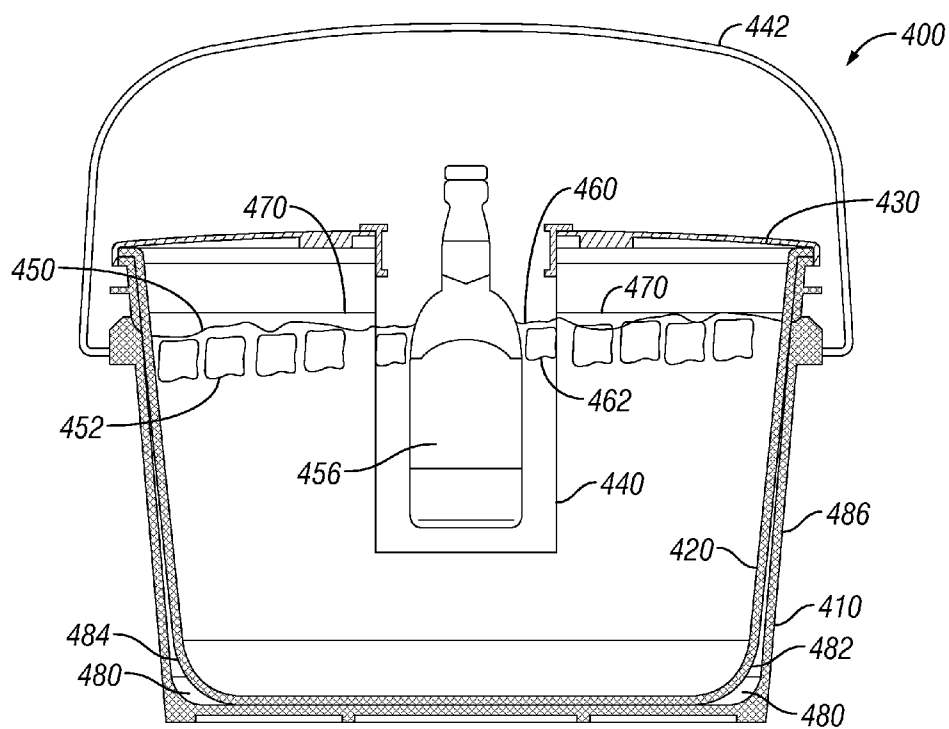


FIG. 4

BUCKET ASSEMBLY

BACKGROUND

[0001] Bars, restaurants, and other businesses that sell food and drinks often place beverages in a bucket filled with ice in order to keep the beverages cold. The buckets are then sold to customers who consume the beverages.

[0002] As the ice melts, the beverages are removed from the bucket and often even placed back into the bucket to keep the beverages cold. This action of removing the beverages from the bucket causes ice and water contained in the bucket to spill. The ice inside the bucket also tends to melt rapidly since the ice is exposed to warm ambient air. Furthermore, liquid from the beverages or other foreign contaminants often mix with the water and ice in the bucket and prevent the ice from being used with another customer.

[0003] Businesses spend large sums of money on ice in order to keep the beverages in the buckets cold. Much of this ice, however, is wasted since it is spilled from the bucket, melted from warm ambient air, and contaminated.

SUMMARY

[0004] One example embodiment is a bucket assembly that includes a bucket, a lid with at least one hole, and a beverage holding insert that extends outwardly from the lid and into the bucket. The bucket can include ice to keep a beverage located in the beverage holding insert cold. The beverage holding insert includes a bladder or body that provides a watertight seal such that liquids, ice, or contaminants cannot pass into the bucket and contaminate ice located therein.

[0005] Other example embodiments and variations of these embodiments are shown and taught in the accompanying drawings and detailed description.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 is a perspective view of a bucket assembly in accordance with an example embodiment of the invention.

[0007] FIG. 2 is an exploded view of a bucket assembly in accordance with an example embodiment of the invention.

[0008] FIG. 3 is a side view of the bucket assembly of FIG. 2 in accordance with an example embodiment of the invention.

[0009] FIG. 4 is a cross-sectional side view of a bucket assembly in accordance with an example embodiment of the invention.

DETAILED DESCRIPTION

[0010] Example embodiments include a bucket assembly that holds beverages and provides a housing that maintains the beverages cold.

[0011] One example embodiment includes two interlocking buckets, a lid that removably connects to the buckets, and one or more beverage holding inserts that lock and engage the lid. These beverage holding inserts hold one or more beverages and extend into the buckets that are filled with ice and/or cold water.

[0012] The bucket assembly keeps water and ice sealed inside of the bucket and prevents contaminants from entering the bucket and contaminating the water and ice sealed therein. Furthermore, these buckets include an air-gap or air-lock space that reduces or eliminates condensation from forming on an exterior surface of the outer bucket and also insulates

the ice located inside of the bucket. As such, the bucket assembly reduces and slows the melting process of the ice located inside of the bucket.

[0013] When beverages are positioned inside the beverage holding inserts, the beverages remain submerged in the ice and/or water located in the bucket and thus remain cold. Furthermore, components of the bucket assembly (such as the two buckets, the lid, and the beverage holding inserts) are separable and removable from each other. As such, these components can be readily cleaned and/or replaced if one of them becomes damaged.

[0014] Furthermore, the beverage holding inserts include bladders that are watertight and/or waterproof. As such, the bladders prohibit or stop drainage from the beverages or any contaminants (such as trash or foreign particles) from entering the bucket and contaminating the ice located therein.

[0015] The bucket assembly saves bars, restaurants, and other businesses that sell food and drinks money since ice used to cool beverages lasts longer, remains confined inside the bucket (e.g., does not spill from the bucket), and remains free from contaminants so ice remaining in the bucket can be safely reused.

[0016] FIG. 1 is a perspective view of a bucket assembly 100 in accordance with an example embodiment of the invention. The bucket assembly 100 includes a bucket 110 and a lid 120 that removably connects to the bucket 110. The lid 120 includes a plurality of circular holes 130A-130F that extend through a body of the lid. A plurality of beverage holding inserts 140A-140F connect to the lid at the holes and extend downwardly into a volume of the bucket.

[0017] For illustration, FIG. 1 shows the lid 120 with six holes and six beverage holding inserts connected to the lid. Example embodiments, however, include different numbers of holes and beverage holding inserts, such as one, two, three, four, five, six, seven, etc.

[0018] FIGS. 2 and 3 show a bucket assembly 200 that includes an outer bucket 210, an inner bucket 220, a lid 230, and a plurality of beverage holding inserts 240.

[0019] The outer bucket 210 has a cylindrical shape or truncated cone shape with an open top 250 and a flat bottom 252. A top of the outer bucket includes a rim 254 with one or more locking mechanisms 256. A body 258 of the outer bucket includes an outer surface 260 and an inner surface 262. This body defines a volume or space 264 into which the inner bucket 220 is positioned.

[0020] The inner bucket 220 has a cylindrical shape or truncated cone shape with an open top 270 and a flat bottom 272. A top of the inner bucket includes a rim 274 with one or more locking mechanisms 276. A body 278 of the inner bucket includes an outer surface 280 and an inner surface 282. This body defines a volume or space 284 into which the plurality of beverage holding inserts 240 is positioned. This volume or space 284 also holds water, ice, or other liquids and material to keep beverages cold when such beverages are located in the plurality of beverage holding inserts 240.

[0021] The outer bucket 210 and the inner bucket 220 have similar shapes with the inner bucket 220 having a smaller size than the outer bucket 210. As such, the body 278 of the inner bucket 220 can fit into or inside of the volume or space 264 of the outer bucket 210.

[0022] When the inner bucket 220 fits within the volume or space 264 of the outer bucket 210, the locking mechanism 276 of the inner bucket 220 engages the locking mechanism 256 of the outer bucket 210. These locking mechanisms engage

each other such that the inner bucket **220** locks to or connects with the outer bucket **210**. By way of example, these locking mechanisms include, but are not limited to snap-fit connections, twist-lock connections, threaded connections, tongue and groove connections, and other type of mechanical connections.

[0023] The lid **230** includes a plurality of holes or apertures **290A-290F** that extend through a body of the lid. By way of example, these apertures **290A-290F** have a circular shape, but other shapes (such as polygonal shapes) can be utilized. Further, for illustration, six apertures are shown, but the lid can have a different number of apertures (such as having a single aperture, two apertures, three apertures, four apertures, etc.).

[0024] The lid **230** has a circular or disk shape, and the apertures **290A-290F** are evenly spaced or evenly distributed across the body of the lid. Each aperture **290A-290F** has a perimeter with a locking mechanism **294A-294F**. Further, the lid **230** has a perimeter or outer edge **296** with a locking mechanism **298**.

[0025] By way of illustration, the plurality of beverage holding inserts **240** include six beverage holding inserts **310A-310F**, but a different number of inserts can also be used (such as a single beverage holding insert, two beverage holding inserts, three beverage holding inserts, etc.).

[0026] In an example embodiment, a number of beverage holding inserts equals a number of apertures in the lid. For illustration, FIGS. **2** and **3** show six beverage holding inserts **310A-310F** and six apertures **290A-290F**. Each beverage holding insert engages with one of the apertures.

[0027] The beverage holding inserts **310A-310F** have an elongated rectangular shape that includes a rigid ring-shaped rim **312A-312F** and a body or bladder **314A-314F**. Each ring-shaped rim **312A-312F** further has a locking mechanism **320A-320F**.

[0028] The bladders **314A-314F** are formed of plastic or polymer and can have a strong rigid body that does not bend or flex. Alternatively, the bladders can have a flexible, foldable body that bends. For example, a flexible body can change shapes and wrap around or conform to a shape of a beverage inserted into the bladder (such as wrapping around a bottle or can that is inserted into or housed in the bladder).

[0029] Furthermore, the bladders **314A-314F** are watertight and/or waterproof such that water or another liquid (such as a liquid used to cool beverages) cannot escape through or pass into or out of the bladder. For example, when the bladder is filled with water, this water cannot seep through or escape through the body of the bladder. Further, water or another liquid cannot seep or pass into the bladder from an outside source. For instance, when the bladder is positioned in or immersed in water located in the bucket, this water cannot pass through the body of the bladder.

[0030] The bladders **314A-314F** and/or beverage holding inserts **310A-310F** have an elongated cylindrical or rectangular shape and can be sized and shaped to receive and house a bottle and/or a can (such as a bottle of beer or soda or a can of beer or soda). By way of example, a bladder and/or beverage holding insert has a width of about two and one-half inches to about three and one-half inches and a length of about four and one-half inches to about seven and one-half inches. Furthermore, the bladder and/or beverage holding insert can have different shapes, such as a polygonal shape, a circular shape, an elongated shape with rounded corners, etc. Further yet, each bladder and/or beverage holding insert can house

one or more bottles or cans. For example, a single bladder can house one can and/or one bottle, two cans and/or two bottles, three cans and/or three bottles, etc. A size and shape of the bladder and/or beverage holding insert can depend on what objects it is intended to house and how many of these objects.

[0031] The locking mechanisms **320A-320F** of the beverage holding inserts **310A-310F** engage the locking mechanisms **294A-294F** of the lid **230** such that the beverage holding inserts are removable from the lid. These beverage holding inserts can be removed from the lid and washed, cleaned, or replaced if broken or damaged. By way of example, these locking mechanisms include, but are not limited to, snap-fit connections, twist-lock connections, threaded connections, tongue and groove connections, and other type of mechanical connections.

[0032] The locking mechanism **298** of the lid **230** engages the locking mechanism **276** of the inner bucket **220** and/or the locking mechanism **256** of the outer bucket **210** in order to engage and connect the lid to the inner and/or outer buckets. These locking mechanisms provide a watertight and removable connection between the lid and the inner and/or outer buckets. By way of example, these locking mechanisms include, but are not limited to, snap-fit connections, twist-lock connections, threaded connections, tongue and groove connections, and other type of mechanical connections.

[0033] FIG. **4** is a cross-sectional side view of a bucket assembly **400** in accordance with an example embodiment of the invention. The bucket assembly **400** includes an outer bucket **410**, an inner bucket **420**, a lid **430**, and at least one beverage holding insert **440**.

[0034] The inner bucket **420** engages with the outer bucket **410** such that these two buckets are removable from each other. Alternatively, these two buckets can be integrally formed. For example, the two buckets are not separable but formed as a single unitary bucket. A semicircular handle **442** extends from opposite sides of the bucket to provide easy transport or carrying of the bucket assembly.

[0035] The inner bucket **420** is filled with water, ice, and/or a fluid or material to keep beverages cold. By way of example, FIG. **4** shows the inner bucket filled with water **450** and ice **452** that are placed inside the inner bucket in order to keep a beverage **456** cold. This beverage is positioned inside of the beverage holding insert **440**. Water **460** and ice **462** are also placed inside of the beverage holding insert **440** to keep the beverage **456** cold.

[0036] The beverage holding insert **440** is watertight such that the water **460**, ice **462**, and other contaminants cannot escape through walls of the beverage holding insert and into the inner bucket. Further, the water **450** and ice **452** located in the inner bucket cannot escape into or pass into the beverage holding insert **440**. As such, liquid and/or material located in the beverage holding insert cannot pass into the inner bucket and contaminate liquid, ice, and/or material located in the inner bucket.

[0037] FIG. **4** also shows that the inner bucket **420** includes a fill line **470**. This fill line **470** extends around an interior surface of the inner bucket **420** and provides a visual indication for how much ice and/or water to place inside of the bucket.

[0038] As shown in FIG. **4**, an air gap or air-lock space **480** extends between an outer surface **482** of the inner bucket **420** and an inner surface **484** of the outer bucket **410**. This air-lock space **480** reduces condensation on an outer surface **486** of the outer bucket **410** when the inner bucket **420** includes ice or

another cooling liquid or material. For instance, when the bucket is filled with ice and/or water, the air-lock space provides insulation or an air barrier that assists in reducing the transfer of heat or cold between the inner and outer buckets.

[0039] Consider an example in which a restaurant fills the bucket with ice and places the lid over the bucket to prevent the ice from spilling out of the bucket. Beverages are then placed in the beverage holding inserts along with additional ice. The ice in the bucket assists in keeping the beverages cold. A customer accidentally spills some of the beverage onto the lid. This spilled beverage enters the beverage holding inserts but does not enter the bucket. As such, the ice located inside of the bucket remains free from contaminants. The customer finishes the beverages and leaves the restaurant. Thereafter, staff at the restaurant remove the lid of the bucket and obtain the ice in the bucket. This ice can be reused in another bucket or for another purpose since it was sealed in the bucket and was not exposed to external contaminants.

[0040] Consider another example in which customers in a bar order four bottles of beer. The bar has lids with different number of holes (such as lids with three holes, lids with four holes, lids with five holes, and lids with six holes). Since the customer ordered four bottles of beer, the bar selects a lid with four holes. A bucket is filled with ice, and the lid is screwed or snapped onto the bucket. Four beverage holding inserts connect to the holes in the lid and extend downwardly into the ice in the bucket. One bottle of beer is placed in each beverage holding insert, and additionally ice is added into the beverage holding inserts containing the beers. Thermal conduction through the bladders of the beverage holding inserts enables the ice in the bucket to keep the beverages cold while they are located in the beverage holding inserts.

[0041] Consider another example in which a customer orders several cans of cold soda. An inner bucket is snapped into an outer bucket, and then the inner bucket is filled with ice. Thereafter, a lid with beverage holding inserts is snapped onto the inner bucket and/or outer bucket to form a bucket assembly. While drinking the cans of soda, the customer accidentally knocks the bucket assembly from a table onto the floor. The bucket assembly does not break or damage since it is formed of plastic or polymers. Furthermore, ice and water located inside the inner bucket does not spill since the lid forms a watertight seal with the inner bucket and/or outer bucket.

[0042] The bucket assembly can be made from one or more of plastics, polymers, metals, steel, composite materials, and wood.

[0043] One skilled in the art will appreciate that a discussion of various example methods should not be construed as steps that must proceed in a particular order. Further, those skilled in the art will appreciate, upon reading this disclosure, numerous modifications and variations to example embodiments. The appended claims cover such modifications and variations.

1. A bucket assembly, comprising:

- an outer bucket;
- an inner bucket that fits inside of and removably engages with the outer bucket;
- a lid that includes a plurality of holes and that engages the inner bucket to form a watertight seal that prevents liquid from exiting the inner bucket; and
- a plurality of beverage holding inserts that each include a rigid ring-shaped rim and an elongated cylindrically-shaped bladder that connects to the ring-shaped rim,

wherein the ring-shaped rim of each of the plurality of beverage holding inserts removably engages the lid at one of the plurality of holes such that the lid connects and holds the beverage holding inserts inside the inner bucket and such that the bladder of each beverage holding insert extends into the inner bucket,

wherein the bladder of each beverage holding insert is watertight so water cannot enter into and escape through the bladder when the bladder is immersed in liquid contained in the inner bucket.

2. The bucket assembly of claim 1, wherein the bladder of each beverage holding insert is pliable and formed of a polymer.

3. The bucket assembly of claim 1, wherein the ring-shaped rim of each beverage holding insert removably engages with the lid with one of a snap-fit connection and a threaded connection.

4. The bucket assembly of claim 1, wherein the bladder of each beverage holding insert is foldable.

5. The bucket assembly of claim 1, wherein the bladder of each beverage holding insert is sized and shaped to receive and hold one of a single beer bottle and a single beer can.

6. The bucket assembly of claim 1, wherein the plurality of holes of the lid includes six equally spaced holes, and each of the six equally spaced holes engages with one of the plurality of beverage holding inserts.

7. The bucket assembly of claim 1, wherein the inner bucket engages the outer bucket to provide an air-lock space therebetween that reduces condensation on an outer surface of the outer bucket when the inner bucket is filled with water and ice.

8. The bucket assembly of claim 1, wherein the outer bucket includes a rim with a locking mechanism, the inner bucket includes a rim with a locking mechanism, and the locking mechanism of the outer bucket removably engages the locking mechanism of the inner bucket with one of a snap-fit connection and a threaded connection.

9. The bucket assembly of claim 1, wherein the lid engages the outer and inner buckets to form a watertight so water cannot from the inner bucket when the outer bucket, the lid, and the inner bucket are engaged together.

10. A bucket assembly, comprising:

- an outer bucket;
- an inner bucket that fits inside of and engages with the outer bucket;
- a lid that includes a plurality of circular holes sized to receive an end of a beer bottle, that engages with and is removable from the outer bucket and the inner bucket, and that forms a watertight seal that prevents liquid from exiting the inner bucket; and
- a plurality of beverage holding inserts that each include a rigid rim and an elongated flexible and collapsible bladder that connects to the rigid rim,

wherein the rigid rim of each of the plurality of beverage holding inserts removably engages the lid at one of the plurality of circular holes such that the lid connects and holds the beverage holding inserts inside the inner bucket and such that the bladder of each beverage holding insert extends into the inner bucket and into the outer bucket,

wherein the plurality of beverage holding inserts form a watertight seal such that liquid contained in the beverage holding inserts cannot pass into either the outer bucket and the inner bucket and liquid contained in the inner

bucket cannot pass into the beverage holding inserts when the plurality of beverage holding inserts are immersed in liquid contained in the inner bucket.

11. The bucket assembly of claim **10**, wherein the inner bucket removably engages with the outer bucket with one of a snap-fit connection and a threaded connection.

12. The bucket assembly of claim **10**, wherein each of the plurality of circular holes has a diameter from about two and one-half inches to about three and one-half inches.

13. The bucket assembly of claim **10**, wherein the inner bucket engages the outer bucket to provide an air-lock space that exists between an outside surface of the inner bucket and an inside surface of the outer buck such that the air-lock space reduces condensation on an outer surface of the outer bucket when the inner bucket is filled with water and ice.

14. The bucket assembly of claim **10**, wherein the lid has a circular shape that engages a circular shaped rim of the outer bucket and a circular shape rim of the inner bucket.

15. The bucket assembly of claim **10**, wherein each of the plurality of beverage holding inserts has an elongated cylindrical shape with a size to hold a beer bottle while an end of the beer bottle is emerged in water and ice trapped inside the inner bucket.

16. The bucket assembly of claim **10**, wherein the inner bucket includes a circular fill line that extends around an interior surface of the inner bucket and indicates a limit for filling the inner bucket with ice and water.

17. A bucket assembly, comprising:

a bucket having a vertical cylindrical shape or truncated cone shape and having an open top and a flat bottom;

a circular lid that includes a plurality of circular holes and that engages the bucket to form a watertight seal that prevents liquid included in the bucket from exiting the bucket; and

a plurality of beverage holding inserts with a rigid rim and an elongated cylindrically-shaped bladder that extends from the rigid rim and that is sized to receive and hold a single beer bottle,

wherein the rigid rim of each of the plurality of beverage holding inserts removably engages the lid at one of the plurality of circular holes such that the lid connects and holds the beverage holding inserts inside the bucket and such that the bladder of each beverage holding insert extends into the bucket,

wherein each of the plurality of beverage holding inserts forms a watertight seal such that with the liquid in the bucket cannot escape into the plurality of beverage holding inserts and liquid in the beverage cannot escape through the beverage holding inserts and into the bucket.

18. The bucket assembly of claim **17**, wherein the bucket includes an outer surface, an inner surface, and an air-lock space that exists between exterior and interior surfaces and reduces condensation on the outer surface when the bucket is filled with water and ice.

19. The bucket assembly of claim **17**, wherein the lid includes six beverage holding inserts that extend into a volume of the bucket defined between the open top and the flat bottom.

20. The bucket assembly of claim **17**, wherein each of the plurality of beverage holding inserts are formed of polymer and are flexible and foldable.

* * * * *