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(54) **DUAL CHAMBER BOTTLE**

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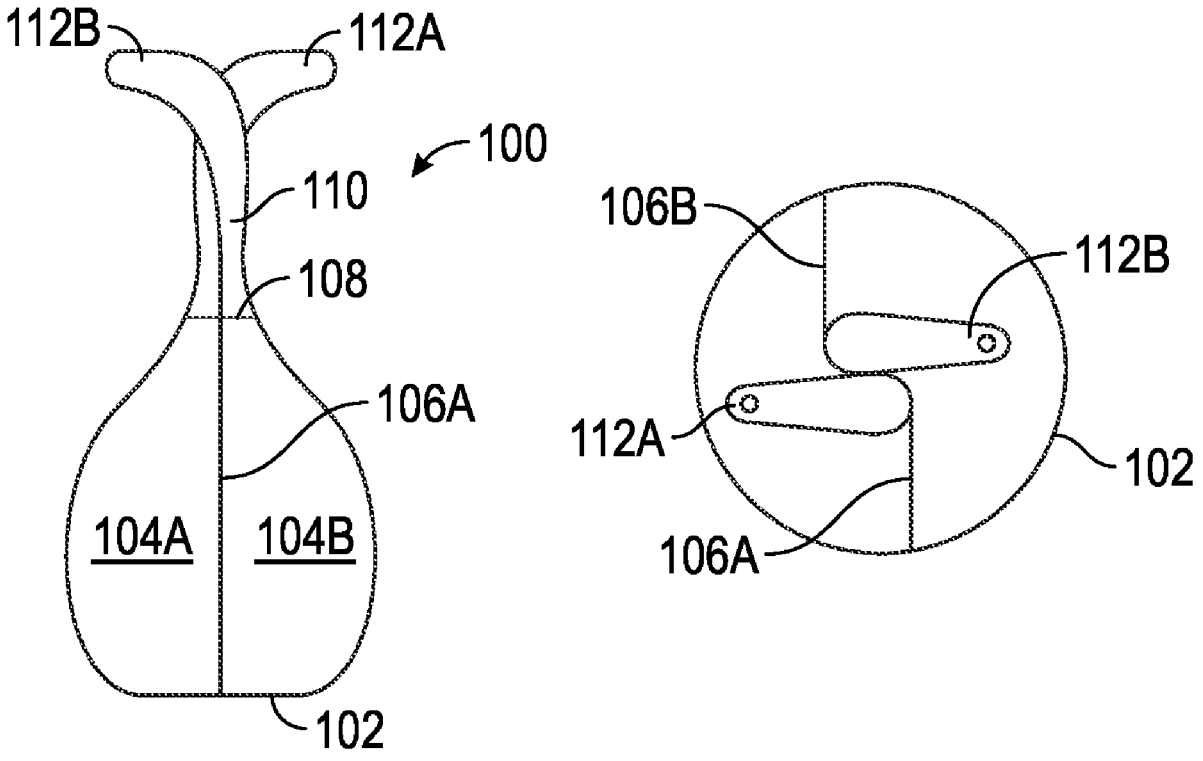
(57) **ABSTRACT**

Systems and methods are disclosed for dispensing a drink by storing a first drink in a first portion having a first storage chamber, a first elongated neck, and a first spout; storing a second portion having a second storage chamber, a second elongated neck, and a second spout, wherein the first and second storage chambers are integrally formed and coupled by internal separation walls, the first and second necks are coupled by internal and external separation walls, and the first and second spouts are spaced apart.



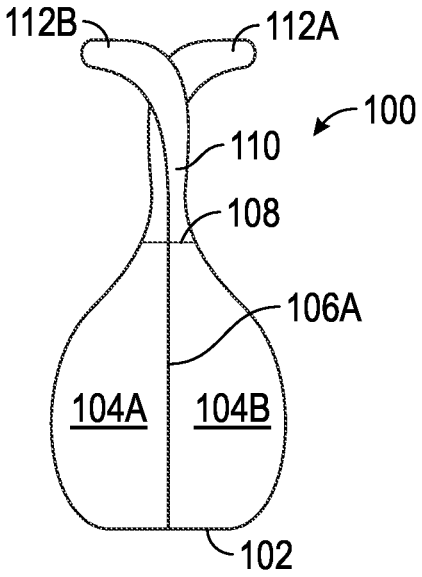


FIG. 1A

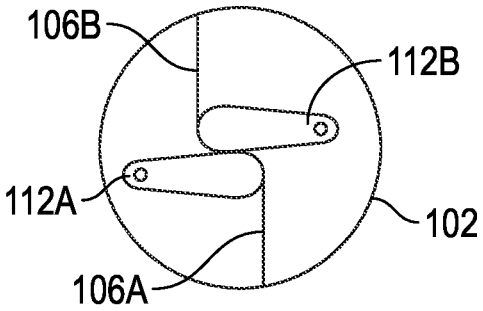


FIG. 1B

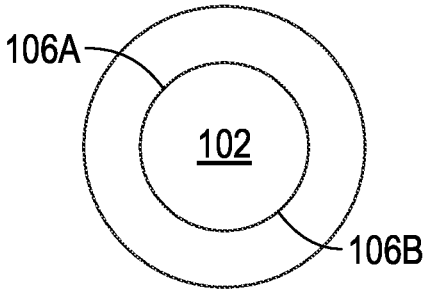


FIG. 1C

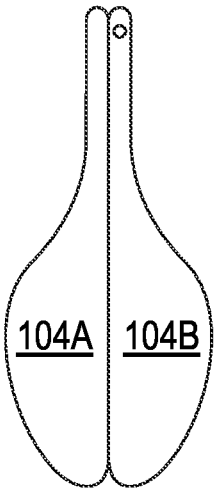


FIG. 1D

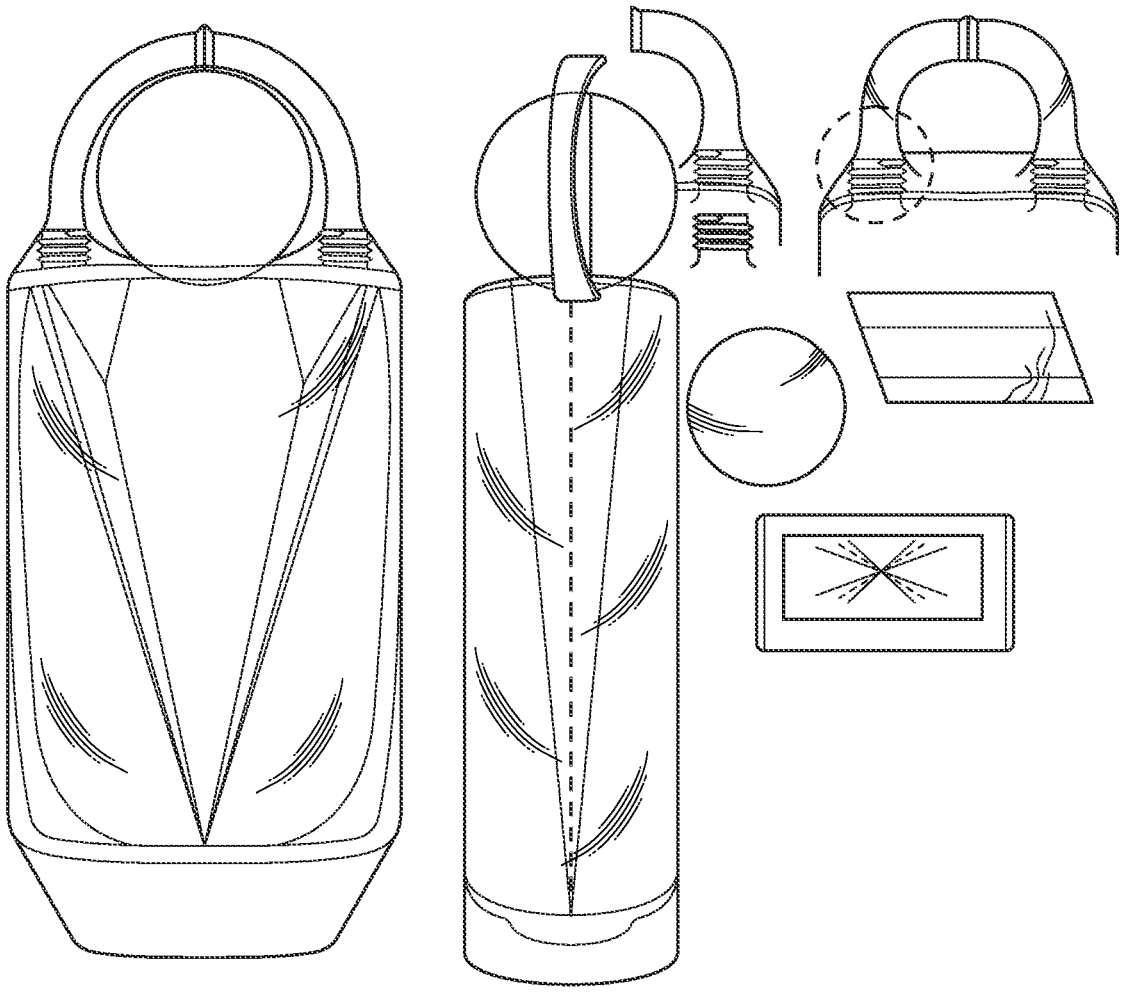


FIG. 2

DUAL CHAMBER BOTTLE

BACKGROUND

[0001] Liquor or spirit (also distilled alcohol) is an alcoholic drink produced by distillation of grains, fruits, or vegetables that have already gone through alcoholic fermentation. The distillation process concentrates the liquid to increase its alcohol by volume.[1] As liquors contain significantly more alcohol (ethanol) than other alcoholic drinks, they are considered "harder"—in North America, the term hard liquor is sometimes used to distinguish distilled alcoholic drinks from non-distilled ones, whereas the term spirits is used in the UK. Examples of liquors include brandy, vodka, absinthe, gin, rum, tequila, and whisky.

[0002] Liquor is typically dispensed from a bottle or flask. A hip flask is a thin flask for holding liquor and is typically bought separate from the liquor. Marketing the liquor and spirits in unique bottles will help attract attention and set a product apart from the rest. Typically the liquor is sold in a glass liquor bottle. A vital part of branding liquor and spirits is the overall design. Even details like the shape and style of the liquor bottle the vendor uses can make a big difference to potential consumers.

SUMMARY

[0003] Systems and methods are disclosed for dispensing a drink by storing a first drink in a first portion having a first storage chamber, a first elongated neck, and a first spout; storing a second portion having a second storage chamber, a second elongated neck, and a second spout, wherein the first and second storage chambers are integrally formed and coupled by internal separation walls, the first and second necks are coupled by internal and external separation walls, and the first and second spouts are spaced apart.

[0004] In one aspect, a bottle includes a first portion having a first storage chamber, a first elongated neck, and a first spout; and a second portion having a second storage chamber, a second elongated neck, and a second spout. The first and second storage chambers are integrally formed and coupled by internal separation walls, the first and second necks are coupled by internal and external separation walls, and the first and second spouts are spaced apart.

[0005] Alternative exemplary embodiments relate to other features and combinations of features as may be generally recited in the claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] This application will become more fully understood from the following detailed description, taken in conjunction with the accompanying figures, wherein like reference numerals refer to like elements in which:

[0007] FIG. **1**A-**1**D show an exemplary dual spout bottle.

[0008] FIG. **2** shows another exemplary dual spout bottle.

DETAILED DESCRIPTION

[0009] Before turning to the figures, which illustrate the exemplary embodiments in detail, it should be understood that the present application is not limited to the details or methodology set forth in the description or illustrated in the figures. It should also be understood that the terminology is for the purpose of description only and should be regarded as limiting.

[0010] FIG. **1**A-**1**D show an exemplary dual spout bottle **100**. The bottle has a base **102** that can be circular, square or any suitable shape that supports the liquid volume above the base **102**. Two reservoirs or chambers **104**A and **104**B extend above the base **102** separated by internal separations **106**A-**106**B. Extending from chambers **104**A-**104**B are two necks **110**A-**110**B, each of which are externally separated by way of an internal to external separation **108**A or **108**B. Two spouts **112**A-**112**B are connected to the necks **110**A-**110**B which in turn are connected to reservoirs/chambers **104**A-**104**B to allow access to the liquid in each of the reservoirs **104**A or **104**B. In one embodiment for storing liquor, a user can imbibe from one spout to enjoy one drink, and then switch to another spout to enjoy a different liquor, for example.

[0011] While liquor is discussed above, the multiple-chamber container may contain liquids, granular materials, gel-like substances, food, etc. that are not permitted to flow from one chamber to the other chamber. The multiple-chamber container may contain different substances in each chamber. For example, one chamber may contain a liquid substance and the second chamber may include a dry product, such as a granular material.

[0012] Referring to FIG. **2**, the first chamber **14** includes a first bottom wall **24** that is integrally formed with a first side wall **26**. The second chamber **18** includes a second bottom wall **28** that is integrally formed with a second side wall **30**. The first side wall **26** extends upwards, away from the first bottom wall **24** and terminates at the first tapered neck portion **12**.

[0013] The second side wall **30** extends upwards, away from the second bottom wall **28** and terminates at the second tapered neck portion **16**. The second bottom wall **28** is substantially coplanar with the first bottom wall **24**. In the exemplary embodiment, the first chamber **14** and the second chamber **18** are mirror images of each other. In other embodiments, the first chamber **14** and the second chamber **18** may have different dimensions.

[0014] FIG. **2** shows another exemplary dual chambered bottle. As shown therein, the spouts and/or necks are rotatable. Alternatively, the spouts and/or necks are pivotable.

[0015] In another embodiment, the spout **112**A may have circular cross-sections. The spout **112**A may be tapered, that is the cross-sections change in diameter from the bottom to the top of the spout or vice versa. Similarly, the neck **110**A may have circular cross-sections. The neck may be tapered, that is the cross-sections change in diameter from the bottom to the top of the spout or vice versa. In one embodiment, the first chamber **104**A may have a oval or circular cross-sections with a small diameter near the base and balloons into a large diameter before the diameter is reduced to a smaller diameter as it transitions into the first tapered neck portion **110**A.

[0016] In other embodiments, the cross-sections can be square or oval. In other embodiments, the cross-section of the chamber **104**A-**104**B may vary in shapes. For example, the first chamber **104**A may have a rectangular cross-section near the base and transitions into more of a square cross-section near the first tapered neck portion **110**A.

[0017] In yet other embodiments, the cross-sections of the reservoirs can have different shapes. For example, one reservoir can have a square shape while the other reservoir can have be oval in shape. In other embodiments, the cross-section of the chamber **104**A-**104**B may vary in

shapes. For example, the first chamber **104**A may have a oval cross-section near the base and transitions into more of a square cross-section near the first tapered neck portion **110**A.

[0018] Containers discussed herein may include containers of any style, shape, size, etc. For example, the containers discussed herein may be shaped such that cross-sections taken perpendicular to the longitudinal axis of the container are generally rectangular. However, in other embodiments the sidewall of the containers discussed herein may be shaped in a variety of ways as may be desirable for different applications or aesthetic reasons. In various embodiments, the sidewall of container **100** may include one or more axially extending sidewall sections that are curved radially inwardly or outwardly such that the diameter of the container is different at different places along the axial length of the container, and such curved sections may be smooth continuous curved sections.

[0019] Creating glass containers can be accomplished by one of two different processes—the Blow and Blow, or the Press and Blow process. Each process is chosen based on the kind of glass bottle being made. All glass bottles start out as raw materials. Silica (sand), soda ash, limestone, and cullet (furnace-ready, recycled glass) are combined into a specific mixture based on the desired properties of the bottle. The mixture is then melted at high temperatures in the furnace until it becomes a molten material, ready for formation. The type of glass this mixture will produce is known as soda-lime glass, the most popular glass for food and beverages. Molten glass gobs are cut by a perfectly-timed blade to ensure each gob is of equal weight before it goes into the forming machine. The weight of a gob is important to the formation process for each glass container being made. The molded glass is created by gravity feeding gobs of molten glass into a forming machine, where pressure forms the neck and basic shape of the bottle. Once the neck finish and the general glass bottle shape has been achieved, the form is known as a parison. To achieve the final container shape, one of two processes are used. The Press and Blow process is the most commonly used method in glass bottle manufacturing. It uses an individual section (IS) machine, which is separated into varying sections to produce several containers of the same size simultaneously. The molten glass is cut with a shearing blade into a specific gob size. The gob falls into the machine by force of gravity. A metal plunger is used to push the gob down into the mold, where it starts to take shape and become a parison. The parison is then transferred into the blow mold and reheated so that the parison is soft enough to finish off the dimensions of the glass. Once the parison is reheated to blowing temperature, air is injected to blow the container into shape. Press and blow methods are typically used for manufacturing wide-mouth bottles and jars as their size allows the plunger into the parison. The Blow and Blow process is used to create narrow containers. It also requires an IS machine, where gobs of molten glass are gravity fed into the mold. The parison is created by using compressed air to form the neck finish and basic bottle shape. The parison is then flipped 180 degrees and reheated before air is again injected to blow the container into its final shape. Compressed air is once again used to blow the bottle into its desired shape. Blow and Blow methods are best used for glass bottle manufacturing requiring different neck thicknesses. Once the bottle has been completely formed, it is removed from the mold and transferred to the annealing lehr. The lehr reheats the bottes to a temperature of about 1,050 degrees Fahrenheit then gradually cools them to about 390 F. This process allows the glass to cool at an even rate—eliminating internal stresses in the glass that could lead to cracking or shattering. Bottles are then subjected to careful inspections to ensure they meet quality control guidelines. Any bottles showing imperfections, including bubbles, cracks, or misshapen areas, are removed from the line and used as cullet. All remaining bottles are sorted according to size and type. The bottles are then packaged on pallets and prepared for shipping.

[0020] While glass is preferred, the instant bottle can form multi-chamber, plastic containers can be formed using extrusion blow molding. The container **100** may be of various sizes (e.g., 3 oz., 8 oz., 12 oz., 15 oz., 28 oz, etc.) as desired fora particular application.

[0021] The bottle can contain wine, liquor, perfume, or any liquid to be dispensed.

[0022] Further modifications and alternative embodiments of various aspects of the invention will be apparent to those skilled in the art in view of this description.

[0023] Accordingly, this description is to be construed as illustrative only. The construction and arrangements, shown in the various exemplary embodiments, are illustrative only. Although only a few embodiments have been described in detail in this disclosure, many modifications are possible (e.g., variations in sizes, dimensions, structures, shapes and proportions of the various elements, values of parameters, mounting arrangements, use of materials, colors, orientations, etc.) without materially departing from the novel teachings and advantages of the subject matter described herein. Some elements shown as integrally formed may be constructed of multiple parts or elements, the position of elements may be reversed or otherwise varied, and the nature or number of discrete elements or positions may be altered or varied. The order or sequence of any process, logical algorithm, or method steps may be varied or re-sequenced according to alternative embodiments. Other substitutions, modifications, changes and omissions may also be made in the design, operating conditions and arrangement of the various exemplary embodiments without departing from the scope of the present invention.

[0024] In various exemplary embodiments, the relative dimensions, including angles, lengths and radii, as shown in the Figures are to scale. Actual measurements of the Figures will disclose relative dimensions, angles and proportions of the various exemplary embodiments. Various exemplary embodiments extend to various ranges around the absolute and relative dimensions, angles and proportions that may be determined from the Figures. Various exemplary embodiments include any combination of one or more relative dimensions or angles that may be determined from the Figures. Further, actual dimensions not expressly set out in this description can be determined by using the ratios of dimensions measured in the Figures in combination with the express dimensions set out in this description.

What is claimed is:

1. A bottle, comprising:

a first portion having a first storage chamber, a first elongated neck, and a first spout; and

a second portion having a second storage chamber, a second elongated neck, and a second spout,

wherein the first and second storage chambers are integrally formed and coupled by internal separation walls,

wherein the first and second necks are coupled by internal and external separation walls, and

wherein the first and second spouts are spaced apart.

2. The bottle of claim **1**, comprising a base formed at the bottom of the first and second portions.

3. The bottle of claim **2**, wherein the base is circular or oval in shape.

4. The bottle of claim **2**, wherein the base is square or rectangular in shape.

5. The bottle of claim **2**, wherein the base extends into the first and second portion, wherein the first and second portions are balloon shaped.

6. The bottle of claim **2**, wherein the base extends into the first and second portion, wherein the first portion comprises a balloon shape with oval or circular diameters and second portion comprises rectangular or square shape.

7. The bottle of claim **2**, wherein the base extends into the first and second portion, wherein the first and second portions are rectangular or square shaped.

8. The bottle of claim **1**, comprising a cap for each spout.

9. The bottle of claim **1**, comprising liquor, perfume, wine, or a liquid in the storage chambers.

10. The bottle of claim **1**, comprising different liquid in each storage chamber.

11. A method for dispensing a drink, comprising:

storing a first drink in a first portion having a first storage chamber, a first elongated neck, and a first spout;

storing a second portion having a second storage chamber, a second elongated neck, and a second spout,

wherein the first and second storage chambers are integrally formed and coupled by internal separation walls, the first and second necks are coupled by internal and external separation walls, and the first and second spouts are spaced apart.

12. The method of claim **11**, comprising a base formed at the bottom of the first and second portions.

13. The method of claim **12**, wherein the base is circular or oval.

14. The method of claim **12**, wherein the base is square or rectangular in shape.

15. The method of claim **12**, wherein the base extends into the first and second portion, wherein the first and second portions are balloon shaped.

16. The method of claim **12**, wherein the base extends into the first and second portion, wherein the first portion comprises a balloon shape with oval or circular diameters and second portion comprises rectangular or square shape.

17. The method of claim **12**, wherein the base extends into the first and second portion, wherein the first and second portions are rectangular or square shaped.

18. The method of claim **11**, comprising securing the bottle with a cap for each spout.

19. The method of claim **11**, comprising storing liquor, perfume, wine, or a liquid in the storage chambers.

20. The method of claim **11**, comprising storing different solutions in each storage chamber.

* * * * *