US 20220361566A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0361566 A1**

Temur (43) **Pub. Date: Nov. 17, 2022**

(54) **DURABLE AND SHATTER RESISTANT GLASS WATER PIPE THAT IS EASY TO CLEAN**

(71) Applicant: **Donovan Temur**, Beverly Hills, CA (US)

(72) Inventor: **Donovan Temur**, Beverly Hills, CA (US)

(21) Appl. No.: **17/731,046**

(22) Filed: **Apr. 27, 2022**

Related U.S. Application Data

(60) Provisional application No. 63/189,349, filed on May 17, 2021.

Publication Classification

(51) **Int. Cl.**

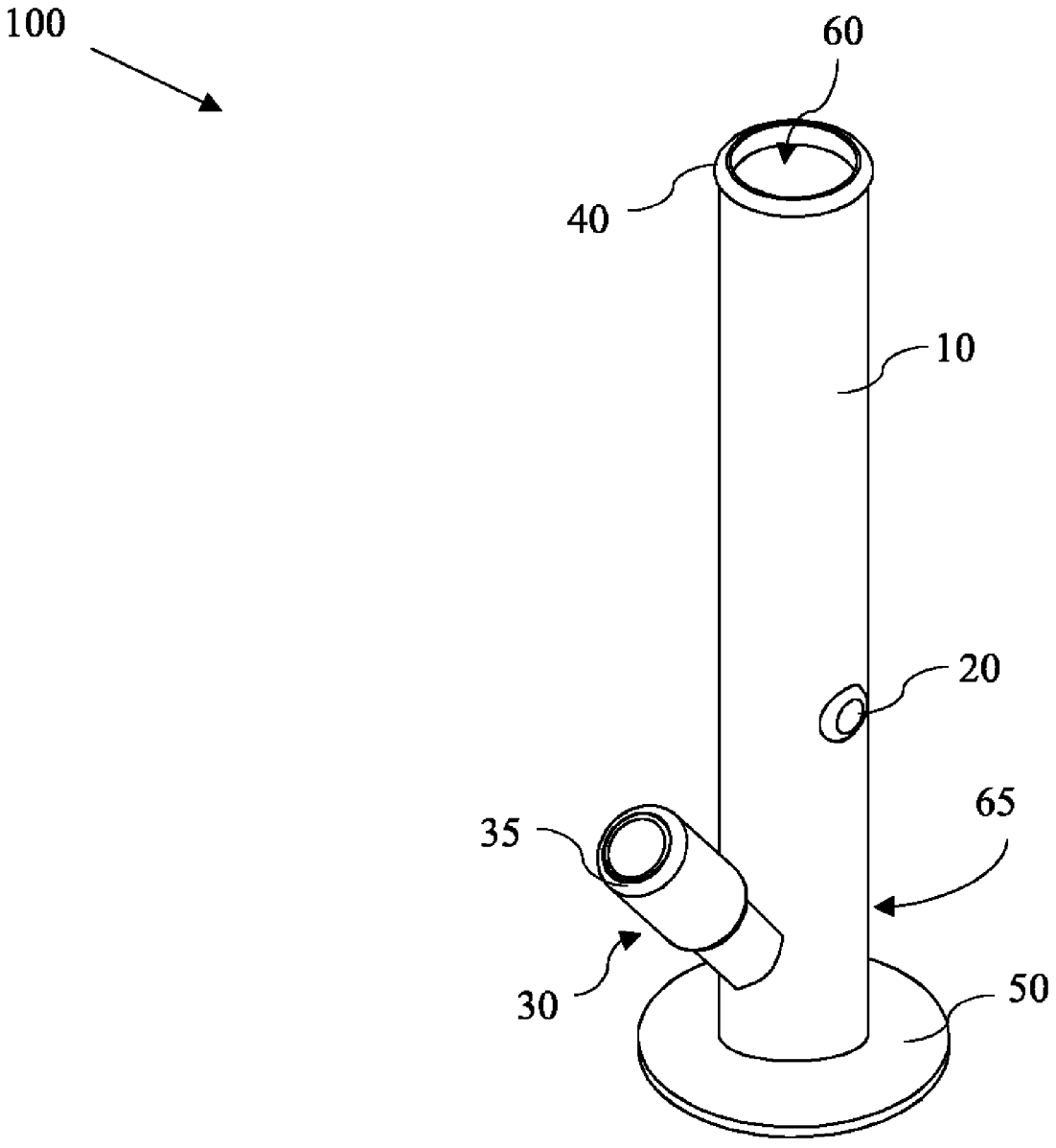
A24F 1/32	(2006.01)
A24F 1/30	(2006.01)
A24F 1/14	(2006.01)

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

CPC *A24F 1/32* (2013.01); *A24F 1/30* (2013.01); *A24F 1/14* (2013.01)

(57) **ABSTRACT**

The present invention provides a bong device that comprises a tubular pipe body having one or more apertures and a reservoir, a base, a detachable cylinder shape ice catcher, a stem that can be detachable, and a downstem sized to fit in the stem



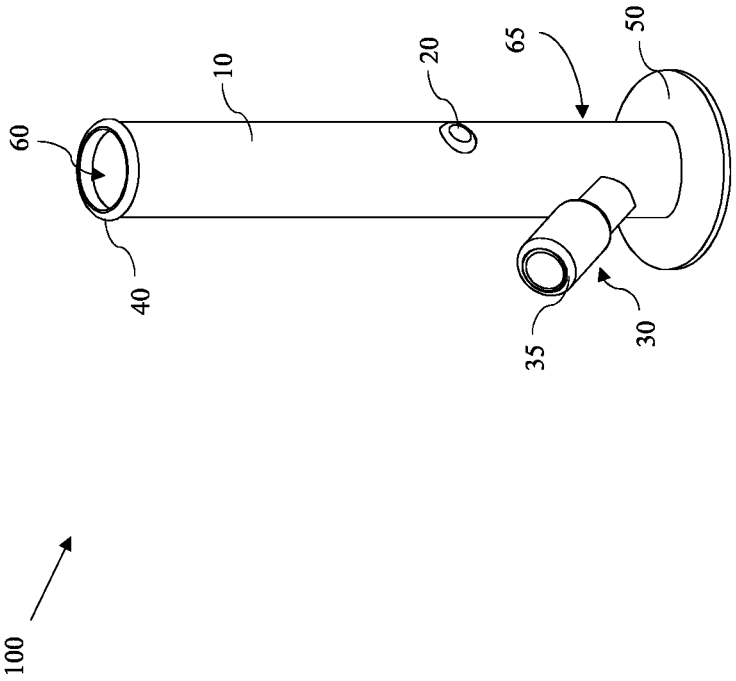


FIG. 1

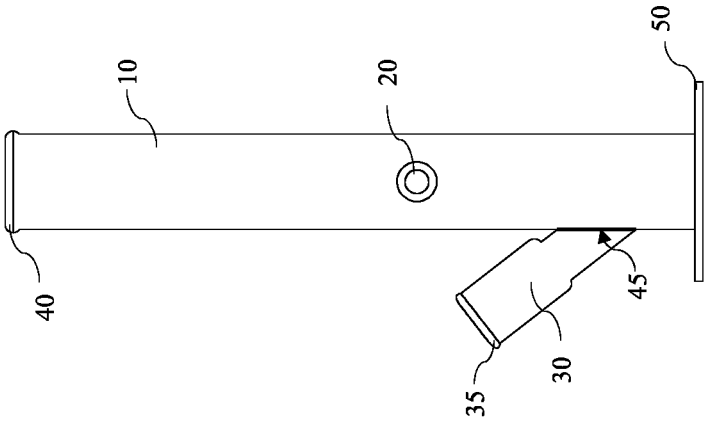


FIG. 2

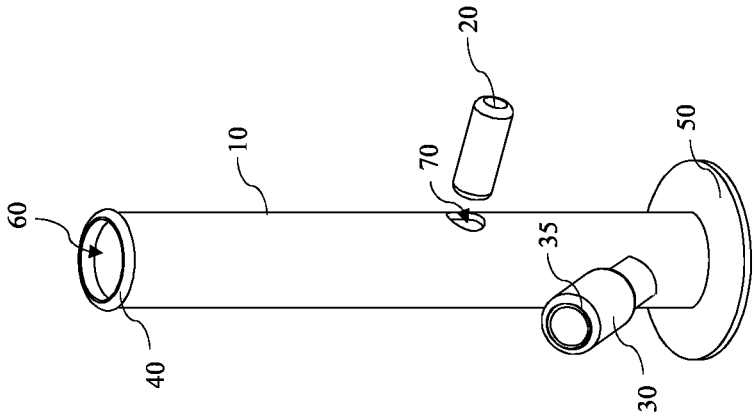


FIG. 3

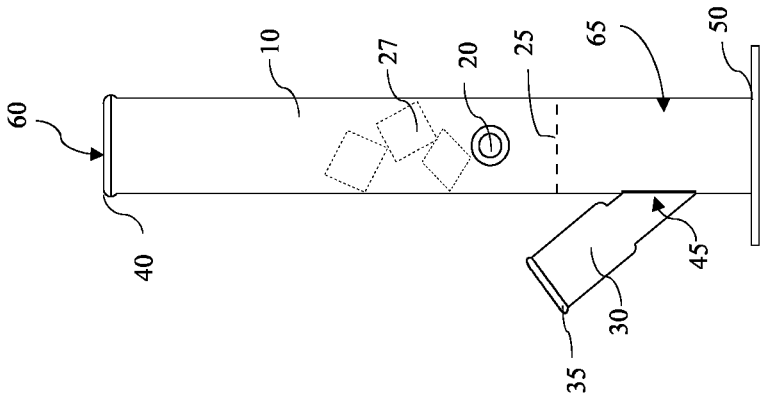


FIG. 4

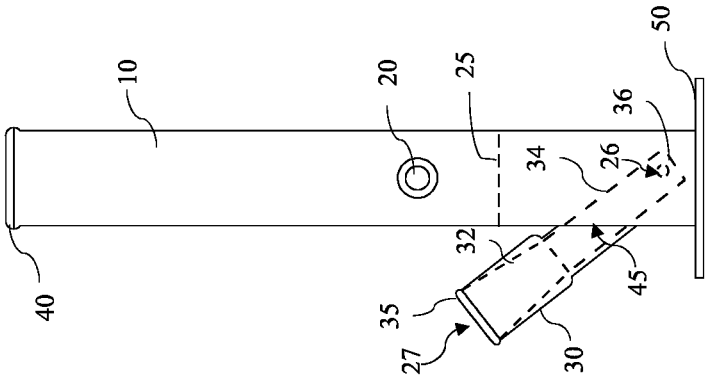


FIG. 5

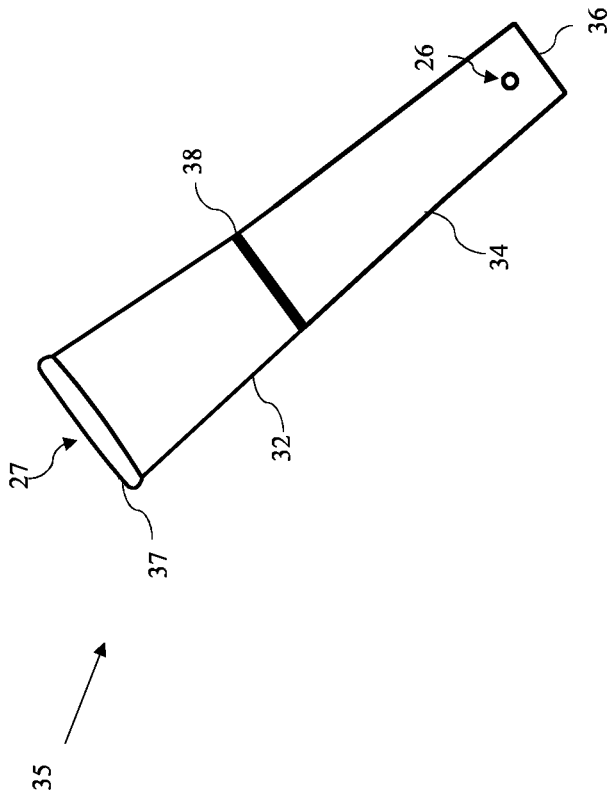


FIG. 6

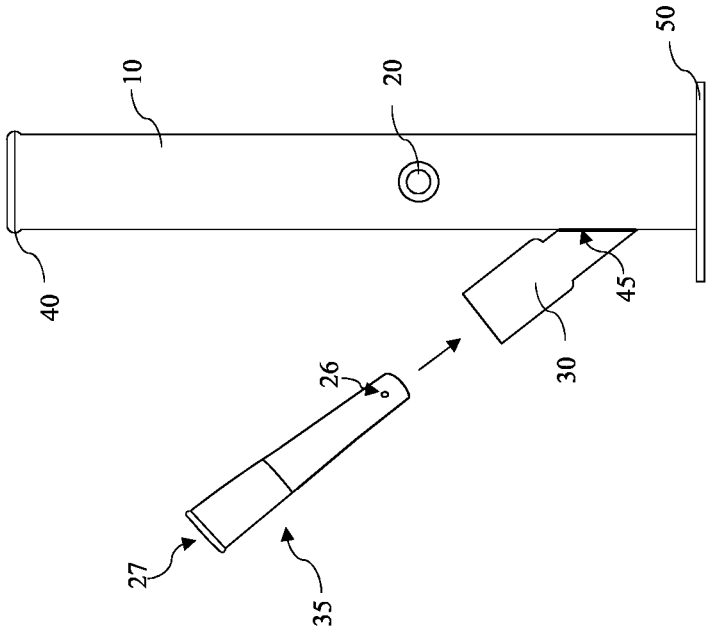


FIG. 7

DURABLE AND SHATTER RESISTANT GLASS WATER PIPE THAT IS EASY TO CLEAN

FIELD OF THE INVENTION

[0001] The present invention generally relates to smoking devices and vaporization devices. More specifically, the present invention relates to a water pipe with a detachable ice catcher, a detachable down-stem holder (aka stem), and a silicone armor system. The invention also will include a one-piece water pipe design made from one single mold instead of 4 individual pieces of glass being fused together.

BACKGROUND OF THE INVENTION

[0002] A water pipe with a detachable ice catcher is in demand. A bong (aka a water pipe) is a filtration device designed for smoking *cannabis*, tobacco, or other herbal substances. The purpose of a bong is twofold: it uses water to filter and cool the smoke or vape, thus acting as a filtration and cooling system.

[0003] In other words, the bong allows the user to produce a smoother, cleaner smoke or vape. The bong typically consists of 6 major components: main tube, mouthpiece, base, down stem holder (aka stem), down stem, and bowl. However, such pipes, as known in the art, have a single common feature: their relative frailty.

[0004] Pipes, including water pipes, are known to break when subjected to forces that exceed their mechanical strength characteristics. At the current time, almost all glass blowers in the USA buy these 6 components and then weld the mouthpiece, main tube, stem, and base together. Many bong manufacturers use a thin 5 mm down stem holder that will crack on impact.

[0005] The second problem that all *cannabis* users face is the inability to clean the pipe thoroughly with a brush due to two major components, the percolator and the ice catcher, which make it physically impossible to introduce a brush and reach all the nooks and crannies. The percolator is much more trouble than it is worth. Careful analysis shows that the percolator serves no functional purpose except to entertain and allow the seller to charge a premium price. No scientific evidence points to its benefits for this particular application. Meanwhile, the problem with all ice catchers is that they are permanent because they use a pinch design and do not allow the user to insert a brush for a thorough cleaning. Thus, there is a need to develop a device to solve these problems.

[0006] The present invention is intended to address problems associated with and/or otherwise improve on conventional systems and devices through an innovative bong device that is shatter-resistant and designed to provide an effective means to clean the bong while incorporating other problem-solving features.

SUMMARY

[0007] In accordance with the present invention, a bong device is provided. The bong device comprises a tubular pipe body having one or more apertures and a reservoir, a base, an ice catcher, a stem and a tubular downstem sized to fit in the stem.

[0008] In one embodiment, the ice catcher is detachably connected to the tubular body. The ice catcher is a cylindrical rod with smooth round outer edges to prevent injuries to the human fingers, and has silicone grommets attached on each end and deployed within the air passage defined within the tubular pipe body and configured to support one or more pieces of ice.

[0009] In one other embodiment, the tubular pipe body, mouthpiece, base, and stem are made of glass and molded or fused together as a single piece.

[0010] In some other embodiments, the tubular pipe body, mouthpiece, and base can be made of 9 mm-thick glass, and the downstem holder (aka stem) can be made of 7 mm-, 8 mm-, or 9 mm-thick glass.

[0011] In some other embodiments, the present invention can be made of 9 mm-thick glass throughout the entire bong device of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. **1** is a perspective view of the present invention.

[0013] FIG. **2** is a side view of the present invention.

[0014] FIG. **3** is an illustration of one embodiment of the present invention with the detachable ice catcher.

[0015] FIG. **4** is an illustration of one embodiment of the present invention with the ice in the tubular pipe body.

[0016] FIG. **5** is an illustration of one embodiment of the present invention with the downstem shown inside the tubular pipe body.

[0017] FIG. **6** is an illustration of an alternative embodiment of the downstem of the present invention.

[0018] FIG. **7** is an illustration of one embodiment of the present invention with the detachable silicone stem and separate downstem.

DETAIL DESCRIPTIONS OF THE INVENTION

[0019] All illustrations of the drawings are for the purpose of describing selected versions of the present invention and are not intended to limit the scope of the present invention.

[0020] The present invention provides a durable, shatter-resistant glass water pipe (bong) that is easy to clean with a brush.

[0021] Although glass is the most sought-after material for water pipes, the problem with this material is that glass will shatter when dropped. The present invention provides a bong that won't crack easily if a user drops it on the ground, even though it's made of glass.

[0022] The present invention includes a detachable ice catcher that allows the user to insert a brush to clean the bong thoroughly with soap and water, eliminating the need for professional cleaning and chemical cleaning solutions. All the water pipes currently on the market use a permanent pinch-style ice catcher that makes it physically impossible to stick a brush in.

[0023] As shown in FIGS. **1** to **5**, the present invention provides a bong device **100** that comprises a tubular pipe body **10**, a base **50**, an ice catcher **20**, a stem **30** and a down stem **35**. The tubular pipe body **10** may include a mouthpiece **40** that fits comfortably in a user's mouth when in use. The whole bong can be either a straight tubular design as show in FIGS. **1-7** or it can be a beaker style design which is similar to the shape of an erlenmeyer flask.

[0024] In the preferred embodiment, the tubular pipe body **10**, mouthpiece **40**, base **50**, and stem **30** are made of glass and molded or fused together as a single piece.

[0025] In some embodiments, the tubular pipe body **10**, mouthpiece **40**, and base **50** can be made of 9 mm-thick

glass, and the stem **30** can be made of 7 mm-, 8 mm-, or 9 mm-thick glass. The base **50** can be made of 9 mm-18 mm thick glass.

[0026] To further strengthen the area surrounding the stem **30**, which is the weakest point on the water pipe, an armor system can be provided, which can be made out of flexible silicone that acts as a shock absorber during a sudden impact.

[0027] In some embodiments, the entire bong device **100** of the present invention can be covered by the flexible silicone that acts as a shock absorber.

[0028] The tubular pipe body **10** defines the air passage **60**. The lower portion of the air passage **60** can be configured to serve as a reservoir **65** that can contain a cooling fluid (e.g., water).

[0029] In some embodiments, the tubular pipe body **10** may include a plurality of apertures **70** formed through a sidewall to regulate airflow through the tubular pipe body **10**.

[0030] As shown in FIG. **3**, the ice catcher **20** can be detachable and deployed within the air passage **60** of the tubular pipe body **10**.

[0031] In one embodiment, as shown in FIG. **4**, the ice catcher **20** can be positioned above an upper surface of water **25** put in the tubular pipe body **10** and can be configured to support one or more pieces of ice **27** for cooling the airflow as it passes through the tubular pipe body **10**.

[0032] In the preferred embodiment, the tubular pipe body **10** has an aperture **70** that accommodates the insertion of the ice catcher **20** made of glass, which is in the shape of a cylindrical rod in 8 mm thick. The ice catcher **20** could be anywhere from 6 mm-9 mm. The optimal size appears to be 8 mm and should have smooth round edges to prevent injuries to the human fingers. The ice catcher **20** can be suitably sized so that the ice catcher **20** can be easily detached from the tubular pipe body **10**.

[0033] The ice catcher **20** can alternatively be of any other shape and can comprise a suitable dimension to catch the ice **27** put in the tubular pipe body **10**.

[0034] The ice catcher **20** can include grommets (which can be any grommets known in the art) on each end to firmly secure the ice catcher **20** on the tubular pipe body **10**. The grommet can be made out of silicone and its purpose is to create an airtight seal.

[0035] Human lungs are highly sensitive to the sensation of inhaling warm or hot smoke, meaning that the smoke or vape ought to be as cool as possible. The problem with all known ice catchers is that they are permanent because they use a pinch design and do not allow users to insert a brush for a thorough cleaning.

[0036] The ice catcher **20** which is detachable solves this problem. The ice catcher **20** can be made from a thick 8 mm glass stirring rod held in place airtight with a silicone grommet.

[0037] The stem **30** can be a tube or tubular structure attached to one side of the tubular pipe body **10**. The stem **30** can be configured to accommodate the downstem **35** so that the downstem **35** can be inserted into the stem **30** as shown in FIG. **7**.

[0038] In some embodiments, the stem **30** can be made of silicone and detachably connected to the tubular pipe body **10**.

[0039] The downstem **35**, as shown in FIG. **5**, can include an upper member **32** and a lower member **34**. The upper member **32** and the lower member **34** can be tubular structure with openings on each end. The upper member **32** and the lower member **34** can be connected together to form a single tubular structure (downtem **35**).

[0040] In some embodiments, the present invention can be connected to silicone detachable clips known in the art design to hold the stem **30** and the downstem **35** together.

[0041] As shown in FIG. **6**, the downstem **35** can be a tube having a distal end **36** and a proximal end **37**. In some embodiments, the down stem **35** can include one or more lower openings **26** near the distal end **36**. In one embodiment, the proximal end **37** can include a stopper in a ring shape configured to stop axial movement of the downtem **35** when the downstem **35** is inserted into the stem **30**.

[0042] As shown in FIG. **5**, the distal end **36** of the downstem **35** can be positioned below the waterline **25** to allow the lower opening **26** of the downstem **35** to be submerged in the water.

[0043] The proximal end **37** (opposite the distal end **36**) of the downstem **35** can be arranged outside one end of the stem **30** (opposite the end attached to one side of the tubular pipe body **10**) and can include an upper opening **27**.

[0044] In some embodiments, the upper member **32** of the downstem **35** may include a greater diameter than the lower member **34** and tapered sides, as shown in FIG. **6**.

[0045] The upper member **32** and the upper opening **27** of the downstem **35** can be sufficiently large to attach a dry herb vaporizer which is known in the art.

[0046] In some embodiments, a shoulder **38** can be interposed between the upper member **32** and lower **34** member of the downstem **35**.

[0047] In the preferred embodiment, the downstem **35** and stem **30** are two separate components. The detachable stem **30** that can be made of silicone will attach to the tubular pipe body **10** through a pre-made hole **45** in the tubular pipe body **10**, as shown in FIG. **2**, FIG. **4**, FIG. **5**, FIG. **7**, creating an airtight seal. The downstem **35**, which is made out of glass, is then inserted inside the detachable stem **30** made of silicone.

[0048] In some embodiments, the present invention may be connected to a bowl known in the art that can be placed on the upper end of the downstem **35**. Such bowls can be cold-formed of glass and include a plurality of airflow apertures.

[0049] In use, vapor from the present invention can be drawn through the flared upper end (the proximal end **37** and upper opening **27**) of the downstem **35** through the lower opening **26** of the downstem **35** and into the water filled in the lower portion (reservoir **65**) of the present invention.

[0050] The vapor can be further drawn through the ice placed in the tubular pipe body **10** and supported by the ice catcher **20** before being inhaled by the user.

[0051] In the tubular pipe body **10**, the water filters and the ice cools the vapor prior to the vapor passing into the user's lungs. The lower portion of the tubular pipe body **10** (which can be the reservoir **65**) can be partially filled with enough water to submerge the lower opening **26** of the downstem **35** and still provide a substantial volume of air filling the remainder of the reservoir **65** which can extend above the waterline **25**.

[0052] Although the invention has been explained in relation to its preferred embodiment, it is to be understood that

many other possible modifications and variations can be made without departing from the spirit and scope of the invention.

What is claimed is:

1. A bong device, comprising:

a tubular pipe body having one or more apertures; the tubular pipe body defines an air passage, wherein the air passage includes a reservoir;

a base attached to the tubular body;

an ice catcher detachably connected to the tubular body, wherein the ice catcher is a cylindrical rod with silicone grommets attached to each end of the cylindrical rod and deployed within the air passage of the tubular pipe body and configured to support one or more pieces of ice;

a stem attached to the tubular body, wherein the stem includes a tubular structure;

a downstem detachably attached to the stem, wherein the downstem is a tube having a distal end and a proximal end;

the downstem includes a lower member and upper member with the upper member having tapered sides and a greater diameter than a diameter of the lower member, wherein the lower member is connected to the upper member to form a continuous passage inside the down stem; and

a mouthpiece attached to the tubular pipe body.

2. The bong device as claimed in claim **1**, wherein the tubular pipe body, base, the stem, and the mouthpiece are molded as a single piece of glass.

3. The bong device as claimed in claim **1**, wherein the tubular pipe body is covered by silicone.

4. The bong device as claimed in claim **1**, wherein the downstem is attached to a dry herb vaporizer.

5. The bong device as claimed in claim **1**, wherein the downstem includes a shoulder interposed between the upper member and lower member of the downstem.

6. The bong device as claimed in claim **1**, wherein the stem is made of silicone.

7. The bong device as claimed in claim **1**, wherein the downstem is attached to a bowl having a plurality of airflow apertures.

8. A bong device, comprising:

a tubular pipe body having one or more apertures; the tubular pipe body defines an air passage, wherein the air passage includes a straight tube or beaker style reservoir;

a base attached to the tubular body;

an ice catcher detachably connected to the tubular body, wherein the ice catcher is a cylindrical rod with grommets attached to each end of the cylindrical rod and deployed within the air passage of the tubular pipe body and configured to support one or more pieces of ice;

a stem attached to the tubular body, wherein the stem includes a tubular structure;

a downstem detachably attached to the stem, wherein the downstem is a tube having a distal end and a proximal end;

the downstem includes a lower member and upper member with the upper member having tapered sides and a greater diameter than a diameter of the lower member, wherein the lower member is connected to the upper member to form a continuous passage inside the down stem,

wherein the downstem includes a shoulder interposed between the upper member and the lower member of the downstem; and

a mouthpiece attached to the tubular pipe body.

9. The bong device as claimed in claim **8**, wherein the tubular pipe body, base, the stem, and the mouthpiece are molded as a single piece.

10. The bong device as claimed in claim **8**, wherein the tubular pipe body is covered by silicone.

11. The bong device as claimed in claim **8**, wherein the downstem is attached to a dry herb vaporizer.

12. The bong device as claimed in claim **8**, wherein the stem will be detachable and made out of silicone.

13. The bong device as claimed in claim **8**, wherein the downstem is attached to a bowl having a plurality of airflow apertures.

14. A bong device, comprising:

a tubular pipe body having one or more apertures; the tubular pipe body defines an air passage, wherein the air passage includes a straight tubular or beaker style reservoir;

a base attached to the tubular body;

an ice catcher detachably connected to the tubular body, wherein the ice catcher is a cylindrical rod with grommets attached to each end of the cylindrical rod and deployed within the air passage of the tubular pipe body and configured to support one or more pieces of ice;

a stem detachably connected to the tubular body, wherein the stem includes

a downstem detachably attached to the stem, wherein the downstem is a tube having a distal end and a proximal end;

the downstem includes a lower member and upper member with the upper member having tapered sides and a greater diameter than a diameter of the lower member, wherein the lower member is connected to the upper member to form a continuous passage inside the down stem; and

a mouthpiece attached to the tubular pipe body.

15. The bong device as claimed in claim **14**, wherein the tubular pipe body, base, and the mouthpiece are molded as a single piece.

16. The bong device as claimed in claim **14**, wherein the tubular pipe body is covered by silicone.

17. The bong device as claimed in claim **14**, wherein the downstem is attached to a dry herb vaporizer.

18. The bong device as claimed in claim **14**, wherein the downstem includes a shoulder interposed between the upper member and lower member of the downstem.

19. The bong device as claimed in claim **14**, wherein the downstem and stem are molded as a single piece.

20. The bong device as claimed in claim **14**, wherein the downstem is attached to a bowl having a plurality of airflow apertures.

* * * * *