



**Description**TECHNICAL FIELD

**[0001]** The present disclosure relates to a liquid reservoir.

BACKGROUND

**[0002]** Generally, a liquid reservoir, such as a bucket, a container, a storage tank, and the like, is used to store various types of liquids therein. The liquid reservoir is typically provided with a hose that is disposed outside of the liquid reservoir and connected thereto. The liquid reservoir is also provided with a pump positioned at a base of the liquid reservoir. The pump is used to pump out the stored liquid from the liquid reservoir. However, depending upon the hose connection to the liquid reservoir, the pump floats above the base, tips over the base, or falls loosely within the liquid reservoir. As a result, the pump is unable to discharge the entire liquid stored in the liquid reservoir. Moreover, tipping of the pump may damage the liquid reservoir, which is not desirable. Thus, there is a need for an improved design of the liquid reservoir which allows the pump to remove out the entire liquid that is stored in the liquid reservoir. Further, there have been arrangements in the past to support, hold the pump within the liquid reservoir. However, such arrangements are generally complex, high-maintenance prone and involve a variety of tools which is undesirable for common users.

**[0003]** An example of a bucket type car washing device is provided in Chinese Utility Model 203,419,110 (hereinafter referred to as '110 reference). The '110 reference discloses the bucket type car washing device having a bucket. The bucket has a cavity mounted to its bottom. Within this cavity an electric pump is freely and non-fixedly located. A bottom plate is fixed under the cavity and is fixed by screw to a bottom surface of the bucket. The screw is unscrewed, and the bottom plate is removed to facilitate maintenance of the electric pump. However, the cavity of the bucket includes rigid, semi-fixed, and complex holding or mounting arrangement for holding the pump. Such holding or mounting arrangement may lead to implementation and maintenance issue during working of the electric pump.

SUMMARY

**[0004]** In view of the above, it is an objective of the present disclosure to solve or at least reduce the drawbacks discussed above. The objective is at least partially achieved by a new design of a liquid reservoir to store a liquid. The liquid reservoir includes a body defining a base and a plurality of sides. The plurality of sides and the base define a volume to store the liquid therein. The liquid reservoir also includes a pump operatively mounted with the liquid reservoir. The liquid reservoir is characterized

in that the body includes one or more mounting features such that the one or more mounting features allow removable mounting of the pump towards the base of the liquid reservoir.

**[0005]** Thus, the present disclosure provides the liquid reservoir having an improved design which allows simple, convenient, and safe discharging of the entire liquid that is stored in the liquid reservoir. The removable mounting arrangement of the pump provided by the one or more mounting features provides flexibility and easy handling of the pump. As the pump is fixed to the base, it reduces any noise during operation of the pump. Further, the mounting features prohibit tipping over of the pump which allows a pump filter associated with the pump to work uniformly and efficiently. Furthermore, the pump does not come in contact with the plurality of sides of the liquid reservoir or the base of the liquid reservoir as the mounting features securely hold the pump. This may also help to avoid any undesired accident or breakdown of the pump which may happen in absence of such mounting features which prevent inadvertent tipping of the pump. Moreover, aesthetics of the liquid reservoir are improved as the pump is fixed to the base and does not change its position while operation, or during movement and transportation of the liquid reservoir.

**[0006]** According to an embodiment of the present disclosure, the one or more mounting features include at least one recessed cavity which is defined below a level of the base of the liquid reservoir. The recessed cavity allows the residue liquid to be concentrated at one location for discharging. This may support water pumping capability of the pump. Further, the recessed cavity provides a definite position for the pump.

**[0007]** According to an embodiment of the present disclosure, the base includes one or more mounting features such that the one or more mounting features allow removable mounting of the pump with the base of the liquid reservoir. The mounting features provided on the base allow simple, safe, and efficient mounting of the pump with the base of the liquid reservoir.

**[0008]** According to an embodiment of the present disclosure, the one or more mounting features include one or more shoulders defined around the at least one recessed cavity and with the base. The shoulder defined around the at least one recessed cavity supports the pump positioned therein. The number, type, position, dimensions of the shoulders may depend on various factors related to the pump, and the liquid reservoir, among others.

**[0009]** According to an embodiment of the present disclosure, the one or more mounting features include one or more of ribs, hooks, and shoulders. The one or more mounting features allow removable mounting of the pump at the base of the liquid reservoir. The choice of the ribs, hooks, and shoulders may be in accordance with power, size, type, service life of the pump, or any other factor related thereto.

**[0010]** According to an embodiment of the present dis-

closure, the one or more mounting features mount the pump substantially perpendicular to the base of the liquid reservoir. This arrangement allows the pump filter to work uniformly and efficiently. Further, this arrangement may lead to improved stability, force distribution, and shock dissipation during working of the pump.

**[0011]** According to an embodiment of the present disclosure, the liquid reservoir is a water reservoir. The water stored in the liquid storage can be used for various gardening operations, indoor applications, and outdoor applications. However, the liquid reservoir may find applications with any liquid without any limitations.

**[0012]** According to an embodiment of the present disclosure, the pump defines a bottom, such that the one or more mounting features at least partially cover the bottom during mounting of the pump with the base of the liquid reservoir. The one or more mounting features hold the pump substantially perpendicular to the base of the liquid reservoir for efficient pump operation. Such covering of the bottom of the pump by the mounting features may support the pump, and simultaneously check, and absorb any undesired forces involved during working of the pump.

**[0013]** According to an embodiment of the present disclosure, the liquid reservoir further includes a cover to enclose the plurality of sides. The cover prevents contamination of the liquid stored therein.

**[0014]** According to an embodiment of the present disclosure, the pump includes a tube which enters the body of the liquid reservoir. The tube allows discharge of the liquid from the liquid reservoir by the pump.

**[0015]** According to an embodiment of the present disclosure, the tube enters the body through an opening of the cover. This opening of the cover allows ease of access and handling of the tube of the pump within the liquid reservoir.

**[0016]** According to an embodiment of the present disclosure, the pump is tool-less removable from the one or more mounting features of the liquid reservoir. The mounting features of the present disclosure obviate application of any external tools for mounting as well as removal of the pump.

**[0017]** Other features and aspects of this disclosure will be apparent from the following description and the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

**[0018]** The disclosure will be described in more detail with reference to the enclosed drawings, wherein:

**FIG. 1** illustrates a semi cross-sectional view of a liquid reservoir, according to a first embodiment of the present disclosure;

**FIG. 2** illustrates a semi cross-sectional view of a base of the liquid reservoir of **FIG. 1**, according to the first embodiment of the present disclosure; and

**FIG. 3** illustrates a semi cross-sectional view of the liquid reservoir, according to a second embodiment of the present disclosure.

#### 5 DESCRIPTION OF EMBODIMENTS

**[0019]** The present disclosure will be described more fully hereinafter with reference to the accompanying drawings, in which example embodiments of the disclosure incorporating one or more aspects of the present disclosure are shown. This disclosure may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein; rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the disclosure to those skilled in the art. For example, one or more aspects of the present disclosure may be utilized in other embodiments and even other types of structures and/or methods. In the drawings, like numbers refer to like elements.

**[0020]** Certain terminology is used herein for convenience only and is not to be taken as a limitation on the disclosure. For example, "upper", "lower", "front", "rear", "side", "longitudinal", "lateral", "transverse", "upwards", "downwards", "forward", "backward", "sideward", "left," "right," "horizontal," "vertical," "upward", "inner", "outer", "inward", "outward", "top", "bottom", "higher", "above", "below", "central", "middle", "intermediate", "between", "end", "adjacent", "proximate", "near", "distal", "remote", "radial", "circumferential", or the like, merely describe the configuration shown in the Figures. Indeed, the components may be oriented in any direction and the terminology, therefore, should be understood as encompassing such variations unless specified otherwise.

**[0021]** **FIG. 1** illustrates a liquid reservoir **100** to store a liquid **101**, according to a first embodiment. The liquid **101** may include any type of liquid depending upon application requirements. In the illustrated embodiment, the liquid reservoir **100** is a water reservoir. The liquid reservoir **100** may include any type of reservoir such as, a bucket, a container, a storage tank, and the like. The liquid reservoir **100** is embodied as a generally hollow structure. The liquid reservoir **100** may be used for various gardening operations, indoor applications, and outdoor applications. The liquid reservoir **100** may be manufactured using a plastic, a metal, and the like.

**[0022]** The liquid reservoir **100** includes a body **102** defining a base **104** and a plurality of sides **106**. The base **104** may include any shape such as, a circular shape, an oval shape, a rectangular shape, and the like. In the illustrated embodiment, the base **104** includes a substantially elliptical shaped structure. The base **104** defines an upper surface **108** in contact with the stored liquid **101**, and a lower surface **110** opposite to the upper surface **108**. In some embodiments, the base **104** may have a tapering structure such that the base **104** deepens at the center of the base **104**. This feature promotes concentration of the stored liquid **101** at a central portion of the

base **104**. Further, the sides **106** of the liquid reservoir **100** may include any shape and size, without limiting the scope of the present invention. The sides **106** together define a cross-section that is substantially elliptical in shape. The sides **106** define an inner surface **112** that is in contact with the stored liquid **101** and an outer surface **114** opposite to the inner surface **112**.

**[0023]** The plurality of sides **106** and the base **104** define a volume **116** to store the liquid **101** therein. The volume **116** of the liquid reservoir **100** may differ based on application requirements. The liquid reservoir **100** also includes a number of handles **118** for transportation purposes. The handles **118** may be manufactured as a separate piece and joined at the outer surface **114** using mechanical fasteners such as, screws, bolts, rivets, and the like. The handles **118** may also be manufactured as an integral part of the liquid reservoir **100**. The handles **118** are designed ergonomically to allow improved handling and transportation of the liquid reservoir **100**.

**[0024]** The liquid reservoir **100** further includes a cover **120** to enclose the plurality of sides **106**. The cover **120** prevents foreign materials from entering the volume **116** of the liquid reservoir **100**, thereby preventing contamination of the liquid **101** stored in the liquid reservoir **100**. The cover **120** has a shape that is similar to the shape of the base **104**. Alternatively, the shape of the cover **120** may be different from the shape of the base **104**. In the illustrated embodiment, the cover **120** is generally elliptical in shape. The cover **120** may be removably coupled to the sides **106** by a snap-fit connection, a push-fit connection, and the like.

**[0025]** The liquid reservoir **100** includes a pump **122** operatively mounted with the liquid reservoir **100**. In the illustrated embodiment, the pump **122** is disposed at the base **104** of the liquid reservoir **100**. The pump **122** may include any type of pump **122**, such as an electric pump, without limiting the scope of the present invention. In the illustrated embodiment, the pump **122** is a submersible pump. The pump **122** is submerged in the liquid **101** stored in the liquid reservoir **100**. The pump **122** includes a pump body **124**. The pump **122** also includes a hermetically sealed motor (not shown) coupled to the pump body **124**. The pump **122** further includes an inlet port **126** and an outlet port **128**. The pump **122** includes a pump filter (not shown). The pump filter filters out contaminants from the liquid **101** stored in the liquid reservoir **100**.

**[0026]** The pump **122** defines a bottom **132**. The bottom **132** of the pump **122** defines a substantially circular shaped structure. The inlet port **126** and the pump filter may be disposed proximate to the bottom **132** of the pump **122**. The pump **122** also defines a top **134**. The top **134** of the pump **122** defines a substantially circular shaped structure. The outlet port **128** is disposed proximate to the top **134** of the pump **122**. The outlet port **128** may be coupled with a tube (or a hose) **130**. The pump **122** sucks the liquid **101** stored in the liquid reservoir **100** through the inlet port **126** and discharges the liquid **101**

through the outlet port **128**. The pump **122** includes a power source (not shown) for operation of the pump **122**. The pump **122** may be battery, or electrically powered as per the application requirements.

**[0027]** As illustrated in the present figure, the pump **122** includes the tube **130** which enters the body **102** of the liquid reservoir **100**. In some embodiments, the tube **130** enters the body **102** through an opening **136** of the cover **120**. This opening **136** of the cover **120** allows ease of access and handling of the tube **130** of the pump **122** within the liquid reservoir **100**. Further, the tube **130** allows discharge of the liquid **101** from the liquid reservoir **100** by the pump **122**.

**[0028]** In some embodiments, the opening **136** of the cover **120** may be provided on one or more sides of the cover **120**. In the illustrated embodiments, one opening **136** is shown with the cover **120**, however actual implementation may have any number of the opening(s) **136**. The opening **136** (refer **FIG. 1**) has been illustrated as oval or semi-circular, however other shapes such as square, triangular, rectangular, trapezoid and the like of the opening(s) **136** have been contemplated and are well within the scope. However, actual implementation of the present disclosure may have any number, type, size, position of the opening(s) **136** without any limitation. In some embodiments, the cover **120** may be provided with one or more lids (not shown) to enclose the opening(s) **136** at least partially or fully, while leaving or keeping sufficient space for the tube **130**.

**[0029]** As shown in **FIG. 2**, the body **102** includes one or more mounting features **138**, **140** such that the one or more mounting features **138**, **140** (three of which are illustrated herein) allow removable mounting of the pump **122** (see **FIG. 1**) towards the base **104** of the liquid reservoir **100**. The present disclosure illustrates the base **104** which includes one or more mounting features **138**, **140**, such that the one or more mounting features **138**, **140** allow removable mounting of the pump **122** with the base **104** of the liquid reservoir **100**. However, the mounting features **138**, **140** may be provided anywhere on the body **102** such as, but not limited to, on the inner surface **112** of the sides **106** such as to allow removable mounting of the pump **122** towards the base **104** of the liquid reservoir **100**.

**[0030]** In some embodiments, the one or more mounting features **138**, **140** are provided on the inner surface **112** of the sides **106**. In such an arrangement, the mounting features **138**, **140** may couple, mount, or engage around the top **134**, or anywhere on body **124** of the pump **122** such as to allow removable mounting of the pump **122** towards the base **104** of the liquid reservoir **100**. Further, the pump **122** remains upright-mounted on the base **104** of the liquid reservoir **100**, while the one or more mounting features **138**, **140** on the sides **106** engage with the pump **122**.

**[0031]** Further, the four mounting features **138**, **140** are disposed proximate to the center of the base **104**, however the present disclosure illustrates less number

(say two or three) of the mounting features **138, 140** from clarity and explanation purposes. However, actual implementation of the present disclosure may have any number, type, position, dimensions of the mounting features **138, 140**. The mounting features **138, 140** are equidistantly spaced from one another in a circumferential manner to define a hollow area **142**. The hollow area **142** defined by the mounting features **138, 140** are defined according to a contour of the pump **122** and may vary as required. In the illustrated embodiment, the one or more mounting features **138, 140** at least partially cover the bottom **132** (see **FIG. 1**) during mounting of the pump **122** with the base **104** of the liquid reservoir **100**. The mounting features **138, 140** are an integral part of the base **104**. Alternatively, the mounting features **138, 140** may be connected to the upper surface **108** of the base **104** by joining techniques such as, welding, soldering, brazing, and the like. The mounting features **138, 140** extend generally perpendicularly from the upper surface **108** of the base **104**. In some embodiments, one or more of the mounting features **138, 140** may extend at any angle from the upper surface **108** of the base **104**.

**[0032]** The one or more mounting features **138, 140** include one or more of ribs, hooks, and shoulders. The choice of the ribs, hooks, and shoulders may be in accordance with power, size, type, service life of the pump **122**, or any other factor related thereto. In the illustrated embodiment, the mounting features **138, 140** are embodied as a rib having a generally rectangular shaped structure. Further, the base **104** includes four mounting features **138, 140**. However, in other embodiments, the base **104** may include any number of mounting features **138, 140**.

**[0033]** Further, a design of the mounting features **138, 140** may be varied based on a design of an outer profile of the pump **122**. In the illustrated embodiment, the mounting features **138, 140** defines a first pair of mounting features **138** and a second pair of mounting features **140**. The first pair of mounting features **138** define a curved profile to accommodate the circular shape of the bottom **132** of the pump **122**. The second pair of mounting features **140** define a flat profile. The second pair of mounting features **140** includes one or more projecting portions **144** that extend angularly from the corresponding mounting feature **140**. In the illustrated embodiment, each mounting feature **140** includes one projecting portion **144**, however any number, position, arrangement of the projecting portion **144** is well within the scope. The projecting portion **144** may assist in the mounting, holding or centering of the pump **122** with the base **104**. The mounting features **138, 140** hold the pump **122** at a fixed position and restrict displacement of the pump **122** during the operation of the pump **122**. The one or more mounting features **138, 140** mount the pump **122** substantially perpendicular to the base **104** of the liquid reservoir **100**. The substantially perpendicular position of the pump **122** may allow the pump filter to work uniformly and efficiently. Further, the mounting features **138, 140** may lead to im-

proved stability, force distribution, and shock dissipation during working of the pump **122**.

**[0034]** Further, the liquid reservoir **100** includes a number of support structures **146**. Specifically, each mounting feature **138, 140** is associated with a support structure **146**, such that the support structure **146** is connected to the upper surface **108** of the base **104** and the corresponding mounting feature **138, 140**. The support structures **146** form an integral part of the base **104**. Alternatively, the support structures **146** may be connected to the upper surface **108** and the mounting features **138, 140** by joining techniques such as, welding, soldering, brazing, and the like.

**[0035]** The mounting features **138, 140** snap on to the pump **122** for retention of the pump **122** by the mounting features **138, 140**. In various embodiments, the mounting features **138, 140** may be connected to the pump **122** by a snap-fit mounting, a push-fit mounting, and the like. It should be noted that the type of mounting does not limit the scope of the present invention.

**[0036]** **FIG. 3** illustrates a second embodiment of the liquid reservoir **100**. A construction of the liquid reservoir **100** of the second embodiment is substantially similar to a construction of the liquid reservoir **100** explained in the first embodiment in relation to **FIGS. 1** and **2**. However, in this embodiment, the liquid reservoir **100** includes one or more mounting features **338**. The one or more mounting features **338** include at least one recessed cavity **350** which is defined below a level of the base **104** of the liquid reservoir **100**. In the illustrated embodiment, the mounting feature **338** includes a single recessed cavity **350**. The recessed cavity **350** projects downwards from the upper surface **108** of the base **104**. The recessed cavity **350** is disposed at the center of the base **104**. The recessed cavity **350** houses the pump **122** therein. Further, the recessed cavity **350** allows the liquid **101** to be concentrated therein, as the recessed cavity **350** is defined below the level of the base **104** of the liquid reservoir **100**.

**[0037]** In some embodiments, the pump **122** defines the bottom **132**, such that the one or more mounting features **138, 140, 338** at least partially cover the bottom **132** during mounting of the pump **122** with the base **104** of the liquid reservoir **100**. Such covering of the bottom **132** of the pump **122** by the mounting features **138, 140, 338** may support the pump **122**, and simultaneously check and absorb any undesired forces involved during working of the pump **122**.

**[0038]** In some embodiments, one or more of the mounting features **138, 140, 338** maybe flexible, semi-resilient to allow easy and safe mounting with the bottom **132** of the pump **122** with the base **104** of the liquid reservoir **100**. Such flexible or semi-resilient nature of the mounting features **138, 140, 338** may also allow to check or absorb any working forces, stresses, pressures during running of the pump **122**, while being mounted with one or more of the mounting features **138, 140, 338**.

**[0039]** Moreover, in the illustrated embodiment, the one or more mounting features **338** include one or more

shoulders **352** defined around the at least one recessed cavity **350** and with the base **104**. The shoulders **352** are equidistantly spaced from one another to define a hollow area (not shown) for receiving the pump **122**, such that the hollow area and the recessed cavity **350** together allow mounting of the pump **122**. The shoulders **352** support the pump **122** disposed inside the recessed cavity **350**. The shoulders **352** extend perpendicularly from the upper surface **108** of the base **104**. The shoulders **352** are embodied as generally rectangular plate members. The number, type, position, dimensions of the shoulders **352** may depend on various factors related to the pump **122**, and the liquid reservoir **100**, among others. Further, each shoulder **352** defines a chamfered edge **354** proximate to a top end of the corresponding shoulder **352**. Such chamfered edges **354** may allow easy insertion (or assembly) and removal (or disassembly) of the pump **122** as per the need.

**[0040]** The shoulders **352** are an integral part of the base **104**. Alternatively, the shoulders **352** may be connected to the upper surface **108** of the base **104** by joining techniques such as, welding, soldering, brazing, and the like. In the illustrated embodiment, the base **104** includes four shoulders **352**, two of which are illustrated herein. It should be noted that the number of the shoulders **352** may vary as per requirements.

**[0041]** In some embodiments, the pump **122** is tool-less removable from the one or more mounting features **138, 140, 338** of the liquid reservoir **100**. The mounting features **138, 140, 338** of the present disclosure thus obviate or substantially limit application of any external tools for mounting as well as removal of the pump **122** from the mounting features **138, 140, 338**. During application, a user may easily move or mount the pump **122** from above the mounting features **138, 140, 338**, which may adjust or move accordingly to allow desired coupling or mounting of the bottom **132** of the pump **122** with the mounting features **138, 140, 338**. Further, during removal of the pump **122**, the user may engage anywhere on the body **124** of the pump **122** such as around the top **134** to disengage the pump **122** from the mounting features **138, 140, 338**. The present disclosure allow both the engagement/assembly or disengagement/disassembly of the pump **122** with the mounting features **138, 140, 338**, without a reliance or application of any tools or accessories.

**[0042]** The present disclosure provides an improved design of the liquid reservoir **100** to store the liquid **101**. The design of the liquid reservoir **100** provides a definite place for the pump **122**. This design of the liquid reservoir **100** allows the liquid **101** to be discharged completely from the liquid reservoir **100** as the mounting features **138, 140, 338** prevent the tipping over of the pump **122** and also prevents hitting of the pump **122** with the sides **106** or the base **104** of the liquid reservoir **100**. Further, the mounting features **138, 140, 338** hold the pump **122** in place and also mount the pump **122** substantially perpendicular to the base **104** which may allow the pump

filter to work uniformly and efficiently. Furthermore, the pump **122** is fixed to the base **104** which reduces an operating noise of the pump **122**. Moreover, the design of the liquid reservoir **100** improves an aesthetics thereof as the pump **122** is fixed and does not change its position while operation, or during transportation of the liquid reservoir **100**.

**[0043]** In the drawings and specification, there have been disclosed preferred embodiments and examples of the disclosure and, although specific terms are employed, they are used in a generic and descriptive sense only and not for the purpose of limitation of the scope of the disclosure being set forth in the following claims.

## 15 LIST OF ELEMENTS

### [0044]

	<b>100</b>	Liquid Reservoir
20	<b>101</b>	Liquid
	<b>102</b>	Body
	<b>104</b>	Base
	<b>106</b>	Side
	<b>108</b>	Upper Surface
25	<b>110</b>	Lower Surface
	<b>112</b>	Inner Surface
	<b>114</b>	Outer Surface
	<b>116</b>	Volume
	<b>118</b>	Handle
30	<b>120</b>	Cover
	<b>122</b>	Pump
	<b>124</b>	Pump Body
	<b>126</b>	Inlet Port
	<b>128</b>	Outlet Port
35	<b>130</b>	Tube
	<b>132</b>	Bottom
	<b>134</b>	Top
	<b>136</b>	Opening
	<b>138</b>	Mounting Features/First Pair of Mounting Features
40	<b>140</b>	Mounting Features/Second Pair of Mounting Features
	<b>142</b>	Hollow Area
	<b>144</b>	Projecting Portion
45	<b>146</b>	Support Structures
	<b>338</b>	Mounting Features
	<b>350</b>	Recessed Cavity
	<b>352</b>	Shoulders
50	<b>354</b>	Chamfered Edge

### Claims

1. A liquid reservoir (**100**) to store a liquid (**101**), comprising:
  - a body (**102**) defining a base (**104**) and a plurality of sides (**106**), wherein the plurality of sides

- (106) and the base (104) define a volume (116) to store the liquid (101) therein; and a pump (122) operatively mounted with the liquid reservoir (100);  
**characterized in that:**  
the body (102) includes one or more mounting features (138), (140), (338) such that the one or more mounting features (138), (140), (338) allow removable mounting of the pump (122) towards the base (104) of the liquid reservoir (100).
2. The liquid reservoir (100) of claim 1, wherein the one or more mounting features (338) include at least one recessed cavity (350) which is defined below a level of the base (104) of the liquid reservoir (100).
  3. The liquid reservoir (100) of claim 1, wherein the base (104) includes one or more mounting features (138), (140), (338) such that the one or more mounting features (138), (140), (338) allow removable mounting of the pump (122) with the base (104) of the liquid reservoir (100).
  4. The liquid reservoir (100) of claim 2, wherein the one or more mounting features (338) include one or more shoulders (352) defined around the at least one recessed cavity (350) and with the base (104).
  5. The liquid reservoir (100) of claim 1, wherein the one or more mounting features (138), (140), (338) include one or more of ribs, hooks, and shoulders (152).
  6. The liquid reservoir (100) of claim 1, wherein the one or more mounting features (138), (140), (338) mount the pump (122) substantially perpendicular to the base (104) of the liquid reservoir (100).
  7. The liquid reservoir (100) of claim 1, wherein the liquid reservoir (100) is a water reservoir.
  8. The liquid reservoir (100) of claim 1, wherein the pump (122) defines a bottom (132), such that the one or more mounting features (138), (140), (338) at least partially cover the bottom (132) during mounting of the pump (122) with the base (104) of the liquid reservoir (100).
  9. The liquid reservoir (100) of claim 1, wherein the liquid reservoir (100) further includes a cover (120) to enclose the plurality of sides (106).
  10. The liquid reservoir (100) of claim 1, wherein the pump (122) includes a tube (130) which enters the body (102) of the liquid reservoir (100).
  11. The liquid reservoir (100) of claims 9, and 10, where-  
in the tube (130) enters the body (102) through an opening (136) of the cover (120).
12. The liquid reservoir (100) of any of the preceding claims, wherein the pump (122) is tool-less removable from the one or more mounting features (138), (140), (338) of the liquid reservoir (100).
- Amended claims in accordance with Rule 137(2) EPC.**
1. A liquid reservoir (100) to store a liquid (101), comprising:  
a body (102) defining a base (104) and a plurality of sides (106), wherein the plurality of sides (106) and the base (104) define a volume (116) to store the liquid (101) therein; and  
a pump (122) operatively mounted within the liquid reservoir (100);  
**characterized in that:**  
the body (102) includes one or more mounting features (138), (140), (338) such that the one or more mounting features (138), (140), (338) allow removable mounting of the pump (122) towards the base (104) of the liquid reservoir (100),  
wherein the pump (122) remains upright-mounted on the base (104) of the liquid reservoir (100), and  
wherein the mounting features (138), (140), (338) couple, mount, or engage around a top (134), or anywhere on a body (124) of the pump (122) such as to allow removable mounting of the pump (122) towards the base (104) of the liquid reservoir (100).
  2. The liquid reservoir (100) of claim 1, wherein the one or more mounting features (338) include at least one recessed cavity (350) which is defined below a level of the base (104) of the liquid reservoir (100).
  3. The liquid reservoir (100) of claim 1, wherein the base (104) includes one or more mounting features (138), (140), (338) such that the one or more mounting features (138), (140), (338) allow removable mounting of the pump (122) with the base (104) of the liquid reservoir (100).
  4. The liquid reservoir (100) of claim 2, wherein the one or more mounting features (338) include one or more shoulders (352) defined around the at least one recessed cavity (350) and with the base (104).
  5. The liquid reservoir (100) of claim 1, wherein the one or more mounting features (138), (140), (338) in-

clude one or more of ribs, hooks, and shoulders (152).

- 6. The liquid reservoir (100) of claim 1, wherein the one or more mounting features (138), (140), (338) mount the pump (122) substantially perpendicular to the base (104) of the liquid reservoir (100). 5
- 7. The liquid reservoir (100) of claim 1, wherein the liquid reservoir (100) is a water reservoir. 10
- 8. The liquid reservoir (100) of claim 1, wherein the pump (122) defines a bottom (132), such that the one or more mounting features (138), (140), (338) at least partially cover the bottom (132) during mounting of the pump (122) with the base (104) of the liquid reservoir (100). 15
- 9. The liquid reservoir (100) of claim 1, wherein the liquid reservoir (100) further includes a cover (120) to enclose the plurality of sides (106). 20
- 10. The liquid reservoir (100) of claim 1, wherein the pump (122) includes a tube (130) which enters the body (102) of the liquid reservoir (100). 25
- 11. The liquid reservoir (100) of claims 9, and 10, wherein the tube (130) enters the body (102) through an opening (136) of the cover (120). 30
- 12. The liquid reservoir (100) of any of the preceding claims, wherein the pump (122) is tool-less removable from the one or more mounting features (138), (140), (338) of the liquid reservoir (100). 35

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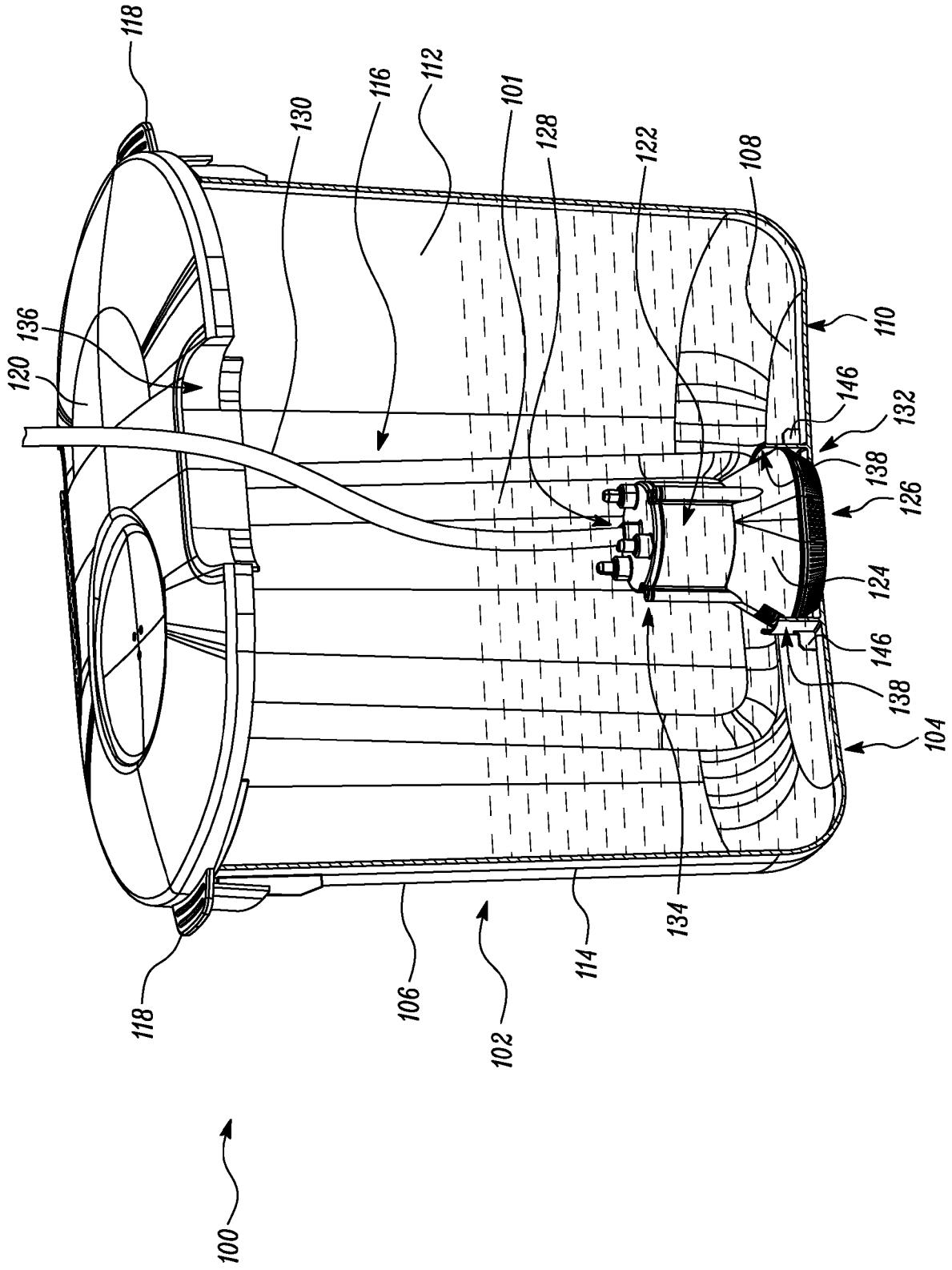


FIG. 1

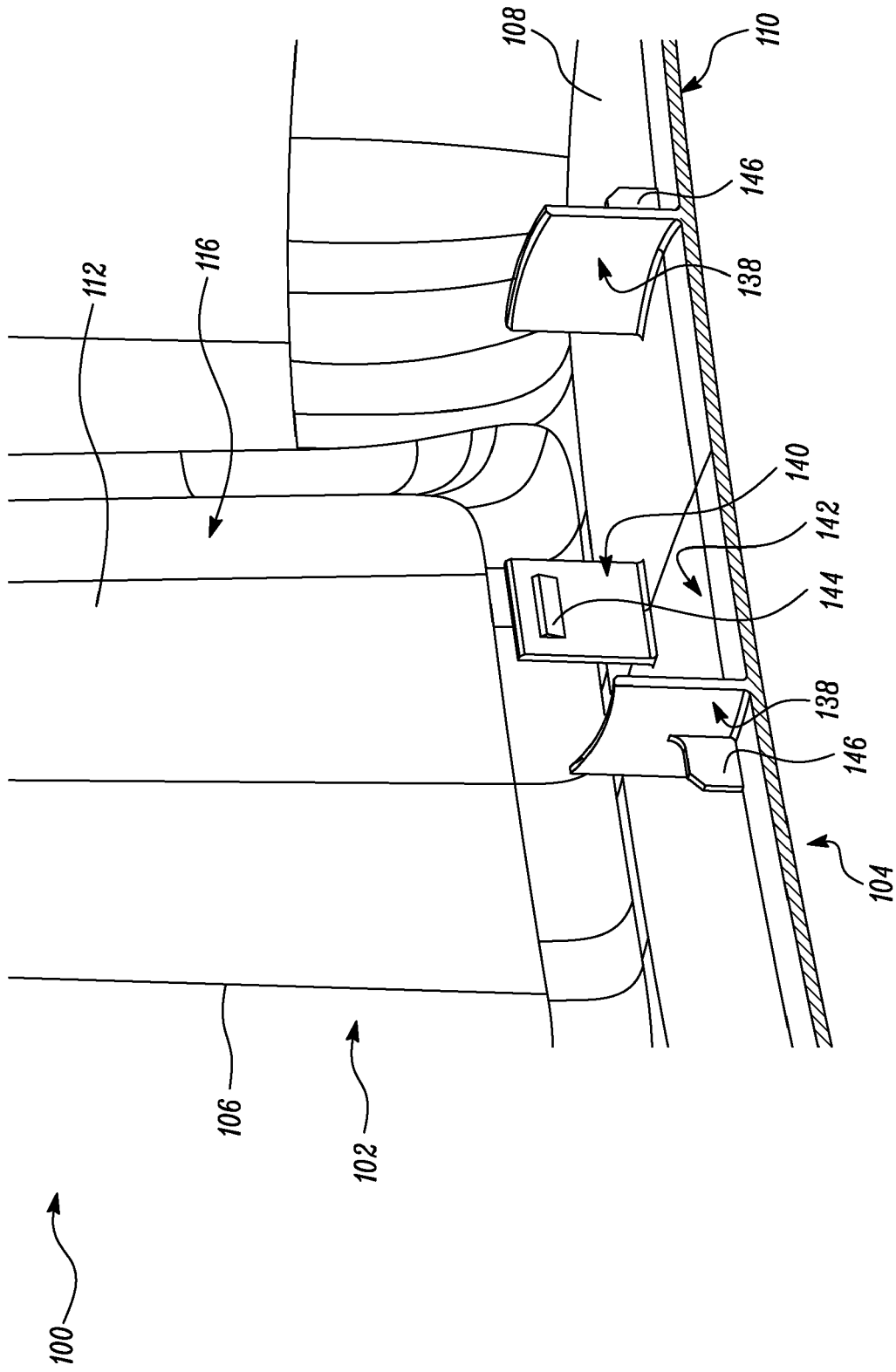


FIG. 2

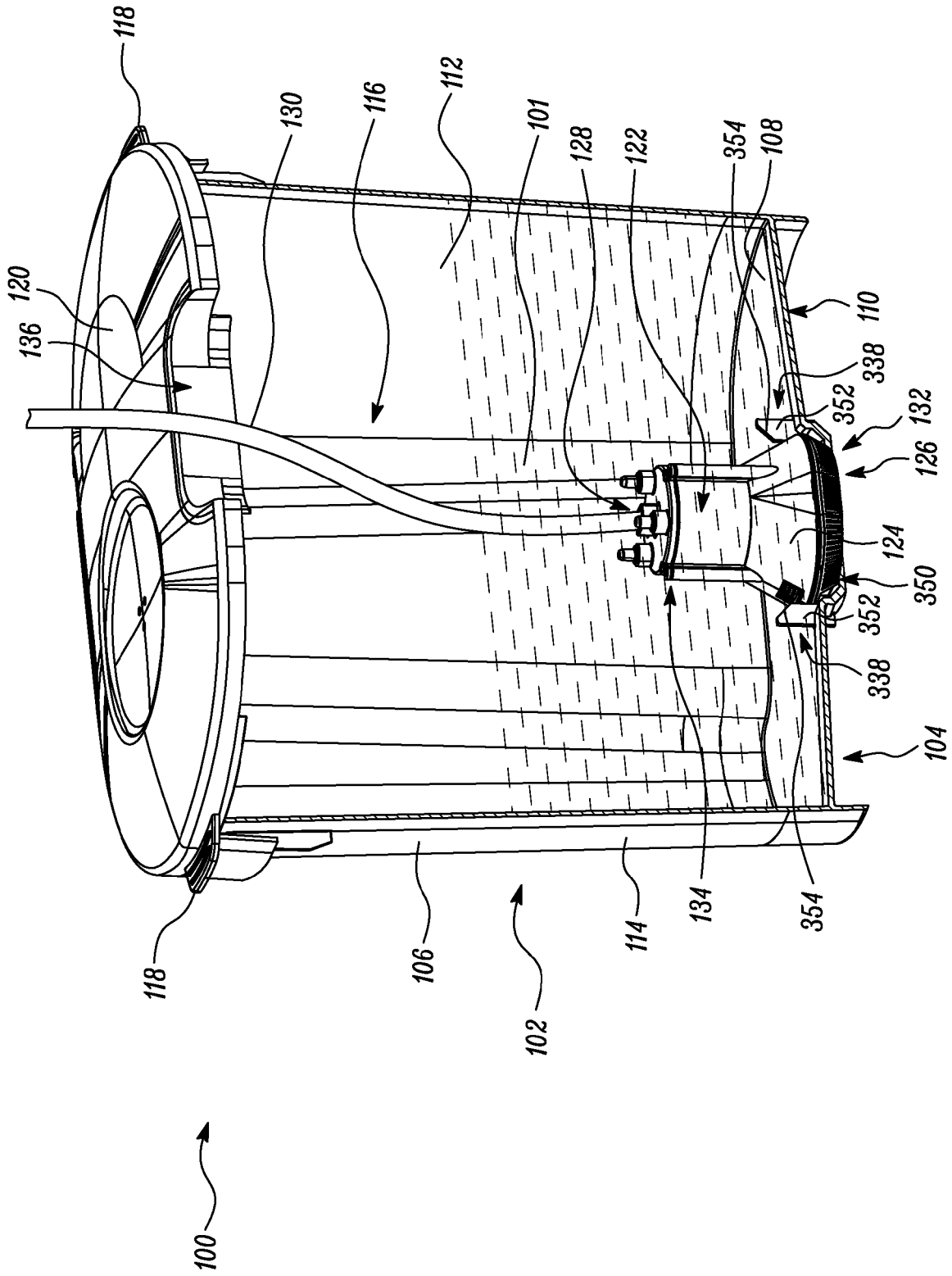


FIG. 3



EUROPEAN SEARCH REPORT

Application Number  
EP 21 15 6013

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			TECHNICAL FIELDS SEARCHED (IPC)
			F04D B60S F02M
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>25 June 2021</b>	Examiner <b>de Martino, Marcello</b>
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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25-06-2021

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

**REFERENCES CITED IN THE DESCRIPTION**

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