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(71) Applicant: **Kohler Co.**
Kohler, WI 53044 (US)

(72) Inventors:
- **Grybush, Evan**
  Belgium, 53004 (US)
- **Kovesdi, Erika**
  Kohler, 53044 (US)
- **Eilmus, Niels**
  Sheboygan, 53081 (US)
- **Mazz, Margaret**
  Atlanta, 30316 (US)
- **Booth, Shawn**
  Sheboygan, 53083 (US)

(74) Representative: **Barker Brettell LLP**
100 Hagley Road
Edgbaston
Birmingham B16 8QQ (GB)

(54) **SINK SYSTEM**

(57) A sink system (100) includes a cabinet module (106) and a sink module (104) coupled to an upper end of the cabinet module (106. The sink module (104) includes a sink basin (116) and a faucet (150). The sink system (100) further includes a water delivery system (180) configured to receive a flow of water from a utility line (181) and selectively provide the flow of water to the sink module (100) based on a control signal received from a controller (200). The controller (200) may be a wired or wireless puck that is positioned near the sink basin (116). The water delivery system (180) may further include a water filtration system (190), and a digitally controlled valve (188) may provide the flow of water to the water filtration system (190) before the flow of water is provided to the sink module (116).

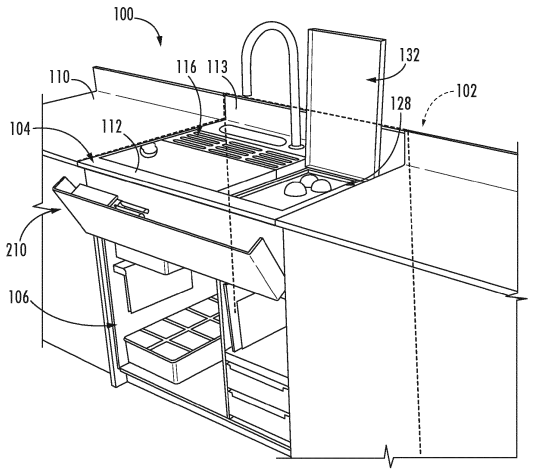

FIG. 1

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Description

CROSS-REFERENCE TO RELATED PATENT APPLICATIONS

[0001] This application claims the benefit of and priority to U.S. Provisional Application No. 63/123,047, filed on December 9, 2020 and U.S. Application No. 17/538,645, filed on November 30, 2021, the entire disclosures of which are hereby incorporated by reference herein.

BACKGROUND

[0002] The present application relates generally to the field of wash receptacles, such as sinks and the like.

[0003] Generally speaking, sinks are vessels that are configured for receiving water in a kitchen, bathroom, or other environment. Usually, a faucet or other water delivery device is located proximate to the sink, and a drain pipe is coupled to the sink to remove unwanted water. In a kitchen environment, the sink, faucet, and associated plumbing is usually separately mounted on or into a cabinet that is part of the building structure of the kitchen.

SUMMARY

[0004] At least one embodiment related to a sink system configured for coupling within a recessed cabinet space. The sink system includes a cabinet module and a sink module coupled to an upper end of the cabinet module. The sink module includes a sink basin and a faucet.

[0005] Another embodiment relates to a sink system. The sink system includes a cabinet module, a sink module coupled to the cabinet module, and a water delivery system. The cabinet module includes a first peripheral sidewall, a second peripheral sidewall opposite to the first peripheral sidewall, and a leg stand coupled to and extending between the first peripheral sidewall and the second peripheral sidewall. The water delivery system is coupled to the cabinet module and is configured to provide a flow of water to the sink module.

[0006] Another embodiment relates to a water delivery system. The water delivery system includes a digital control valve, an inlet coupling, an outlet coupling, and a power supply. The digital control valve is configured to receive a flow of water, such as from a municipal utility line. The inlet coupling is in fluid communication with the digital control valve and is configured for coupling with a fluid source. The outlet coupling is in fluid communication with the digital control valve and is configured to receive a flow of water from the digital control valve. The outlet coupling is also configured for coupling with an outlet conduit, such as a water fixture or faucet. The power supply is operably coupled to the digital control valve and is configured for plugging into a wall outlet.

[0007] This summary is illustrative only and should not be regarded as limiting.

BRIEF DESCRIPTION OF THE FIGURES

[0008] The disclosure 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:

FIG. 1 is a perspective view of a sink system, according to an example embodiment;

FIG. 2 is a top view of a sink module, according to an example embodiment;

FIG. 3 is a perspective view of a portion of the sink module of FIG. 2, according to an example embodiment;

FIG. 4 is a top view of a portion of the sink module of FIG. 2, according to an example embodiment;

FIG. 5 is a top view of a portion of the sink module of FIG. 2, according to another example embodiment;

FIG. 6 is a front view of a water delivery system of the sink system of FIG. 1, according to an example embodiment;

FIG. 7 is a front view of the sink system of FIG. 1, according to an example embodiment;

FIG. 8 is a perspective view of a portion of a leg stand of the sink system of FIG. 1;

FIG. 9 is a front view of a portion of the leg stand of the sink system of FIG. 1;

FIG. 10 is a perspective view of the sink system, according to an example embodiment;

FIG. 11 is a perspective view of the sink system, according to another example embodiment; and

FIG. 12 is a perspective view of the sink system, according to yet another example embodiment.

DETAILED DESCRIPTION

[0009] Before turning to the figures, which illustrate certain exemplary embodiments in detail, it should be understood that the present disclosure 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 used herein is for the purpose of description only and should not be regarded as limiting.

[0010] Generally speaking, a household kitchen may include a sink and a faucet. The sink often includes one or basins and a single faucet, where the faucet is man-

ually controlled using a handle. Positioned below the sink are the utility lines for the water connections and drain plumbing. In some embodiments, an electrical outlet is positioned below the sink, allowing for the installation of a garbage disposal. Because the cabinet space below a sink can be damp, difficult to reach, and crowded with utility connections, a user may avoid storing cookware and food below the sink. Instead, the user may decide to store cleaning supplies, tools, and other equipment that would not be safe to store with food.

[0011] In may be desirable, in some embodiments, to add shelves or drawers underneath the sink to organize the space better. However, including shelves can be challenging because of the utility connections and garbage disposal. The garbage disposal may be centrally positioned in the cabinet and get in the way of sliding drawers. Other common plumbing features, such as the J-trap and the flexible hose/hose weight may also be intrusive in the space below a sink. For example, the hose weight on the flexible hose for certain types of faucets may get caught on cleaning bottles and buckets positioned below the sink.

[0012] Further, adding drawers and shelves below a sink may require the help of a professional installer, carpenter, and/or plumber.

[0013] As people spend more time in their kitchens and technology becomes more accessible, a user may desire additional sink features that require electricity and water to be routed and rerouted. For example, the installation of a cabinet light may require using fasteners or an adhesive to mount a light within the cabinet space. The light then needs power, which may require routing wires around the plumbing, shelves, and sliding drawers. A user may include a sanitizing light (e.g., ultraviolet light) into a portion of the sink basin or into a drawer. Again, the light needs to be mounted and provided with electricity. A water filtration system and a dedicated filtered water faucet may be included in the sink, though the filtration system may need both electric power and water to operate, requiring the help of both an electrician and a plumber.

[0014] As can be appreciated, including all of these features into the cabinet under a sink can be expensive and challenging to install. Thus, there is a desire for an all-in-one modular sink system that includes one or more of the above noted features and accessories. Further, it is desirable that this sink system can be installed by a do-it-yourselfer without the assistance of a certified plumber or electrician.

[0015] Referring generally to FIGS. 1-12, a sink system 100 is shown according to various exemplary embodiments. The sink system 100 is configured to be received within a recessed cabinet space 102. In some embodiments, the recessed cabinet space 102 is a standard cabinet opening having a width of approximately 36 inches, a depth of approximately 24 inches, and a height of approximately 40 inches. In some embodiments, the recessed cabinet space 102 is surrounded on one side by a cabinet and on two sides by walls (e.g., in the corner of a wall). As will be appreciated, the sink system 100 may be sized to fit most any recessed cabinet space 102. The recessed cabinet space 102 is formed in the cabinets and sized to receive the sink system 100. For example, the recessed cabinet space 102 may be 36 inches across and 24 inches deep.

[0016] The sink system 100 is configured to be installed by connecting the utility lines (e.g., water lines, plumbing lines, etc.) and plugging the sink system 100 in to an electrical wall outlet of the building using a power cord. In some embodiments, the sink system 100 is provided with a power cord configured for plugging into a residential wall outlet, such as those providing a single-phase voltage of between 100-250 volts and between 50-60 hertz (Hz).All of the accessories provided with the sink system 100 are already installed and configured to be controlled by a wireless controller (e.g., the control puck 200). For example, the sink system 100 may include a first faucet, a second faucet, a spray wand, a side-sprayer, and an integrated dishwasher, each receiving a flow of water from the utility lines. Instead of having to install each of these accessories with new plumbing lines and new electrical connections, the sink system 100 includes all of these features already fluidly coupled and controlled by a water delivery system (e.g., the water delivery system 180). A user may use the wireless controller to turn on the first faucet and the side-sprayer. The user may also use the wireless controller to turn off the first faucet and the side-sprayer and turn on the integrated dishwasher. With all of the accessories already installed within the sink system 100, the user only has to connect the utility lines and the power cord to provide water and electricity to the sink system 100.

[0017] The sink system 100 may further include sliding drawers and shelves below the sink. The sink system 100 may be reconfigurable to allow a user to customize the storage area below the sink using different combinations of drawers, shelves, and accessories, such as a garbage can, etc. The drawers may be positioned and sized to avoid interfering with the garbage disposal. For example, the drawers may be narrow enough to fit on either side of the garbage disposal. The sinks system may further include lights in the cabinet positioned beneath the sink. The lights may be operatively coupled to the power supply plugged into the wall such that the lights are controllable by the wireless controller.

[0018] The sink system 100 include sanitizing features, such as ultraviolet light and sanitizing mists. The ultraviolet lights may be in visual communication with each of the drawers, operatively coupled to the power supply, and controllable by the wireless controller. Similarly, the sanitizing mist may spray into the cabinet below the sink to sanitize sponges, towels, clothes, and anything else stored in the cabinet.

[0019] Many cabinets positioned below a sink include a center post positioned in the middle of the cabinet. The center post is often provided by the original cabinet man-

ufacturer and supports the weight of the countertop and the sink. Thus, it may be desirable to remove the center post without sacrificing support for the sink. The sink system 100 includes a cabinet module that is able to support the sink without requiring additional supports that extend across the opening of the cabinet.

[0020] The sink system 100 may include replaceable doors that may be removed and replaced with cabinet doors that match the aesthetic of the cabinetry in the kitchen.

[0021] Referring now to FIG. 1, the sink system 100 includes a sink module 104 and a cabinet module 106. The sink module 104 is coupled to an upper end of the cabinet module 106 and is configured to be positioned within the recessed cabinet space 102 proximate to a countertop 110. The sink module 104 includes a top surface 112 extending about a perimeter of the sink module 104 and includes a backsplash 113 extending upward proximate a rear of the sink module 104, the backsplash 113 being contiguous with the top surface 112. When the sink module 104 is installed within the recessed cabinet space 102, the top surface 112 may be in the same plane as the countertop 110, so as to provide a cohesive, seamless appearance. In some embodiments, the top surface 112 is positioned slightly lower than the countertop 110. In some embodiments, the top surface 112 is adjustable via the cabinet module 106 to be positioned either above or below the countertop 110. Similarly, the backsplash 113 may be contiguous with an existing backsplash of the countertop 110. The sink module 104 may be formed of a corrosion-resistant material, such as stainless steel, aluminum, or plastic. In some embodiments, the sink module 104 is formed from sheet metal that is stamped and bent into the shape of the top surface 112 and the backsplash 113.

[0022] Referring to FIG. 2, a top view of the sink module 104 is shown. The sink module 104 includes a leading edge 114 (e.g., front edge, first edge) and a trailing edge 115 (e.g., rear edge, second edge, etc.) positioned opposite to the leading edge 114. Extending between the leading edge 114 and the trailing edge 115 is the top surface 112. Extending orthogonally away from the sink module 104 proximate to the trailing edge 115 is the backsplash 113. A first basin 116 extends into the sink module 104 between the leading edge 114 and the trailing edge 115 such that a portion of the top surface 112 is positioned between the first basin 116 and the leading edge 114. The first basin 116 includes sidewalls 118, a catch 120, and a drain opening 122. The sidewalls 118 are contiguous with the top surface 112 and may be formed from the same sheet material as the top surface 112, such as through stamping and bending. The catch 120 is contiguous with the sidewalls 118 and defines the drain opening 122. The first basin 116 is configured for receiving a flow of liquid and/or waste and delivering the flow to the drain opening 122. In some embodiments, the drain opening 122 is positioned proximate to a corner of the catch 120. In some embodiments, the drain opening 122 is centered in the catch 120.

[0023] The first basin 116 may further include an integrated rinse feature 117 (FIG. 3) configured to provide a spray of water into the first basin 116 through one of the sidewalls 118. The integrated rinse feature 117 may be included in multiple of the sidewalls 118, such as a front sidewall proximate to the leading edge 114 and a rear sidewall proximate to the trailing edge 115. In some embodiments, the integrated rinse feature 117 provides a soapy water mixture. In some embodiments, the integrated rinse feature 117 is controllable by a wireless controller (e.g., control puck 200).

[0024] As can be appreciated, the first basin 116 may take a variety of forms, including circular, elliptical, racetrack, obround, rectangular, rounded-corner rectangular, and similar shapes. In some embodiments, the first basin 116 extends between a first peripheral edge 123 and a second peripheral edge 124 of the sink module 104 such that a narrow portion of the top surface 112 is positioned between the first peripheral edge 123 and the first basin 116 and a narrow portion of the top surface 112 is positioned between the second peripheral edge 124 and the first basin 116. In other words, the sink module 104 may include one basin (e.g., the first basin 116), commonly referred to as a "single basin" sink. The first basin 116 may further include a pair of ledges 126 extending orthogonally into the first basin 116 and configured to support an accessory within or above the first basin 116, such as a drying rack and/or a cutting board. The pair of ledges 126 may extend perpendicularly to the leading edge 114. In some embodiments, the pair of ledges 126 extend substantially parallel to the leading edge 114. A sink rack 127 and/or a cutting board 129 may be sized to be positioned across the first basin 116 and engage with both of the pair of ledges 126. In some embodiments, the sink rack 127 and the cutting board 129 are sized such that both the sink rack 127 and the cutting board 129 are positioned on the pair of ledges 126 at the same time without overlapping one another. The pair of ledges may be offset from the top surface 112, positioned lower into the first basin 116. The sink rack 127 and the cutting board 129 may be sized such that a top-facing surface of either of the cutting board 129 and the sink rack 127 is in the same plane as the top surface 112.

[0025] The sink module 104 includes self-trimming features that extend over the edges of the countertop 110 and provide a clean edge. In some embodiments, the countertop 110 may have rough edges proximate to the recessed cabinet space 102. As can be appreciated, a perfectly sized recessed cabinet space 102 is difficult to build or cut. Accordingly, the top surface 112 proximate the first peripheral edge 123 and the second peripheral edge 124 may extend over the countertop 110 when the sink system 100 is installed in the recessed cabinet space 102 to cover the rough or imperfect edges of the countertop 110. A bead of caulk or similar sealant may then be interposed between the top surface 112 and the countertop 110.

[0026] In some embodiments, the sink module 104 includes a second basin 128 extending into the sink module 104. The second basin 128 is positioned in confronting relation to the first basin 116 and may be similar to the first basin 116. A difference between the first basin 116 and the second basin 128 is that the second basin 128 has a greater depth (e.g., distance between the top surface 112 and the catch). In some embodiments, a partition 130 extends between the first basin 116 and the second basin 128 such that the first basin 116 and the second basin 128 are fluidly isolated from one another. The partition 130 may include one of the pair of ledges 126. In some embodiments, the partition 130 includes a valve 131 configured to selectively fluidly couple the first basin 116 to the second basin 128. For example, waste water from the first basin 116 may be transferred to the second basin 128 to facilitate operation of the garbage disposal instead of using new water from the faucet. The second basin 128 may be similar to the first basin 116 in that the second basin 128 includes sidewalls and a drain opening. For example, the second basin 128 may be fluidly coupled to a garbage disposal, making the second basin 128 a dedicated food waste basin. In some embodiments, the second basin 128 includes a basin lid 132 for covering the second basin 128 and preventing foreign objects from falling into the second basin 128. The basin lid 132 is pivotally coupled to the sink module 104. The basin lid 132 may pivot about a pivot axis that extends substantially parallel to the trailing edge 115. In some embodiments, the basin lid 132 pivots about a pivot axis that extends substantially perpendicular to the trailing edge 115. In some embodiments, the basin lid 132 forms a watertight seal about the second basin 128. In some embodiments, the first basin 116 includes a basin lid similar to the basin lid 132.

[0027] In some embodiments, the second basin 128 includes a specialty accessory, such as a convenience dishwasher 134 or an ultrasonic/ultraviolet cleaning system 136, shown in FIGS. 4 and 5. The convenience dishwasher 134 includes a propeller 137 positioned proximate the catch of the second basin 128 and configured to spray a fluid, such as water or soapy water, upward toward the basin lid 132 when the basin lid 132 is closed. A rack 138 is positioned within the convenience dishwasher 134 and is configured to position dishes and other utensils away from the propeller 137 such that the dishes do not interfere with the propeller 137 as the propeller 137 rotates. The rack 138 may be formed of stainless steel, aluminum, plastic, or a similar noncorrosive material. In some embodiments, the rack 138 includes endcaps or rubber stoppers that prevent the rack 138 from scratching the sidewalls and the catch of the second basin 128. To operate the convenience dishwasher 134, the user may pressed down on the basin lid 132 when the basin lid 132 is closed. A force on the basin lid 132 actuates a switch that sends a signal to the sink module 104 to deliver of flow of water to the propellers 137. So long as the basin lid 132 is being pressed down, the propellers 137 may rotate and deliver a flow of water. To end the cycle, the user releases the pressure on the basin lid 132. In some embodiments, the basin lid 132 latches closed to avoid accidental opening while the propellers are delivering water. In some embodiments, the convenience dishwasher 134 is controlled by a wireless remote, such as a control puck, touch remote, or mobile device. The convenience dishwasher 134 further includes a waste drain 135 configured to drain the contents of the second basin 128. In some embodiments, the convenience dishwasher 134 includes multiple cycle modes and is operable to run any one of the multiple cycle modes. The multiple cycle modes may include a "rinse" cycle, a "heavy duty" cycle, a "heat-to-dry" cycle, and any combination of the "rinse," "heavy duty," and "heat-to-dry" cycles.

[0028] The ultrasonic/ultraviolet cleaning system 136 uses sounds and/or light to disinfect kitchen items, such as fruits, vegetables, and dishes. Similar to the convenience dishwasher 134, the ultrasonic/ultraviolet cleaning system 136 includes the rack 138 removably positioned within the second basin 128. Positioned within the basin lid 132 is an ultraviolet light 140. The ultraviolet light 140 may be positioned in fluid communication with the second basin 128 whether the second basin 128 is a wash basin similar to the first basin 116, the convenience dishwasher 134, or the ultrasonic/ultraviolet cleaning system 136.

[0029] Positioned between the backsplash 113 and the first basin 116 is a recessed surface 144, recessed relative to the top surface 112. The recessed surface 144 provides a space for a user of the sink module 104 to place soap bottles, sponges, and the like. The recessed surface 144 may be rectangular and is contiguous with the sidewalls 118 of the first basin 116 such that waste and fluids from the recessed surface 144 can easily be wiped into the first basin 116. Extending through a central portion of the recessed surface 144 is an opening 146 for receiving the shank of a faucet 150. The faucet 150 extends through the opening 146 and is operable to provide a spray to both the first basin 116 and the second basin 128. The faucet 150 may be a goose-neck faucet, as shown, or any type of faucet configured for discharging a fluid in both the first basin 116 and the second basin 128. In some embodiments, a second opening extends through the recessed surface 144 and is configured to receive a second faucet. The second faucet is configured to provide fluid to at least the first basin 116. The fluid may be filtered water, hot water, soapy water, or other fluid. In some embodiments, the second faucet is configured to provide water to both the first basin 116 and the second basin 128.

[0030] A control puck 200 (e.g., touch control, touchless control, etc.) is positioned on the recessed surface 144 and is configured to send an electronic signal to a water delivery system (FIG. 6) in response to a user input, so as to provide a flow of water to any one of the integrated rinse feature 117, faucet 150, the second faucet, the convenience dishwasher 134, the ultrasonic/ultraviolet

cleaning system 136, the propellers 137, and/or a garbage disposal. The control puck 200 maybe wireless such that the control puck 200 is removable from the recessed surface 144 and may be held in a user's hand. In some embodiments, the control puck 200 is coupled to the recessed surface 144 and is communicably coupled to the water delivery system via a wired connection. In some embodiments, a flow of water through the faucet 150 is stopped and started using the control puck 200. The temperature of water and the flow rate of water may be adjusted using the control puck 200. In some embodiments, the control puck 200 includes a plurality of buttons and switches for controlling a flow of water. In some embodiments, the control puck 200 includes a plurality of capacitive touch sensors. In some embodiments, the control puck 200 includes a microphone and is configured to receive voice commands from the user. A magnet may be coupled to an underside of the control puck 200 such that the control puck 200 is removably coupled to the recessed surface 144, where the recessed surface 144 is formed of a ferrous metal. In some embodiments, such as when the control puck 200 includes a wired connection to the water delivery system, the control puck 200 is permanently coupled to the recessed surface 144.

[0031] Positioned below the sink module 104 is a water delivery system 180, shown in FIG. 6. The water delivery system 180 is configured to receive water from utility plumbing 181 (e.g., rough-in plumbing, etc.) and provide a flow of fluid to one of or both of the first basin 116 and the second basin 128. The water delivery system 180 is positioned (e.g., housed) within a housing 182 coupled to the cabinet module 106. The housing 182 includes a substantially planar rear surface 184 that faces the wall when the sink system 100 is positioned within the recessed cabinet space 102. The housing 182 further defines a housing cavity 186 that houses the water delivery system 180. The water delivery system 180 further includes a digital control valve 188, a water filtration system 190, a plurality of water delivery lines 192, and a power supply 194. The housing 182 is coupled to the sidewalls of the cabinet module 106 to add lateral rigidity to the cabinet module 106. In some embodiments, the housing 182 is formed of a structural material, such as stainless steel or reinforced plastic to add support to the cabinet module 106.

[0032] The digital control valve 188 is configured to receive a supply of water from the utility plumbing 181 and selectively deliver the flow of water to any of the integrated rinse feature 117, the water filtration system 190, the faucet 150, the second faucet, the convenience dishwasher 134, and/or the ultrasonic/ultraviolet cleaning system 136. The digital control valve 188 includes a wireless controller 196 configured to receive a signal from a control puck 200 positioned on the recessed surface 144 and operable by a user of the sink system 100. In response to receiving a signal from the control puck 200, the digital control valve 188 selectively delivers a flow of water. For example, in response to receiving a signal from the control puck 200, the digital control valve 188 may deliver a flow of water to the faucet 150.

[0033] The water filtration system 190 is an in situ filtration system configured to receive a flow of water from the digital control valve 188 and deliver the flow of water to the second faucet. The water filtration system 190 includes an in situ water filter 191 fluidly coupled to the water filtration system 190 and extending out of the housing 182. This allows for the water filter 191 to be removed without removing the housing cover 202 from the housing 182. For example, the second faucet may be a dedicated filtered water faucet configured to provide the user with filtered drinking water. In some embodiments, the second basin 128 receives a flow of water from the digital control valve 188, such as when the second basin 128 is the convenience dishwasher 134 or an ultrasonic/ultraviolet cleaning system 136. In some embodiments, the digital control valve 188 delivers a flow of water directly to a garbage disposal.

[0034] The housing 182 further includes a housing cover 202 removably coupled to the housing 182 to protect the components, such as the water delivery lines 192, positioned within the housing 182 from getting bumped by any equipment stored below the sink module 104 in the cabinet module 106.

[0035] The digital control valve 188 may be fluidly coupled to the utility plumbing 181 while the housing cover 202 is coupled to the housing 182. Coupled to the housing 182 and extending into the housing cavity 186 is a pair of inlet couplings 204 and a pair of outlet couplings 206. When installing the sink system 100, an installer may couple the utility plumbing 181 directly to the inlet couplings 204, avoiding the need to open the housing 182 and/or solder new joints. Similarly, the faucet 150 may be fluidly coupled to the outlet couplings 206 without using additional solder joints, solder couplings, or threaded couplings. For example, the inlet couplings 204 and the outlet couplings 206 may be quick-connect couplings, SHARKBITE® couplings, or a similar push-fit coupling. In some embodiments, the inlet couplings 204 and the outlet couplings 206 are threaded couplings configured for coupling with threaded connectors provided by either the faucet 150 or the utility plumbing 181. While only two outlet couplings 206 are shown, it should be understood that multiple sets of outlet couplings may be provided, such as for fluidly coupling to the second faucet, the second basin 128, the convenience dishwasher 134, the ultrasonic/ultraviolet cleaning system 136, a hand sprayer, and/or a garbage disposal. Water delivery to each of the various peripheral components attached by the outlet couplings 206 is facilitated by the digital control valve 188.

[0036] Extending out of the housing 182 is a power cord 208 for the power supply 194. Because the power cord 208, the inlet couplings 204, and the outlet couplings 206 are easily accessible without removing the housing cover 202, installation of the sink system 100 is more streamlined.

[0037] Referring to FIG. 7, a front view of the sink sys-

tem 100 is shown. Positioned below the leading edge 114 of the sink module 104 is a front apron 210. The front apron 210 extends along the horizontal width of the sink module 104 between the first peripheral edge 123 and the second peripheral edge 124. In some embodiments, the peripheral edges of the front apron 210 abut the cabinet when the sink system 100 is coupled within the cabinet space 102. The front apron 210 defines an apron cavity 212 positioned behind the front apron 210 and below the top surface 112 of the sink module 104. The apron cavity 212 is configured to receive storage containers and various kitchen accessories, such as a knife block. The front apron 210 is pivotally coupled to the sink system 100 along a pivot axis 214 and the front apron 210 is positionable between an open position and a closed position. In the closed position, a front apron surface 216 of the front apron 210 is positioned perpendicularly to the top surface 112 such that the front apron 210 interfaces with the sink module 104. More specifically, when the front apron 210 is in the closed position, a top of the front apron 210, and thus a top of the front apron surface 216, interfaces with the underside of the top surface 112 proximate to the leading edge 114. In the open position, the top of the front apron 210 is pivoted away from the sink module 104 about the pivot axis 214, exposing the apron cavity 212. In some embodiments, the front apron 210 is rigid and does not pivot away from the sink module 104 and does not include the apron cavity 212. In other words, the front apron 210 is similar to a front apron of a traditional apron sink.

[0038] A knife block 211 may be positioned within the apron cavity 212. The knife block 211 may include a rounded end that allows the user to rotate the knife block 211 from a parallel position (e.g., horizontal position) to a perpendicular position (e.g., vertical position) relative to the front apron surface 216. In the parallel position, the knife block 211 is disposed entirely within the apron cavity 212 and the front apron 210 is operable between the open position and the closed position. In the perpendicular positon, the knife block 211 extends out of the apron cavity 212 and prevents the front apron 210 from being in the closed position. A storage bin 215 may also be positioned within the apron cavity 212, the storage bin 215 configured to receive a sponge, rag, or other small item. The storage bin may be wedge shaped such that the tip of the wedge rests near the bottom of the apron cavity 212 and the opening of the storage bin 215 faces out of the apron cavity 212. The storage bin 215 is disposed entirely within the apron cavity 212 and does not interfere with the front apron 210 when transitioning from the open position to the closed position.

[0039] In some embodiments, the sink module 104 is self-trimming. Specifically, the edges of the front apron 210 extend beyond the edges of the recessed cabinet space 102 and cover a portion of the cabinetry to hide the cut lines. Similar to the self-trimming features of the top surface 112 described above, the front apron 210 provides straight lines and hides the uneven and/or imperfect cut lines in the recessed cabinet space 102.

[0040] In some embodiments, the front apron 210 includes a light source 221 and a mister 223. The light source 221 may provide visible light and be coupled to an underside of the top surface 112 of the sink module 104.The light source 221 may receive a signal to turn on when the front apron 210 is moved out of the closed positon. In some embodiments, the light source 221 is operated by the control puck 200. In some embodiments, the light source 221 provides ultraviolet light to sanitize the contents of the apron cavity 212. The light source 221 may provide the ultraviolet light in response to sensing that the front apron 210 is in the closed positon. In some embodiments, the light source 221 is configured to provide both visible light and ultraviolet light. The mister 223 may provide a misting of a sanitizing agent to sanitize the apron cavity 212. In some embodiments, the mister 223 is operated by the control puck 200. In some embodiments, the mister 223 is programmed to release the sanitizing mist intermittently based on a preset schedule. In some embodiments, the mister 223 provides the mist when the mister 223 senses that the front apron 210 is in the closed position.

[0041] The cabinet module 106 supports the sink module 104 at a desired height and fits in the recessed cabinet space 102. The cabinet module 106 includes a first peripheral sidewall 250, a second peripheral sidewall 252 positioned opposite to the first peripheral sidewall 250, and a leg stand 254 extending between the first peripheral sidewall 250 and the second peripheral sidewall 252 and coupled to both the first peripheral sidewall 250 and the second peripheral sidewall 252. The sink module 104, the first peripheral sidewall 250, the second peripheral sidewall 252, and the leg stand 254 cooperate to define a cabinet cavity 260. The first peripheral sidewall 250, the second peripheral sidewall 252, and the leg stand 254 may be formed of steel, aluminum, wood, or a similar material exhibiting corrosion resistance and able to support the weight of the sink module 104.

[0042] The cabinet cavity 260 houses the water delivery system 180, a garbage disposal 262, a base tray 264, and a plurality of storage devices. The garbage disposal 262 may be a direct injection garbage disposal. For example, a conduit may extend from the water delivery system 180 and provide a flow of water directly to the garbage disposal. In some embodiments, such as when the garbage disposal 262 is an impeller disposal, the water delivery system 180 may provide a flow of water to the impeller in the direction that the impeller rotates (e.g., substantially tangential to the rotational direction of the impeller). In some embodiments, the garbage disposal 262 includes a mister 263 that provides a sanitizing mist to the inside of the garbage disposal 262 to eliminate bacteria and prevent unwelcome smells. In some embodiments, the garbage disposal 262 includes a light source 261 coupled to the garbage disposal 262 and configured to provide ultraviolet light to the inside of the garbage disposal 262. In some embodiments, the mister 263

and the light source 261 cooperate to sanitize the garbage disposal 262.

[0043] When the sink system 100 is installed within the recessed cabinet space 102, the sink system 100 may be pushed against the rear wall of the recessed cabinet space 102 such that the first peripheral sidewall 250 and the second peripheral sidewall 252 interface with the rear wall. The base tray 264 extends across the leg stand 254 to provide a solid surface for placing various supplies and equipment. The base tray 264 may be slidably coupled to the peripheral sidewalls 250, 252 and/or the leg stand 254 such that the base tray 264 may be slid in and out of the cabinet cavity 260.

[0044] The peripheral sidewalls 250, 252 include a plurality of parallel slots 265 extending substantially parallel to the horizon. Each of the plurality of slots 265 may be L-shaped and configured to receive a similarly shaped projection. The plurality of parallel slots 265 are configured to be operatively coupled with a sliding drawer 268, a sliding waste bin 270, and the base tray 264. The sliding drawer 268 defines a substantially rectangular body having a storage cavity 272 and drawer sidewalls 274. Extending orthogonally away from the drawer sidewalls 274 is a first flange 276 configured to be received within one of the plurality of parallel slots 265 in one of the peripheral sidewalls 250, 252. The first flange 276 may be L-shaped, similar to the shape of the plurality of slots 265. As shown in FIG. 7, the first flange 276 hooks onto the second peripheral sidewall 252 to prevent movement of the sliding drawer 268 in a direction toward the first peripheral sidewall 250. When the sliding drawer 268 is slid into and out of the cabinet cavity 260, the first flange 276 slides within one of the plurality of parallel slots 265. The sliding drawer 268 is adjustable such that the first flange 276 may be removed from one of the plurality of parallel slots 265 and inserted into a different one of the plurality of parallel slots 265. Thus, a user of the sliding drawer 268 may adjust the placement and height of the sliding drawer 268 relative to the sink module 104. The sliding drawer 268 further includes a second flange 278 extending orthogonally away from the sliding drawer 268 parallel to the first flange 276. The second flange 278 is configured to be received within one of the plurality of parallel slots 265 proximate to the slot 265 that the first flange 276 is operatively coupled to. A difference between the first flange 276 and the second flange 278 is that the second flange 278 defines a straight profile and does not hook into the L-shaped slot 265. The second flange 278 provides support to the sliding drawer 268 and guides the sliding drawer 268 as the sliding drawer 268 is slid into and out of the cabinet cavity 260.

[0045] In some embodiments, the sliding drawer 268 is polarized such that the sliding drawer 268 may only be operably coupled to the plurality of parallel slots 265 in one of the first peripheral sidewall 250 or the second peripheral sidewall 252. In some embodiments, the sliding drawer 268 is symmetrical and may be operatively coupled any one of the plurality of parallel slots 265 in either the first peripheral sidewall 250 and the second peripheral sidewall 252. The sliding waste bin 270 is similar to the sliding drawer 268. A difference between the sliding waste bin 270 and the sliding drawer 268 is that the sliding waste bin 270 has a greater height. The sliding waste bin 270 may include the first flange 276 and the second flange 278 such that the sliding waste bin 270 is operatively coupled to two of the plurality of parallel slots 265 for a greater amount of support. In some embodiments, the sliding waste bin 270 includes a third flange for greater support. For example, the sliding waste bin 270 may include trash, which may be heavier than what is stored in the sliding drawer 268. Accordingly, an additional flange (e.g., the third flange, a fourth flange, etc.) may provide more support for the sliding waste bin 270.

[0046] The sink system 100 further includes a dry sliding drawer 280 operatively coupled to one of the plurality of parallel slots 265 and similar to the sliding drawer 268. Accordingly, like numbering is used to designate like parts between the sliding drawer 268 and the dry sliding drawer 280. A difference between the sliding drawer 268 and the dry sliding drawer 280 is that the dry sliding drawer 280 includes features that detect the humidity within the cavity 272 and reduce the humidity within the cavity 272, thus drying an interior space within the dry sliding drawer 280 and the contents stored within the dry sliding drawer 280, such as a wet sponge, wet rag, or wet dish. The dry sliding drawer 280 includes a sensor 282, a fan 284, a heating element 286, and a dehumidifier 288. The sensor 282 may be a humidity sensor and is configured to detect the level of humidity within the cavity 272. When the sensor 282 detects that the humidity level within the cavity 272 is above a threshold value, the fan 284 may turn on. In some embodiments, the heating element 286 turns on to heat the contents of the dry sliding drawer 280, thus drying the contents of the cavity 272. In some embodiments, the dehumidifier 288 is turned on and reduces the humidity within the cavity 272. In some embodiments, the sensor 282, the fan 284, the heating element 286, and the dehumidifier 288 are coupled to the underside of the sink module 104. Thus, the dry sliding drawer 280 is whichever drawer is positioned such that the cavity 272 is in visual communication with the underside of the sink module 104. For example, the sliding waste bin 270 may be positioned in visual communication with the sink module 104, making the sliding waste bin 270 also the dry sliding drawer 280.

[0047] The sink system 100 further includes a sanitary sliding drawer 290 operatively coupled to one of the plurality of parallel slots 265 and similar to the sliding drawer 268. Accordingly, like numbering is used to designate like parts between the sliding drawer 268 and the sanitary sliding drawer 290. A difference between the sliding drawer 268 and the sanitary sliding drawer 290 is that the sanitary sliding drawer 290 includes features that sanitize the cavity 272 and the contents stored within the cavity 272, such as a sponge, rag, or dish. The sanitary sliding drawer 290 includes a light source 292 and a mis-

ter 294. The light source 292 may be an ultraviolet light source and is configured to turn on in response to receiving a control from a remote controller, such as the control puck 200 and/or a mobile device (e.g., cell phone). The ultraviolet light from the light source 292 may sanitize the contents of the sanitary sliding drawer 290. In some embodiments, the mister 294 releases a misting of a sanitizing spray into the cavity 272 each time the sanitary sliding drawer 290 is closed (e.g., slid into the cabinet cavity 260). In some embodiments, the mister 294 releases a misting in response to receiving a control from a remote controller, such as the control puck 200 and/or a mobile device (e.g., cell phone). In some embodiments, the light source 292 and the mister 294 are coupled to the underside of the sink module 104. Thus, the sanitary sliding drawer 290 is whichever drawer is positioned such that the cavity 272 is in visual communication with the underside of the sink module 104 having the light source 292 and the mister 294. For example, the sliding drawer 268 may be positioned in visual communication with the sink module 104 coupled with the light source 292 and the mister 294, making the sliding waste bin 270 also the sanitary sliding drawer 290.

[0048] The cabinet module 106 may further include a rack 315. The rack 315 may be coupled to the sink module 104, the peripheral sidewalls 250, 252, the garbage disposal 262, the housing 182, and/or the front apron 210. The rack 315 is configured to hold a towel or cloth. As shown in FIG. 7, the rack 315 is positioned in a central location of the cabinet cavity 260, positioned between the sliding drawers 268, 270 positioned on either side of the cabinet module 106. In some embodiments, the rack 315 slides out of the cabinet cavity 260 when pulled on.

[0049] The sink system 100 further includes a tote 320. The tote 320 is positioned on the base tray 264 and configured to fit between the sliding drawers 268, 270 positioned on either side of the cabinet module 106. The tote 320 is configured to hold cleaning supplies, such as sponges, bottles of cleaning supplies, rags, and similar items. The tote 320 may be formed of cloth, canvas, plastic, a polymeric material, or similar material resistant to water and soap. In some embodiments, the tote 320 is sized to fit underneath the garbage disposal 262.

[0050] The sink system 100 further includes cabinet doors, shown as a first door 350 and a second door 352. The first door 350 and the second door 352 are pivotally couple to the cabinet module 106 and selectively close the cabinet cavity 260. The cabinet doors 350, 352 may be formed of metal, wood, plastic, acrylic, glass, or similar materials. In some embodiments, the cabinet doors 350, 352 are configured to receive a decorative facing, such as a plating (e.g., nickel-plating), luan wood, paneling, decals, stickers, and the like. In some embodiments, the cabinet doors 350, 352 match the cabinetry surrounds the recessed cabinet space 102. In some embodiments, the cabinet doors 350, 352 are removably coupled to the cabinet module 106. For example, if the plumbing (e.g., garbage disposal 262, water delivery system 180, etc.) requires servicing, it may be easier for the serviceman to remove the cabinet doors 350, 352 instead of working around the cabinet doors 350, 352 opening and closing while trying to work.

[0051] The cabinet module 106 further includes a lighting system 356 configured to supply visible light and/or ultraviolet light to the cabinet cavity 260. The lighting system 356 may be coupled to the sink module 104, the peripheral sidewalls 250, 252, the garbage disposal 262, the housing 182, and/or the front apron 210. The lighting system 356 may include LED lights, incandescent lights, RGB lights, and similar types of lights. The lighting system 356 receives power from the power supply 194 positioned within the housing 182. The lighting system 356 may be operatively controlled by the control puck 200. In some embodiments, the lighting system 356 provides a supply of visible light in response to sensing that the cabinet doors 350, 352 are in an open position. In some embodiments, the lighting system 356 provides ultraviolet light in response to detecting that the cabinet doors 350, 352 are in a closed position.

[0052] The cabinet module 106 further includes a misting system 360 configured to supply a sanitizing mist and/or a scented mist to the cabinet cavity 260. The misting system 360 may be coupled to the sink module 104, the peripheral sidewalls 250, 252, the garbage disposal 262, the housing 182, and/or the front apron 210. The misting system 360 receives power from the power supply 194 positioned within the housing 182. The misting system 360 may be operatively controlled by the control puck 200. In some embodiments, the misting system 360 provides a scented mist in response to sensing that the cabinet doors 350, 352 are in an open position. In some embodiments, the misting system 360 provides a sanitizing mist in response to detecting that the cabinet doors 350, 352 are in a closed position.

[0053] The cabinet module 106 further includes a dehumidifying system 370 configured to remove moisture from the cabinet cavity 260. The dehumidifying system 370 may be coupled to the sink module 104, the peripheral sidewalls 250, 252, the garbage disposal 262, the housing 182, and/or the front apron 210. The dehumidifying system 370 receives power from the power supply 194 positioned within the housing 182. The dehumidifying system 370 may be operatively controlled by the control puck 200. In some embodiments, the dehumidifying system 370 is power on in response to sensing that the cabinet doors 350, 352 are in a closed position. In some embodiments, the dehumidifying system 370 is powered off in response to detecting that the cabinet doors 350, 352 are in a closed position.

[0054] Turning now to FIGS. 8 and 9, the leg stand 254 is shown including front legs 300, rear legs 302, and a leveling indicator 304. The front legs 300 includes adjustable feet 306 configured to raise and lower the front legs 300 and adjust the height of the sink module 104 relative to the ground. The rear legs 302 include wheels 308 (e.g., rollers) rotatably coupled to the rear legs 302

and configured to ease the positioning of the sink system 100 into the recessed cabinet space 102. A support beam 310 extends across the leg stand 254 and includes the leveling indicator 304. The leveling indicator 304 may be a bubble leveler that indicates how level the front of the sink system 100 is relative to the horizon.

[0055] The sink system 100 provides the advantage of being highly customizable by the user, even after being installed and all of the utility lines (e.g., water, electricity) are connected. For example, the sliding drawer 268 may be positioned in most any of the plurality of parallel slots 265 without having to remove fasteners, latches, or disconnect and reconnect the utilities.

[0056] Referring to FIGS. 10-12, three different configurations of the sink system 100 are shown. The sink system 100 of FIG. 10 includes the sink module 104 and the cabinet module 106 positioned within a recessed cabinet space 102. The sink module 104 includes the first basin 116, but not the second basin 128. Instead of the second basin 128, the recessed surface 144 is extended over the portion of the sink module 104 where the second basin 128 would be positioned. The sink module 104 further includes the front apron 210 having the front apron surface 216, but the front apron 210 does not pivot and does not include the apron cavity 212. In some embodiments, the sink module 104 is formed from one piece of sheet metal. The sink module 104 includes self-trimming features, including portions of the top surface 112 that extend over the countertop 110.

[0057] The cabinet module 106 includes a cabinet partition 400 extending between the leg stand 254 and the sink module 104. The cabinet partition 400 includes the plurality of parallel slots 265 and is configured to be slidingly coupled with the sliding drawer 268. In some embodiments, the cabinet partition 400 is positioned at a central location of the cabinet module 106. In some embodiments, the cabinet partition 400 is positioned nearer to the second peripheral sidewall 252 than the first peripheral sidewall 250. The garbage disposal 262 is positioned outside of an alcove 402 formed by the cabinet partition 400 and the second peripheral sidewall 252. The alcove 402 may include the lighting system 356, the misting system 360, and/or the dehumidifying system 370. In some embodiments, the alcove 402 is fluidly sealed from the rest of the cabinet cavity 260 such that moisture from the garbage disposal 262 is prevented from entering the alcove 402.

[0058] The sink system 100 further includes a toe kick 404 coupled to the leg stand 254 and extending between the front legs 300 and the floor. The toe kick 404 may match the cabinetry. The sink system 100 of FIG. 10 is shown with the cabinet doors 350, 352 removed.

[0059] Turning now to FIG. 11, the sink system 100 is shown according to another example embodiment. The sink system 100 of FIG. 11 is similar to the sink system of FIG. 10. However, the sink system 100 of FIG. 11 further includes the convenience dishwasher 134, the basin lid 132, and the dry sliding drawer 280. The convenience dishwasher 134 is positioned within the second basin 128 and includes plumbing connections to the water delivery system 180. The dry sliding drawer 280 is shown in a pulled out positon. Positioned within the dry sliding drawer 280 is a drawer organizer configured to withstand the temperatures of the heating element 286. In some embodiments, the dry sliding drawer 280 is formed of a material different from the sliding drawer 268 and configured to withstand higher temperatures. Within the alcove 402 are the sliding drawer 268 and various other sliding shelves 406 similar to the sliding drawer 268. The sliding shelves 406 positioned within the alcove 402 are slidingly coupled to the plurality of parallel slots in both the second peripheral sidewall 252 and the cabinet partition 400. In some embodiments, the cabinet partition 400 is positionable either one drawer-width from the second peripheral sidewall 252 or one drawer-width from the first peripheral sidewall 250.

[0060] Turning now to FIG. 12, the sink system 100 is shown according to yet another example embodiment. The sink system 100 of FIG. 12 is similar to both the sink system 100 of FIG. 10 and the sink system 100 of FIG. 11. However, the sink system 100 of FIG. 12 includes the front apron 210 pivotally coupled to the sink system 100 and including the apron cavity 212 configured to store the knife block 211 and the storage bins 215. Positioned in the second basin 128 is the ultrasonic/ultraviolet cleaning system 136. The rack 315 is coupled to one of the plurality of parallel slot 265 positioned on the first peripheral sidewall 250. The rack 31 is slidable along the slot 265. In some embodiments, various accessories may be operatively couple to the plurality of parallel slots 265. For example, the rack 315, sliding drawer 268, the shelves 406, hangers, platforms, and third-party accessories may be operatively coupled to and slidable along the plurality of parallel slots 265.

[0061] As utilized herein with respect to numerical ranges, the terms "approximately," "about," "substantially," and similar terms generally mean +/- 10% of the disclosed values, unless specified otherwise. As utilized herein with respect to structural features (e.g., to describe shape, size, orientation, direction, relative position, etc.), the terms "approximately," "about," "substantially," and similar terms are meant to cover minor variations in structure that may result from, for example, the manufacturing or assembly process and are intended to have a broad meaning in harmony with the common and accepted usage by those of ordinary skill in the art to which the subject matter of this disclosure pertains. Accordingly, these terms should be interpreted as indicating that insubstantial or inconsequential modifications or alterations of the subject matter described and claimed are considered to be within the scope of the disclosure as recited in the appended claims.

[0062] It should be noted that the term "exemplary" and variations thereof, as used herein to describe various embodiments, are intended to indicate that such embodiments are possible examples, representations, or illus-

trations of possible embodiments (and such terms are not intended to connote that such embodiments are necessarily extraordinary or superlative examples).

[0063] The term "coupled" and variations thereof, as used herein, means the joining of two members directly or indirectly to one another. Such joining may be stationary (e.g., permanent or fixed) or moveable (e.g., removable or releasable). Such joining may be achieved with the two members coupled directly to each other, with the two members coupled to each other using a separate intervening member and any additional intermediate members coupled with one another, or with the two members coupled to each other using an intervening member that is integrally formed as a single unitary body with one of the two members. If "coupled" or variations thereof are modified by an additional term (e.g., directly coupled), the generic definition of "coupled" provided above is modified by the plain language meaning of the additional term (e.g., "directly coupled" means the joining of two members without any separate intervening member), resulting in a narrower definition than the generic definition of "coupled" provided above. Such coupling may be mechanical, electrical, or fluidic.

[0064] References herein to the positions of elements (e.g., "top," "bottom," "above," "below") are merely used to describe the orientation of various elements in the FIGURES. It should be noted that the orientation of various elements may differ according to other exemplary embodiments, and that such variations are intended to be encompassed by the present disclosure.

[0065] It is important to note that any element disclosed in one embodiment may be incorporated or utilized with any other embodiment disclosed herein. For example, the convenience dishwasher 134 of the exemplary embodiment described in at least paragraph [0039] may be incorporated in the ultrasonic/ultraviolet cleaning system 136 of the exemplary embodiment described in at least paragraphs [0040]. Although only one example of an element from one embodiment that can be incorporated or utilized in another embodiment has been described above, it should be appreciated that other elements of the various embodiments may be incorporated or utilized with any of the other embodiments disclosed herein.

Claims

1. A sink system configured for coupling within a recessed cabinet space, the sink system comprising:

   a cabinet module; and
   a sink module coupled to an upper end of the cabinet module, the sink module comprising a sink basin and a faucet.

2. The sink system of claim 1, further comprising a water delivery system configured to receive a flow of water from a utility line and selectively provide the flow of water to the sink module based on a control signal received from a controller.

3. The sink system of claim 2, wherein the water delivery system comprises:

   a power supply; and
   a digital control valve operably coupled to the power supply and configured to receive the flow of water from the utility line and selectively provide the flow of water to the sink system in response to the control signal received from the controller;
   optionally wherein the water delivery system further comprises a water filtration system, and the digital control valve is configured to provide the flow of water to the water filtration system before the flow of water is provided to the sink module.

4. The sink system of claim 1, claim 2 or claim 3, wherein the cabinet module further comprises:

   a first peripheral wall;
   a second peripheral wall positioned opposite to the first peripheral wall, and
   a leg stand coupled to the first peripheral wall and the second peripheral wall.

5. The sink system of claim 4, further comprising a water delivery system configured to receive a flow of water from a utility line and provide the flow of water to the sink module, the water delivery system extending between and coupled to both the first peripheral wall and the second peripheral wall and/or wherein the first peripheral wall includes a plurality of mounting slots extending from a rear of the cabinet module to a front of the cabinet module, each of the plurality of mounting slots configured to receive a slotted accessory.

6. A sink system comprising:

   a cabinet module comprising:

      a first peripheral sidewall
      a second peripheral sidewall opposite to the first peripheral sidewall; and
      a leg stand coupled to and extending between the first peripheral sidewall and the second peripheral sidewall; and

   a sink module coupled to the cabinet module; and
   a water delivery system coupled to the cabinet module and configured to provide a flow of water to the sink module.

7. The sink system of claim 6, further comprising a de-

livery housing coupled to the cabinet module and extending between the first peripheral sidewall and the second peripheral sidewall, wherein the water delivery system in coupled to the delivery housing.

8. The sink system of claim 6 or claim 7, wherein the water delivery system includes a digital control valve configured to receive a flow of water, the digital control valve communicably coupled to a controller configured to provide a control signal to the digital control valve to selectively provide the flow of water to the sink module.

9. The sink system of claim 8, wherein the sink module comprises a faucet in fluid communication with a first basin and a second basin of the sink module, the faucet configured to selectively receive the flow of water from the digital control valve based on the control signal from the controller and/or wherein the controller is a wireless control puck.

10. The sink system of any one of claims 6 to 9, wherein the sink module further comprises:

a faucet;
a first basin; and
a second basin smaller than the first basin;
wherein the faucet is in fluid communication with both the second basin and the first basin.

11. The sink system of claim 10, wherein the second basin is one of a convenience dishwasher, an ultrasonic cleaning basin, or an ultraviolet cleaning basin.

12. A water delivery system comprising:

a digital control valve configured to receive a flow of water;
an inlet coupling in fluid communication with the digital control valve, the inlet coupling configured for coupling with a fluid source;
an outlet coupling in fluid communication with the digital control valve, the outlet coupling configured to receive a flow of water from the digital control valve and configured for coupling with an outlet conduit; and
a power supply operably coupled to the digital control valve.

13. The water delivery system of claim 12, wherein the power supply includes a power cord configured to plug into a residential wall outlet providing a single-phase voltage of between 100-250 volts and between 50-60 hertz and/or wherein the inlet coupling is a push-to-connect fitting.

14. The water delivery system of claim 12 or claim 13, further comprising a fluid filtration system, the digital control valve configured to provide the flow of water to the fluid filtration system, and the fluid filtration system configured to provide the flow of water to the outlet coupling, optionally wherein the fluid filtration system includes an in situ filter removably coupled to the water delivery system.

15. The water delivery system of any one of claims 12 to 14, wherein the water delivery system further comprises:

a delivery housing;
a housing cover removably coupled to the delivery housing and configured to prevent access to the digital control valve when the housing cover is coupled to the delivery housing;
wherein the fluid source is coupleable to the inlet coupling while the housing cover is coupled to the delivery housing; and
wherein the outlet conduit is coupleable to the outlet coupling while the housing cover is coupled to the delivery housing.

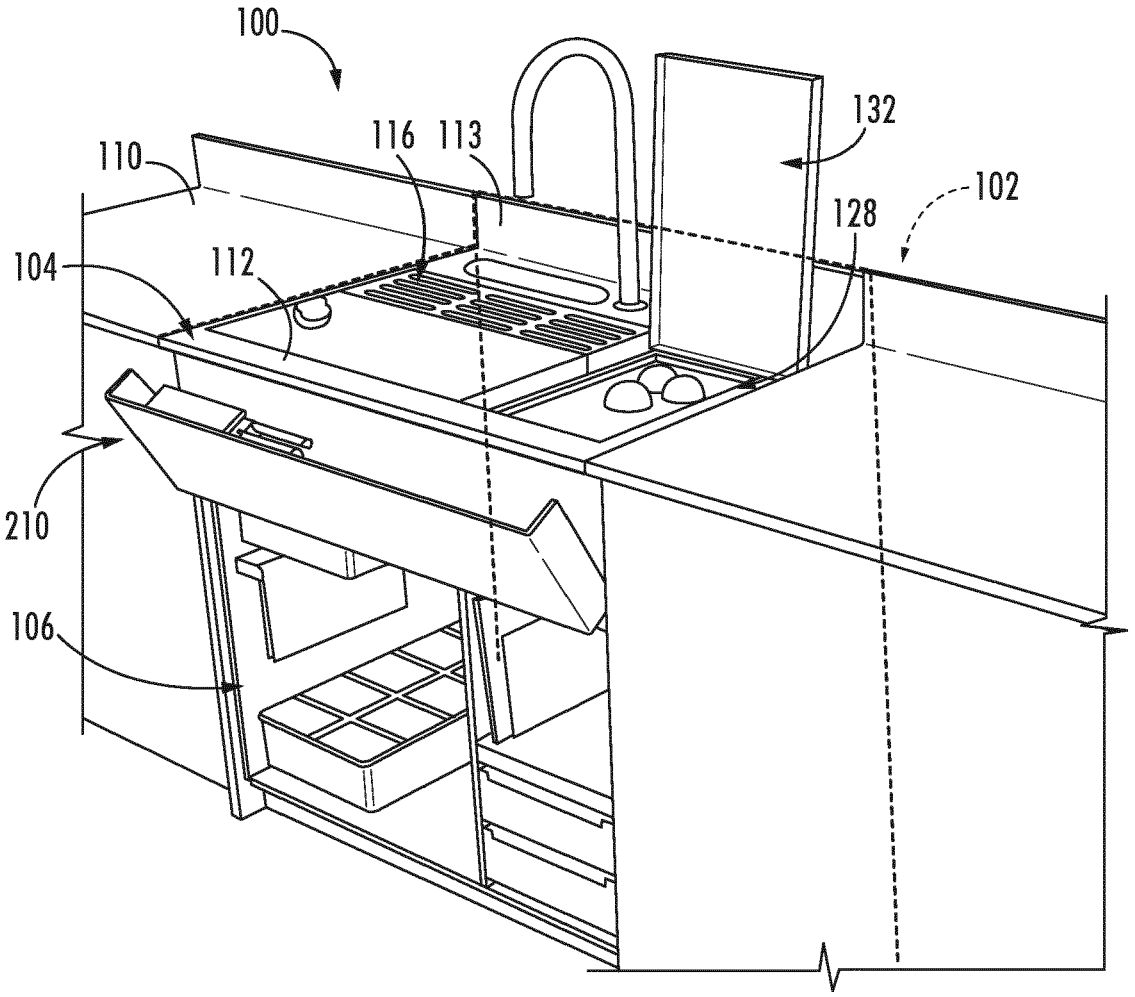

FIG. 1

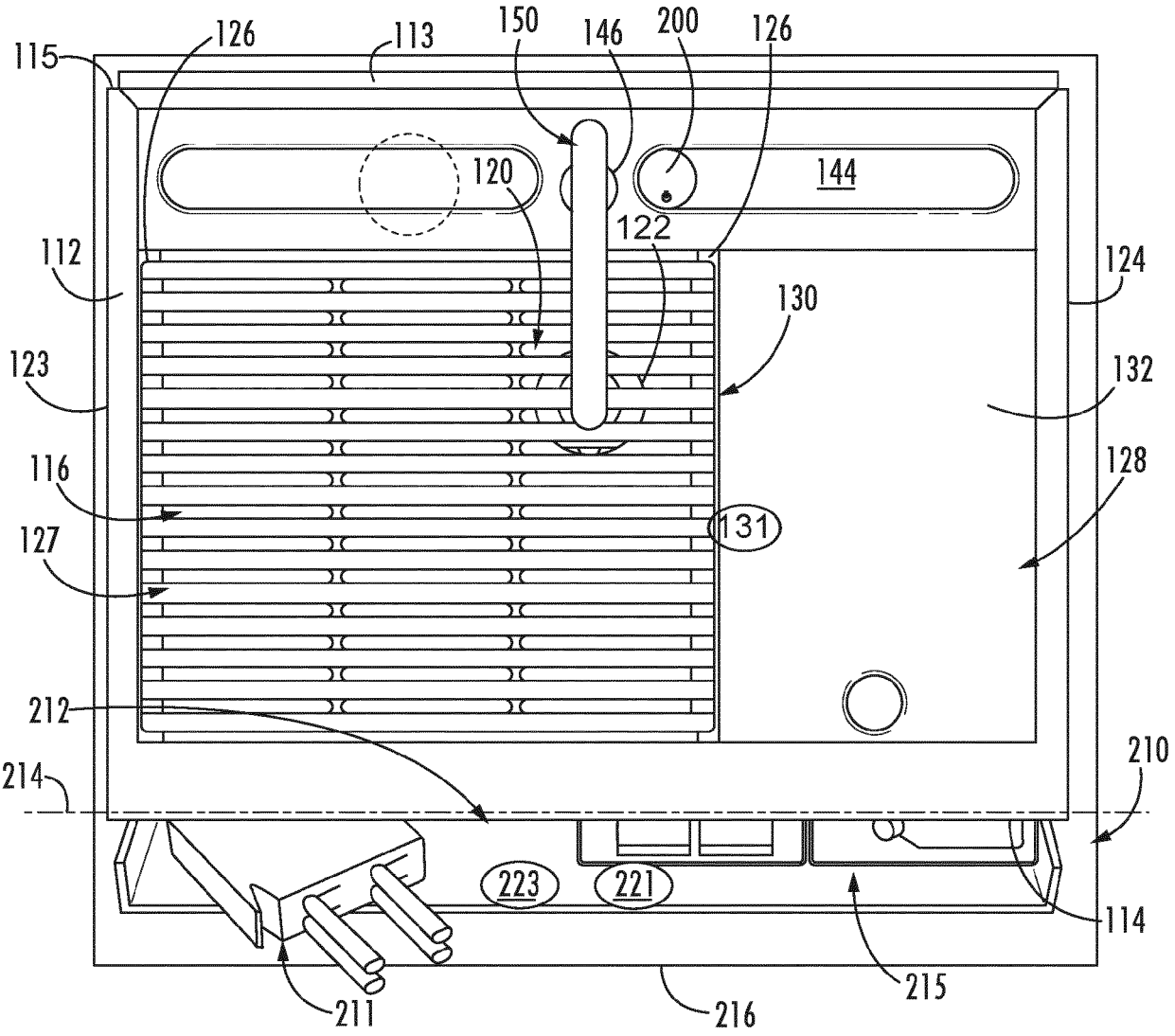
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FIG. 2

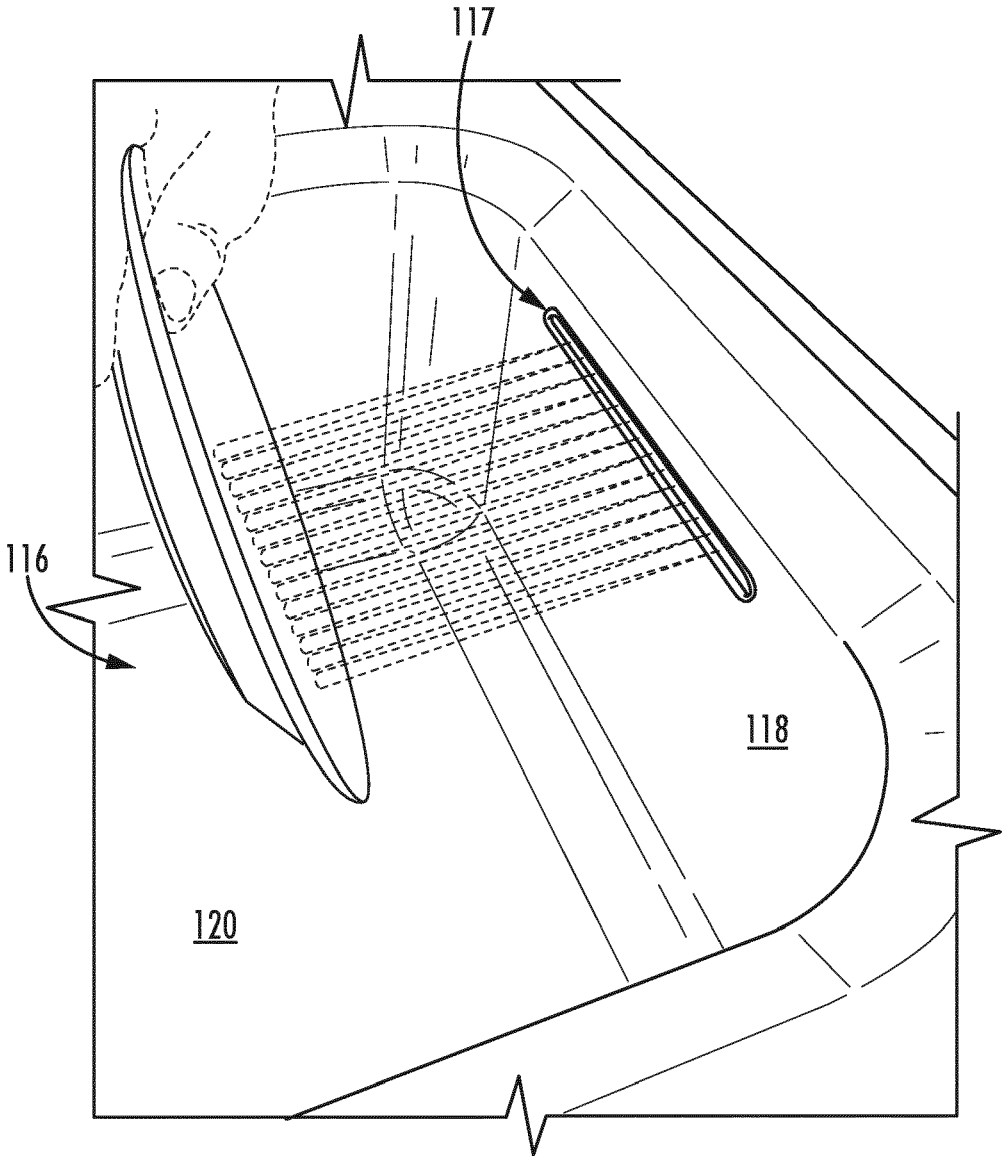

FIG. 3

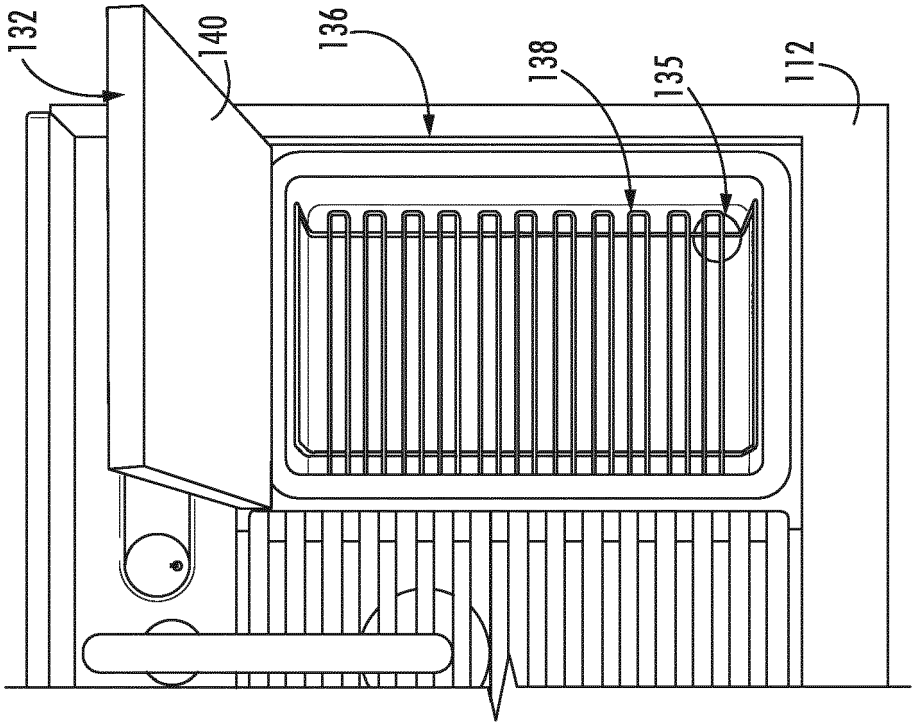

FIG. 5

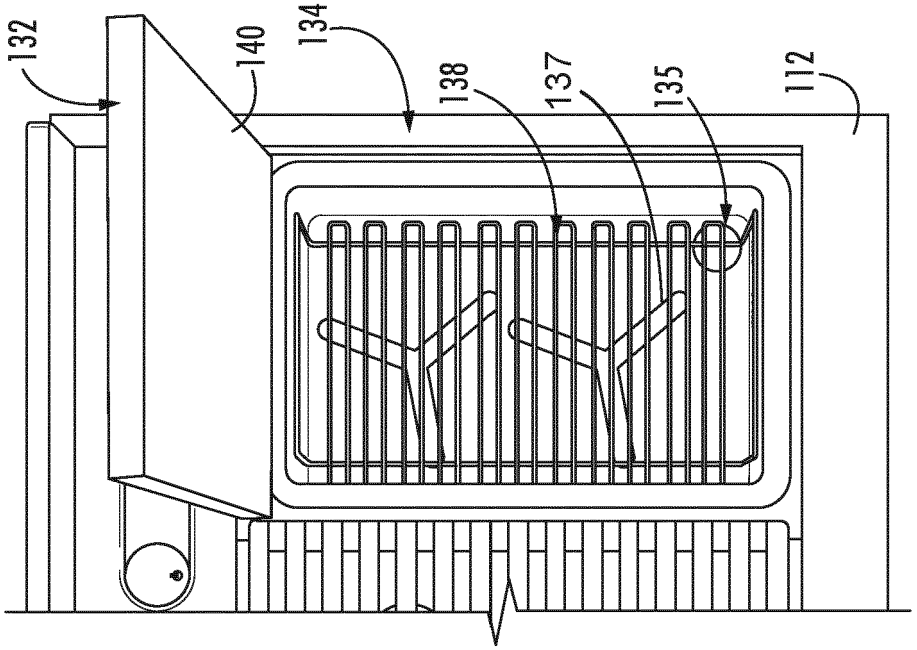

FIG. 4

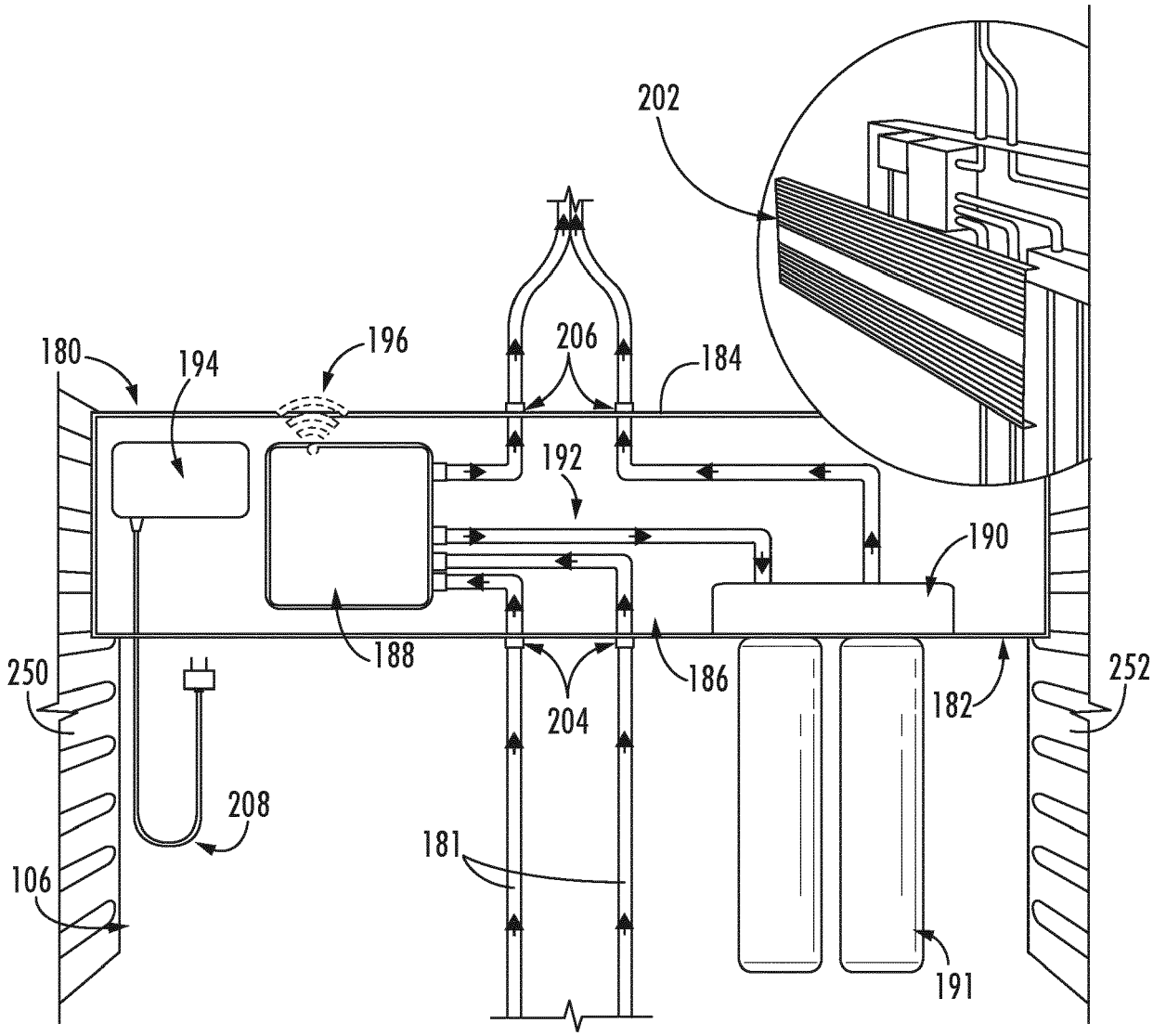
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FIG. 6

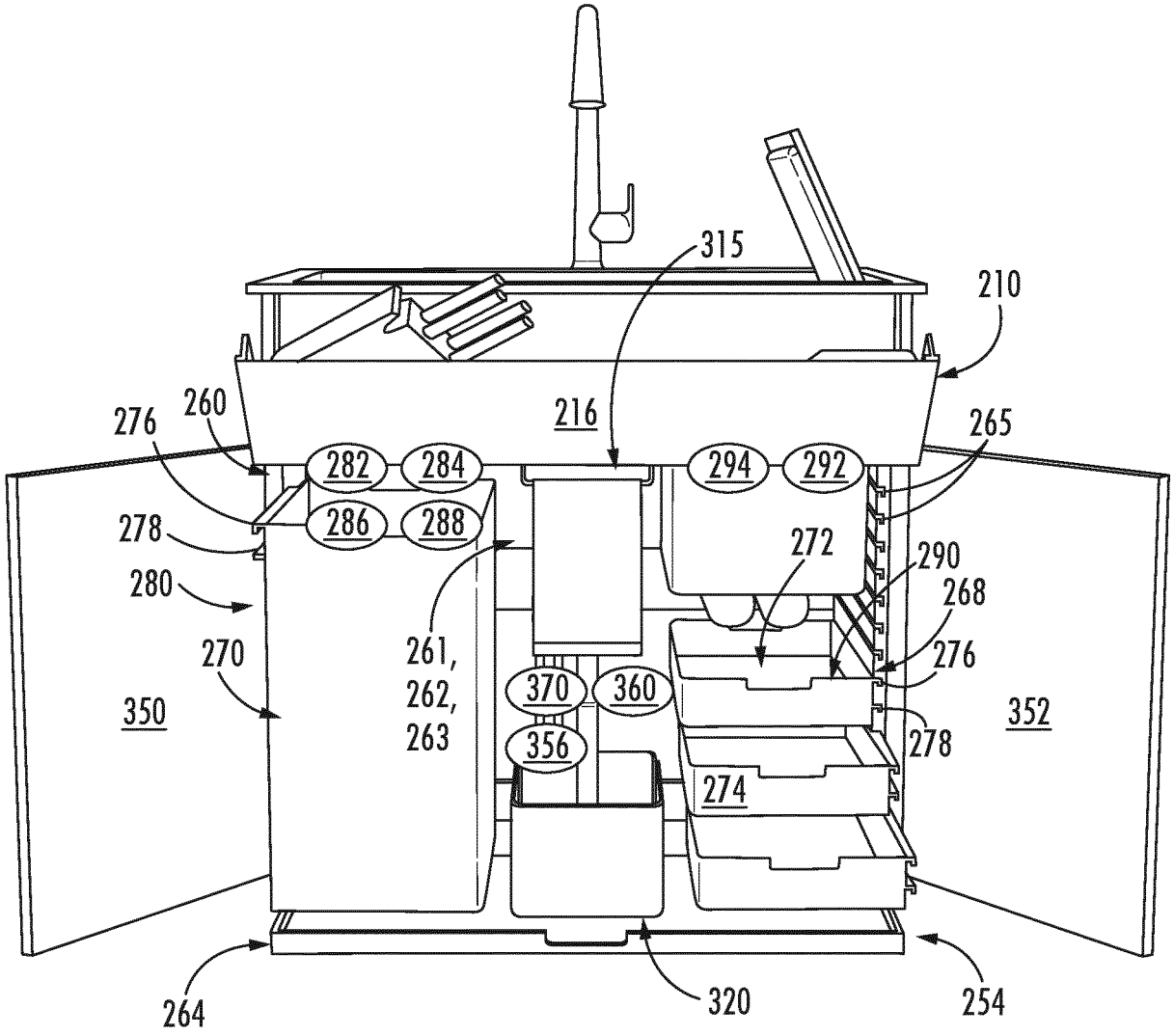
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FIG. 7

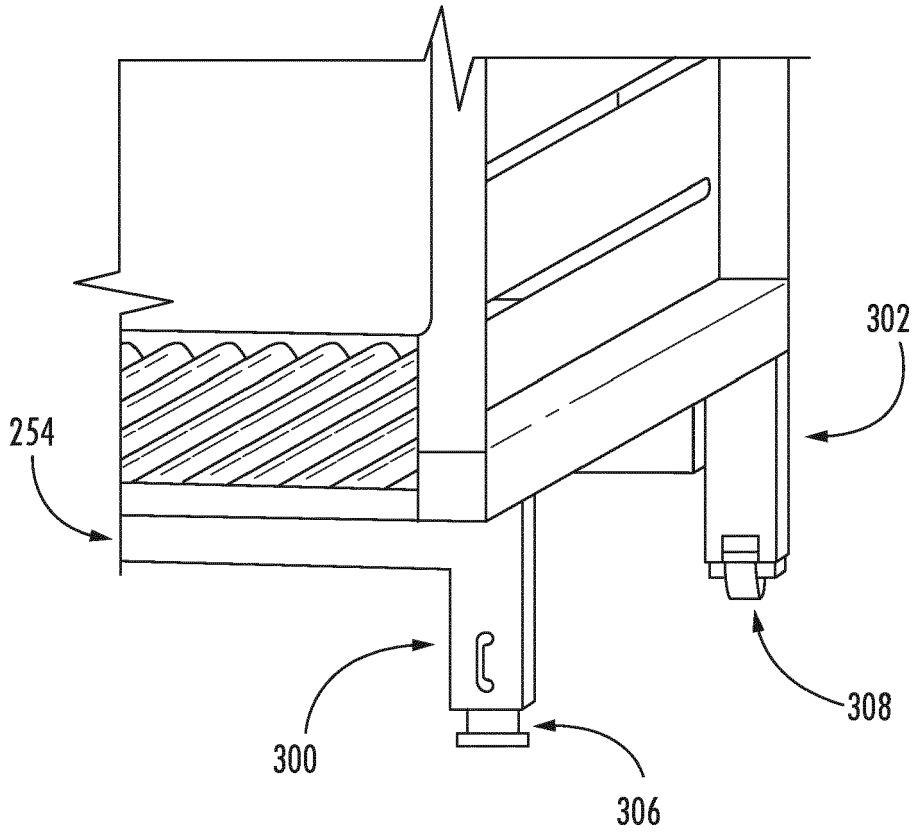

FIG. 8

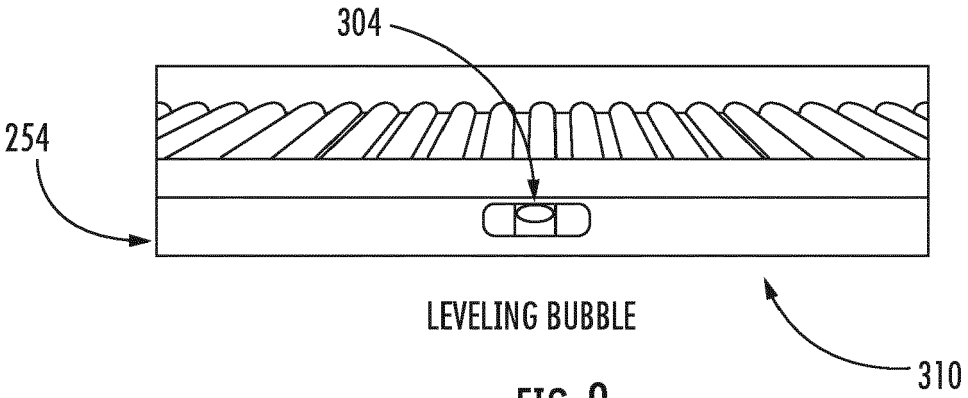

FIG. 9

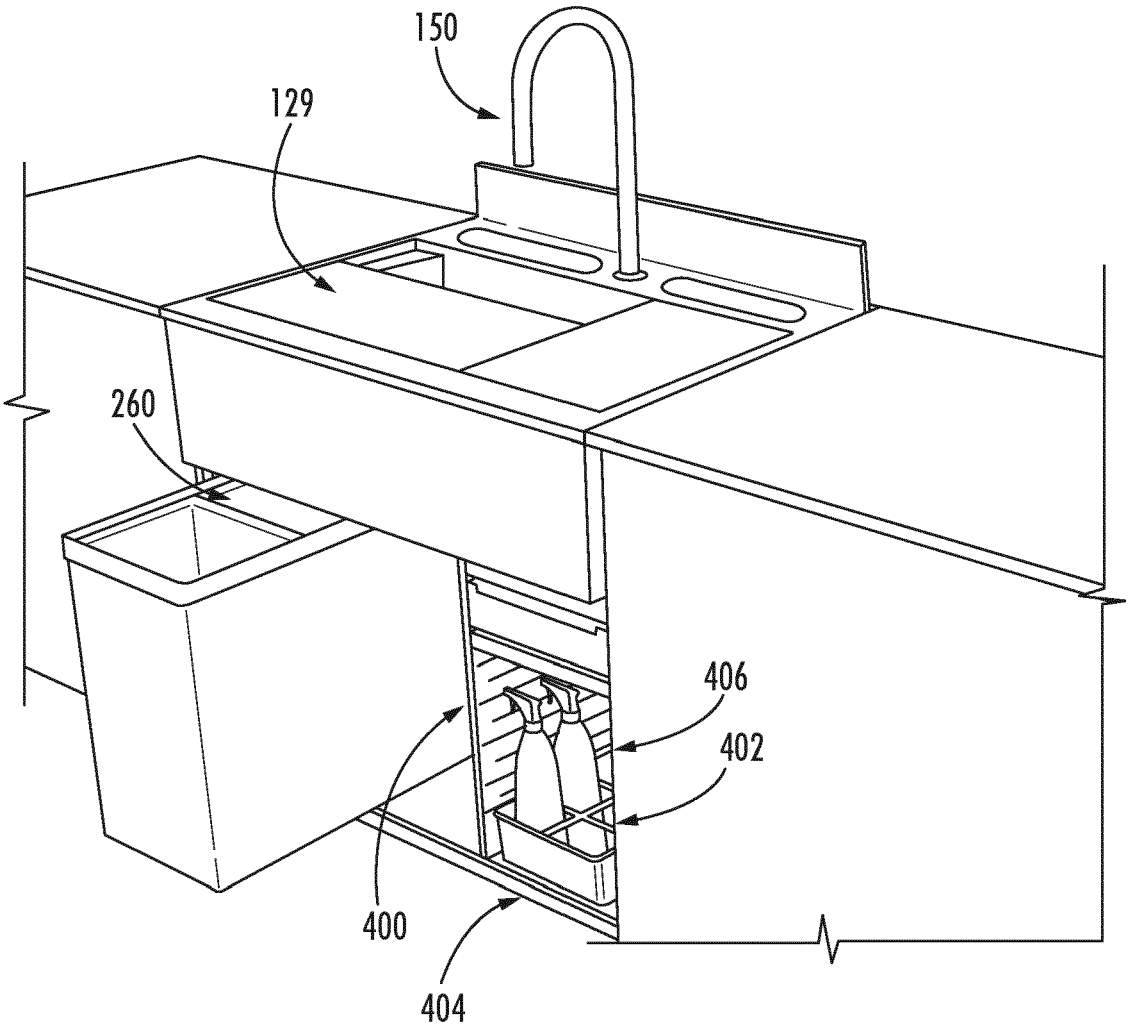

FIG. 10

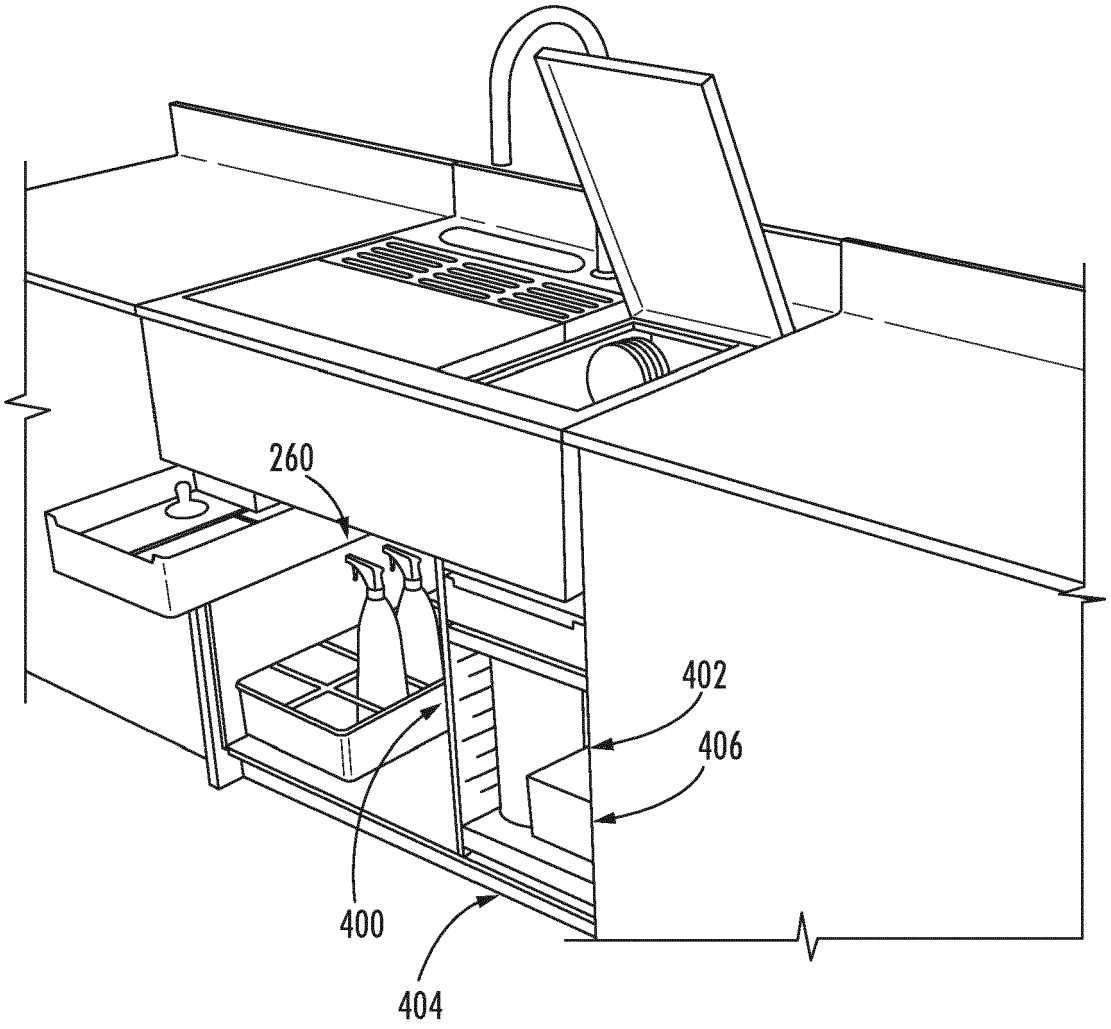

FIG. 11

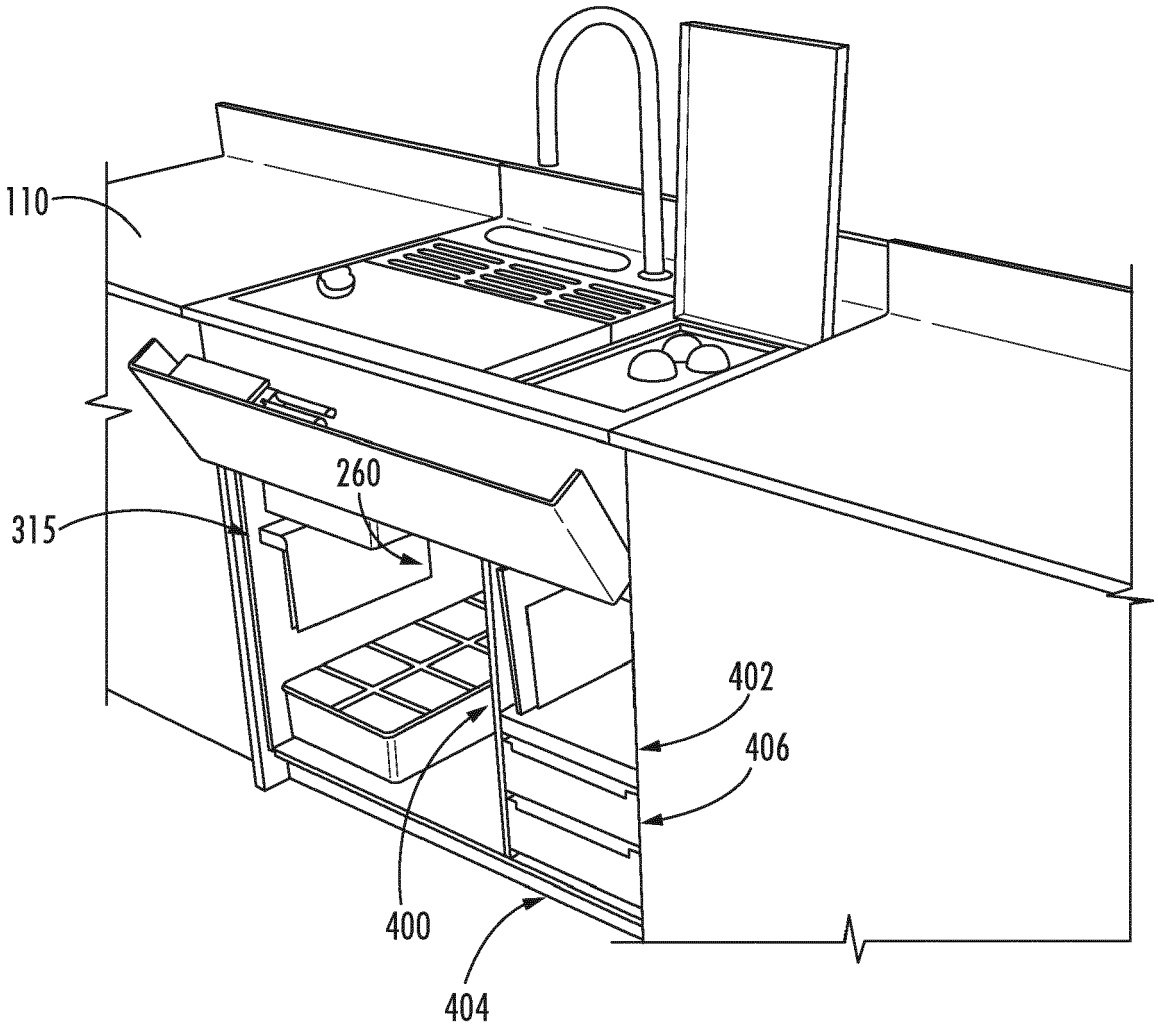

FIG. 12

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EUROPEAN SEARCH REPORT

Application Number
EP 21 21 2654

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	US 2020/277768 A1 (CHONG JONATHAN [US] ET AL) 3 September 2020 (2020-09-03) * the whole document *	1,6,11, 13 2-5, 7-11,14, 15	INV. E03C1/05 E03C1/182 A47B77/06
X Y	US 2018/186655 A1 (COBB DOMINIQUE [US] ET AL) 5 July 2018 (2018-07-05) * the whole document *	12-15 2-5, 7-11,14, 15	
X Y	US 2012/124737 A1 (GIBSON ROD [US]) 24 May 2012 (2012-05-24) * the whole document *	12-15 2-5,7-11	
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	29 March 2022	Horst, Werner

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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D : document cited in the application
L : document cited for other reasons

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 21 21 2654

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