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(54) **GUIDE FEATURE FOR A REFRIGERATION UNIT**

(57) A refrigeration unit (10) includes a water tray (12) that includes at least one side wall (14) that extends from a floor (16) of the water tray (12) to an upper rim (18) of the water tray (12) to define a cavity (20), a guide feature (22) coupled to the upper rim (18) of the water tray (12) and having a connection feature (24) that is aligned with the cavity (20) of the water tray (12), and a drain conduit (26) coupled to the connection feature (24) of the guide feature (22), such that the drain conduit (26) is aligned with the cavity (20) and water conveyed by the drain conduit (26) is received within the water tray (12).

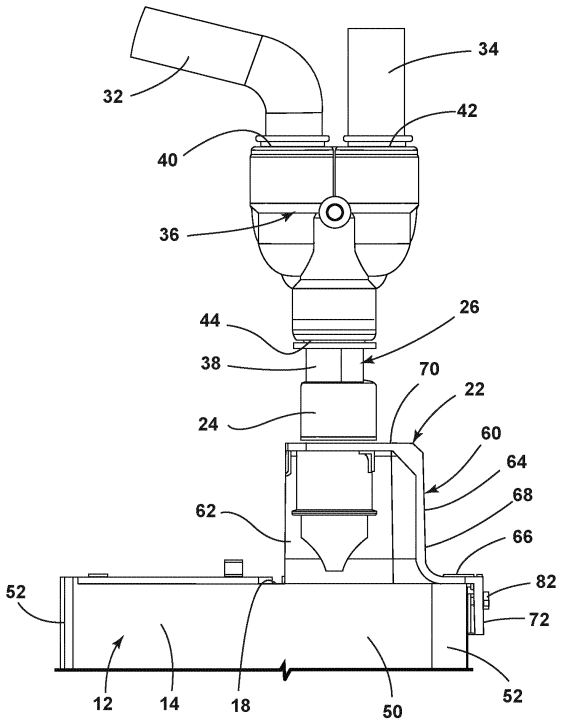

FIG. 5

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Description

BACKGROUND OF THE DISCLOSURE

[0001] The present disclosure generally relates to a refrigeration unit and, more specifically, to a guide feature that aligns a drain conduit with a water tray of a refrigeration unit.

SUMMARY OF THE DISCLOSURE

[0002] According to an aspect of the present disclosure, a refrigeration unit includes a water tray that includes at least one side wall that extends from a floor of the water tray to an upper rim of the water tray to define a cavity, a guide feature coupled to the upper rim of the water tray and having a connection feature that is aligned with the cavity of the water tray, and a drain conduit coupled to the connection feature of the guide feature, such that the drain conduit is aligned with the cavity and water conveyed by the drain conduit is received within the water tray.

[0003] These and other features, advantages, and objects of the present disclosure will be further understood and appreciated by those skilled in the art by reference to the following specification, claims, and appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] In the drawings:

FIG. 1 is a front elevational view of a refrigeration unit of the present disclosure;
FIG. 2 is a rear elevational view of the refrigeration unit of FIG. 1, illustrating a machine compartment;
FIG. 3 is a top perspective view of a portion of the machine compartment of the refrigeration unit of the present disclosure, illustrating a drain conduit, a water tray, and a guide feature;
FIG. 4 is a top perspective view of the water tray and the guide feature coupled to the water tray;
FIG. 5 is a rear elevational view of a portion of the drain conduit, the guide feature, and the water tray; and
FIG. 6 is a top perspective view of the guide feature.

[0005] The components in the figures are not necessarily to scale, emphasis instead being placed upon illustrating the principles described herein.

DETAILED DESCRIPTION

[0006] The present illustrated embodiments reside primarily in apparatus components related to a refrigeration unit. Accordingly, the apparatus components have been represented, where appropriate, by conventional symbols in the drawings, showing only those specific details that are pertinent to understanding the embodiments of the present disclosure so as not to obscure the disclosure with details that will be readily apparent to those of ordinary skill in the art having the benefit of the description herein. Further, like numerals in the description and drawings represent like elements.

[0007] For purposes of description herein, the terms "upper," "lower," "right," "left," "rear," "front," "vertical," "horizontal," and derivatives thereof shall relate to the disclosure as oriented in FIG. 1. Unless stated otherwise, the term "front" shall refer to the surface of the element closer to an intended viewer, and the term "rear" shall refer to the surface of the element further from the intended viewer. However, it is to be understood that the disclosure may assume various alternative orientations, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification, are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

[0008] The terms "including," "comprises," "comprising," or any other variation thereof, are intended to cover a non-exclusive inclusion, such that a process, method, article, or apparatus that comprises a list of elements does not include only those elements but may include other elements not expressly listed or inherent to such process, method, article, or apparatus. An element proceeded by "comprises a . . . " does not, without more constraints, preclude the existence of additional identical elements in the process, method, article, or apparatus that comprises the element.

[0009] As used herein the terms "the," "a," or "an," mean "at least one," and should not be limited to "only one" unless explicitly indicated to the contrary. Thus, for example, reference to "a component" includes embodiments having two or more such components unless the context clearly indicates otherwise.

[0010] As used herein, the term "and/or," when used in a list of two or more items, means that any one of the listed items can be employed by itself, or any combination of two or more of the listed items can be employed. For example, if a composition is described as containing components A, B, and/or C, the composition can contain A alone; B alone; C alone; A and B in combination; A and C in combination; B and C in combination; or A, B, and C in combination.

[0011] Referring to FIGS. 1-6, reference numeral 10 generally designates a refrigeration unit. The refrigeration unit 10 includes a water tray 12. The water tray 12 includes at least one side wall 14 that extends from a floor 16 of the water tray 12 to an upper rim 18 of the water tray 12 to define a cavity 20. A guide feature 22 is coupled to the upper rim 18 of the water tray 12. The guide feature 22 includes a connection feature 24 that is

aligned with the cavity 20 of the water tray 12. A drain conduit 26 is coupled to the connection feature 24 of the guide feature 22. Water conveyed by the drain conduit 26 is configured to be received within the water tray 12.

[0012] Referring now to FIGS. 1-3, the refrigeration unit 10 includes a refrigeration compartment 28 and a freezer compartment 30. The refrigeration unit 10 may include one or more evaporators (not shown) for use in cooling the refrigeration compartment 28 and/or the freezer compartment 30. The drain conduit 26 is configured to convey water condensate originating from the one or more evaporators to the water tray 12. In various implementations, the drain conduit 26 may be an assembly of components. For example, in the embodiments illustrated in FIGS. 2 and 3, the drain conduit 26 includes first and second drain pipes 32, 34, a Y-shaped connector 36, and a consolidated drain pipe 38. In the illustrated embodiment, the first and second drain pipes 32, 34 convey water condensate from first and second evaporators of the refrigeration unit 10, respectively, to the Y-shaped connector 36. The water from the first drain pipe 32 is conveyed into the Y-shaped connector 36 via a first inlet 40, and the water conveyed from the second drain pipe 34 is conveyed into the Y-shaped connector 36 via a second inlet 42. The water travels out of an outlet 44 of the Y-shaped connector 36, through the consolidated drain pipe 38 coupled with the outlet 44, and into the water tray 12. It should be appreciated that the drain conduit 26 may have more or fewer components in various implementations. For example, in some implementations, the drain conduit 26 is comprised of a single component. Various styles of refrigeration units 10 with varying numbers of compartments and/or evaporators are contemplated.

[0013] Referring now to FIGS. 3-5, the water tray 12 is illustrated. As depicted in FIG. 3, the water tray 12 is positioned within a machine compartment 46 of the refrigeration unit 10. In various implementations, the water tray 12 includes at least one side wall 14. The at least one side wall 14 may extend upward from the floor 16 of the water tray 12 to the upper rim 18 of the water tray 12. The at least one side wall 14 may include an interior surface 48 and an exterior surface 50 opposite the interior surface 48. The upper rim 18 of the water tray 12 may be disposed between and/or formed by a convergence of the interior and exterior surfaces 48, 50 of the at least one side wall 14. The interior surface 48 of the at least one side wall 14 may be adjacent to and/or may border the floor 16 of the water tray 12. In various embodiments, the interior surface 48 of the at least one side wall 14 and the floor 16 of the water tray 12 define the cavity 20 of the water tray 12. The cavity 20 of the water tray 12 is configured to collect water conveyed into the cavity 20 by the drain conduit 26.

[0014] In the embodiments illustrated in FIGS. 3 and 4, the water tray 12 includes a plurality of side walls 14. Each side wall 14 is coupled to each other adjacent side wall 14 via corners 52. In some implementations, the corners 52 may be generally rounded, as shown in FIGS. 3 and 4. Various types of water trays 12 having various shapes and/or numbers of side walls 14 are contemplated.

[0015] Referring now to FIGS. 3-6, the guide feature 22 is illustrated. The guide feature 22 is configured to be coupled to the water tray 12 and the drain conduit 26, such that water conveyed by the drain conduit 26 is directed into the cavity 20 defined by the water tray 12. In various implementations, the guide feature 22 is configured to be coupled to the at least one side wall 14 of the water tray 12. In some implementations, the guide feature 22 is configured to be coupled to the upper rim 18 of the at least one side wall 14. For example, as illustrated in FIG. 5, a portion of the guide feature 22 rests on the upper rim 18. In some implementations, the guide feature 22 is configured to be coupled to a plurality of side walls 14 of the water tray 12. For example, as illustrated in FIG. 4, the guide feature 22 is coupled to a first side wall 54 and a second side wall 56 that is coupled to the first side wall 54 via the corner 52. In various embodiments, the guide feature 22 is coupled to the upper rim 18, such that the guide feature 22 contacts the first side wall 54 and the second side wall 56 of the water tray 12.

[0016] In various implementations, the guide feature 22 includes the connection feature 24. The connection feature 24 is configured to be coupled with the drain conduit 26. When the guide feature 22 is assembled to the water tray 12, the connection feature 24 is configured to be aligned with the cavity 20 of the water tray 12. In other words, the connection feature 24 is configured to be positioned relative to the water tray 12, such that water flowing out of the drain conduit 26 coupled to the connection feature 24 is directed into the cavity 20 of the water tray 12. For example, in the embodiment illustrated in FIG. 3, the connection feature 24 is positioned directly above the floor 16 of the water tray 12, such that water flowing downward out of the drain conduit 26 falls into the cavity 20. Thus, the connection feature 24 is aligned with the cavity 20.

[0017] In some implementations, the connection feature 24 of the guide feature 22 is generally tubular and defines a hollow 58. In such examples, the drain conduit 26 may be coupled to the connection feature 24, such that water conveyed by the drain conduit 26 flows through the hollow 58 and into the water tray 12. As illustrated in FIG. 5, in some implementations, a portion of the drain conduit 26 is received within the hollow 58 defined by the generally tubular connection feature 24. A variety of types of connection features 24 are contemplated. Further, it should be appreciated that the drain conduit 26 may be coupled to the connection feature 24 in a variety of ways, in various embodiments.

[0018] Referring now to FIG. 6, an exemplary embodiment of the guide feature 22 is illustrated. In the illustrated embodiment, the guide feature 22 includes a body 60 having an interior side 62 and an exterior side 64 opposite the interior side 62. The body 60 includes a shelf 66, a guide feature side wall 68, a platform 70, and a skirt 72.

The shelf 66 extends between the guide feature side wall 68 and the skirt 72. The skirt 72 extends downward from the shelf 66 a first direction. The guide feature side wall 68 extends upward from the shelf 66 a second direction that is generally opposite the first direction. The platform 70 extends outward from an end of the guide feature side wall 68 that is distal from the shelf 66. In the illustrated embodiment, the exterior side 64 of the skirt 72 is generally parallel to the exterior side 64 of the guide feature side wall 68, and the exterior side 64 of the platform 70 is generally parallel to the exterior side 64 of the shelf 66. As illustrated in FIG. 6, in various implementations, the skirt 72, shelf 66, and/or guide feature side wall 68 may be generally L-shaped. As described further herein, the L-shaped skirt 72, shelf 66, and/or guide feature side wall 68 may follow the contour of first and second side walls 54, 56 of the water tray 12, as well as the contour of the corner 52 connecting the first and second side walls 54, 56 of the water tray 12.

[0019] In various embodiments, at least one tab 74 is coupled to the interior side 62 of the shelf 66 and extends downward therefrom. The tab 74 is in a spaced relationship with the skirt 72. In the embodiment illustrated in FIG. 6, the guide feature 22 includes first and second tabs 76, 78 that extend downward from the interior side 62 of the shelf 66. In various implementations, the connection feature 24 is coupled to the platform 70 of the guide feature 22. In the embodiment illustrated in FIG. 6, the connection feature 24 is generally tubular and defines the hollow 58. As illustrated, the connection feature 24 extends upward from the exterior side 64 of the body 60 and downward from the interior side 62 of the body 60.

[0020] In some implementations, the body 60 of the guide feature 22 include at least one guide retention feature 80. The at least one guide retention feature 80 may be positioned on at least one of the shelf 66 and the skirt 72 of the body 60. In the embodiment illustrated in FIG. 4, the shelf 66 of the body 60 defines two guide retention features 80 in the form of slots that extend through the shelf 66. As described further herein, the at least one guide retention feature 80 may be configured to be engaged with at least one corresponding tray retention feature 82 coupled to the water tray 12, to maintain the guide feature 22 in a coupled relationship with the water tray 12. For example, the two slots defined by the shelf 66, as shown in FIG. 6, may be configured to be engaged by a snap fit protrusion that extends outward from the upper rim 18 of the at least one side wall 14 of the water tray 12. It is contemplated that the at least one guide retention feature 80 and the at least one tray retention feature 82 may be one or more of a variety of types of corresponding features configured to retain the water tray 12 and the guide feature 22 in a coupled relationship (e.g., snap fit features, magnets, hook and loop fasteners, etc.).

[0021] Referring now to FIGS. 3-5, the guide feature 22 and water tray 12 are configured to be coupled to each other. As illustrated in FIG. 5, the shelf 66 of the guide feature 22 extends over the upper rim 18 of the water tray 12 from the guide feature side wall 68 to the skirt 72. In the illustrated embodiment, the interior side 62 of the shelf 66 contacts the upper rim 18 of the at least one side wall 14. Implementations in which the interior side 62 of the shelf 66 is in a spaced relationship with upper rim 18 of the at least one side wall 14 are contemplated. As further illustrated in FIG. 5, the skirt 72 extends downward from the shelf 66 along the exterior surface 50 of the at least one side wall 14 opposite the cavity 20 defined by the water tray 12. In the illustrated embodiment, the interior side 62 of the skirt 72 is maintained in a spaced relationship with the side wall 14 via the tray retention feature 82, which is coupled to the exterior surface 50 of the at least one side wall 14 and matingly engaged with the corresponding guide retention feature (not shown) defined by the skirt 72. Implementations in which the skirt 72 contacts the at least one side wall 14 directly are contemplated.

[0022] In the embodiment illustrated in FIG. 4, the water tray 12 includes the first and second side walls 54, 56 coupled via the corner 52, and the skirt 72 and shelf 66 of the guide feature 22 are generally L-shaped. The generally L-shaped shelf 66 extends over a portion of the upper rim 18 that extends along a portion of the first side wall 54, the corner 52, and a portion of the second side wall 56. Similarly, the L-shaped skirt 72 extends downward from the shelf 66 along the exterior surface 50 of a portion of the first side wall 54, the corner 52, and a portion of the second side wall 56. In some implementations, wherein the guide feature 22 includes the first and second tabs 76, 78, the first tab 76 extends downward from the shelf 66, such that a portion of the first side wall 54 is positioned between the skirt 72 and the first tab 76. Further, the second tab 78 may also extend downward from the shelf 66, such that a portion of the second side wall 56 is positioned between the skirt 72 and the second tab 78. The guide feature 22 being coupled to both the first and second side walls 54, 56 of the water tray 12, as described herein, may advantageously increase the structural integrity of the connection between the water tray 12 and the guide feature 22. In some implementations, the guide feature 22 may be a single unitary body that is integrally formed. In other words, the components of the guide feature 22 may be integrally coupled to each other.

[0023] Referring still to FIG. 4, the illustrated guide feature 22 includes a plurality of guide retention features 80 in the form of slots positioned on the shelf 66 and the skirt 72. Further, the illustrated water tray 12 includes a plurality of corresponding tray retention features 82 that are engaged with the guide retention features 80. In the illustrated embodiment, the plurality of tray retention features 82 includes tray retention features 82 that are coupled to the exterior surface 50 of the first side wall 54, the exterior surface 50 of the second side wall 56, a portion of the upper rim 18 that extends along the first side wall 54, and a portion of the upper rim 18 that extends

along the second side wall 56.

[0024] Referring now to FIGS. 3-5, the guide feature 22 includes the guide feature side wall 68. The guide feature side wall 68 extends upward from the shelf 66 to the platform 70. As illustrated in FIG. 4, the platform 70 is positioned further than the shelf 66 from the floor 16 of the water tray 12. In other words, the platform 70 is positioned a first distance from the floor 16, the shelf 66 is positioned a second distance from the floor 16, and the first distance is greater than the second distance. The platform 70 extends outward from the shelf 66. In the illustrated embodiment, the platform 70 extends over the cavity 20 of the water tray 12 generally away from the portion of the at least one side wall 14 that the guide feature 22 is coupled to. In various implementations, the connection feature 24 is coupled to the platform 70 and is, likewise, positioned over the cavity 20 of the water tray 12. In the embodiment illustrated in FIG. 5, the generally tubular connection feature 24 receives the drain conduit 26 within the hollow 58, such that water conveyed by the drain conduit 26 passes through the hollow 58 and into the cavity 20 of the water tray 12 beneath the connection feature 24.

[0025] In operation of an exemplary embodiment of the refrigeration unit 10, first and second evaporators are operated to assist in cooling the refrigeration and freezer compartments 28, 30. The first and second evaporators produce water condensate. The water from the first and second evaporators enters first and second drain pipes 32, 34, respectively. The first and second drain pipes 32, 34 convey the water to first and second inlets 40, 42 of the Y-shaped connector 36. Next, the water exits the outlet 44 of the Y-shaped connector 36 and is conveyed toward the water tray 12 via a consolidated drain pipe 38. The consolidated drain pipe 38 extends from the Y-shaped connector 36 into the generally tubular connection feature 24 of the guide feature 22 coupled to first and second side walls 54, 56 of the water tray 12. The connection feature 24 is positioned over the cavity 20 defined by the water tray 12 and defines a hollow 58. The water conveyed by the consolidated drain pipe 38 flows through the hollow 58 and into the cavity 20 of the water tray 12.

[0026] The refrigeration unit 10 of the present disclosure may provide a variety of advantages. First, the guide feature 22 may assist in anchoring the drain conduit 26 in a position that ensures water conveyed by the drain conduit 26 is received within the water tray 12. Second, the Y-shaped connector 36 being positioned within the machine compartment 46 (instead of disposed within foam insulation, for example) allows the Y-shaped connector 36 and the drain conduit 26 coupled to the Y-shaped connector 36 to be conveniently accessed.

[0027] According to one aspect, a refrigeration unit includes a water tray that includes at least one side wall that extends from a floor of the water tray to an upper rim of the water tray to define a cavity. A guide feature is coupled to the upper rim of the water tray and has a connection feature that is aligned with the cavity of the water tray. A drain conduit is coupled to the connection feature of the guide feature, such that water conveyed by the drain conduit is received within the water tray.

[0028] According to another aspect, the connection feature is generally tubular and defines a hollow. The drain conduit is coupled to the connection feature, such that water conveyed by the drain conduit flows through the hollow and into the water tray.

[0029] According to another aspect, a portion of the drain conduit is received within the hollow defined by the connection feature.

[0030] According to another aspect, the at least one side wall of the water tray includes a first side wall and a second side wall coupled to the first side wall via a corner. The guide feature is coupled to the upper rim, such that the guide feature contacts the first side wall and the second side wall of the water tray.

[0031] According to another aspect, the guide feature includes a shelf that extends over the upper rim of the water tray and a skirt that extends downward from the shelf along an exterior surface of the at least one side wall opposite the cavity.

[0032] According to another aspect, the guide feature further includes a tab that extends downward from the shelf into the cavity of the guide feature, such that a portion of the at least one side wall is positioned between the skirt and the tab of the guide feature.

[0033] According to another aspect, the guide feature includes a guide retention feature and the water tray includes a tray retention feature configured to be engaged with the guide retention feature to maintain the guide feature in a coupled relationship with the water tray. The guide retention feature is positioned on at least one of the skirt and the shelf.

[0034] According to another aspect, the guide feature further includes a guide feature side wall that extends from the shelf to a platform positioned further than the shelf from the floor of the water tray. The connection feature is coupled to the platform.

[0035] According to another aspect, a refrigeration unit includes a water tray. A guide feature is coupled to the water tray, such that the guide feature contacts a first side wall of the water tray and a second side wall of the water tray that is coupled to the first side wall at a corner. A drain conduit is coupled to the guide feature, such that water conveyed by the drain conduit is received within the water tray.

[0036] According to another aspect, the first and second side walls of the water tray extends from a floor of the water tray to an upper rim. The guide feature is coupled to the upper rim.

[0037] According to another aspect, the guide feature is coupled to a portion of the upper rim that extends along at least a portion of the first side wall and a portion of the upper rim that extends along at least a portion of the second side wall.

[0038] According to another aspect, the first and second side walls of the water tray extends from a floor of

the water tray to an upper rim. The guide feature includes a shelf that extends over the upper rim, a skirt that extends downward from the shelf along an exterior surface of at least one of the first and second side walls opposite a cavity of the water tray, and a tab that extends downward from the shelf into the cavity of the water tray, such that a portion of at least one of the first side wall and the second side wall is positioned between the skirt and the tab.

[0039] According to another aspect, the guide feature further includes a guide feature side wall that extends from the shelf to a platform positioned further than the shelf from the floor of the water tray and a connection feature coupled to the platform. The drain conduit is coupled to the connection feature.

[0040] According to another aspect, the connection feature is generally tubular and defines a hollow. The drain conduit is coupled to the connection feature, such that water conveyed by the drain conduit flows through the hollow and into the water tray.

[0041] According to another aspect, a portion of the drain conduit is received within the hollow defined by the connection feature.

[0042] According to another aspect, the guide feature includes a guide retention feature and the water tray includes a tray retention feature configured to be engaged with the guide retention feature to maintain the guide feature in a coupled relationship with the water tray. The guide retention feature is positioned on at least one of the skirt and the shelf.

[0043] According to another aspect, a guide feature for attachment to a water tray of a refrigeration unit includes a shelf configured to extend over an upper rim of at least one side wall of the water tray, a skirt configured to extend downward from the shelf along an exterior surface of the at least one side wall opposite a cavity defined by the water tray, and a connection feature configured to be coupled with a drain conduit that conveys water to the water tray. The shelf is positioned between the connection feature and the skirt.

[0044] According to another aspect, a tab extends downward from the shelf. The tab and the skirt are configured such that a portion of the at least one side wall is configured to be positioned between the tab and skirt.

[0045] According to another aspect, a guide feature side wall extends from the shelf to a platform. The connection feature is coupled to the platform.

[0046] According to yet another aspect, the connection feature is generally tubular and defines a hollow configured to receive a portion of the drain conduit.

[0047] It will be understood by one having ordinary skill in the art that construction of the described disclosure and other components is not limited to any specific material. Other exemplary embodiments of the disclosure disclosed herein may be formed from a wide variety of materials, unless described otherwise herein.

[0048] For purposes of this disclosure, the term "coupled" (in all of its forms: couple, coupling, coupled, etc.) generally means the joining of two components (electrical or mechanical) directly or indirectly to one another. Such joining may be stationary or movable in nature. Such joining may be achieved with the two components (electrical or mechanical) and/or any additional intermediate members. Such joining may include members being integrally formed as a single unitary body with one another (i.e., integrally coupled) or may refer to joining of two components. Such joining may be permanent in nature, or may be removable or releasable in nature, unless otherwise stated.

[0049] It is also important to note that the construction and arrangement of the elements of the disclosure as shown in the exemplary embodiments is illustrative only. Although only a few embodiments of the present innovations have been described in detail in this disclosure, those skilled in the art who review this disclosure will readily appreciate that many modifications are possible (e.g., variations in sizes, dimensions, structures, shapes and proportions of the various elements, values of parameters, mounting arrangements, use of materials, colors, orientations, etc.) without materially departing from the novel teachings and advantages of the subject matter recited. For example, elements shown as integrally formed may be constructed of multiple parts or elements shown as multiple parts may be integrally formed, the operation of the interfaces may be reversed or otherwise varied, the length or width of the structures and/or members or connectors or other elements of the system may be varied, the nature or number of adjustment positions provided between the elements may be varied. It should be noted that the elements and/or assemblies of the system may be constructed from any of a wide variety of materials that provide sufficient strength or durability, in any of a wide variety of colors, textures, and combinations. Accordingly, all such modifications are intended to be included within the scope of the present innovations. Other substitutions, modifications, changes, and omissions may be made in the design, operating conditions, and arrangement of the desired and other exemplary embodiments without departing from the spirit of the present innovations.

Claims

1. A refrigeration unit (10), comprising:

a machine compartment (46),

a water tray (12) positioned within the machine compartment (46), wherein the water tray (12) includes at least one side wall (14) that extends from a floor (16) of the water tray (12) to an upper rim (18) of the water tray (12) to define a cavity (20);

a guide feature (22) coupled to the upper rim (18) of the water tray (12) and having a connection feature (24) that is aligned with the cavity

(20) of the water tray (12); and
a drain conduit (26) coupled to the connection feature (24) of the guide feature (22), such that the drain conduit (26) is aligned with the cavity (20) and water conveyed by the drain conduit (26) is received within the water tray (12).

2. The refrigeration unit (10) of claim 1, wherein the connection feature (24) is generally tubular and defines a hollow (58), and wherein the drain conduit (26) is coupled to the connection feature (24), such that water conveyed by the drain conduit (26) flows through the hollow (58) and into the water tray (12).

3. The refrigeration unit (10) of claim 2, wherein a portion of the drain conduit (26) is received within the hollow (58) defined by the connection feature (24).

4. The refrigeration unit (10) of any one of claims 1-3, wherein the guide feature (22) comprises:

a shelf (66) that extends over the upper rim (18) of the water tray (12); and
a skirt (72) that extends downward from the shelf (66) along an exterior surface (50) of the at least one side wall (14) opposite the cavity (20).

5. The refrigeration unit (10) of claim 4, wherein the guide feature (22) further comprises:
a tab (74) that extends downward from the shelf (66) into the cavity (20) of the guide feature (22), such that a portion of the at least one side wall (14) is positioned between the skirt (72) and the tab (74) of the guide feature (22).

6. The refrigeration unit (10) of claims 4 or 5, wherein the guide feature (22) includes a guide retention feature (80) and the water tray (12) includes a tray retention feature (82) configured to be engaged with the guide retention feature (80) to maintain the guide feature (22) in a coupled relationship with the water tray (12), wherein the guide retention feature (80) is positioned on at least one of the skirt (72) and the shelf (66).

7. The refrigeration unit (10) of any one of claims 4-6, wherein the guide feature (22) further comprises:
a guide feature side wall (68) that extends from the shelf (66) to a platform (70) positioned further than the shelf (66) from the floor (16) of the water tray (12), wherein the connection feature (24) is coupled to the platform (70).

8. The refrigeration unit (10) of any one of claims 1-3, wherein the at least one side wall (14) of the water tray (12) comprises:

a first side wall (54); and
a second side wall (56), wherein the guide feature (22) is coupled to the upper rim (18), such that the guide feature (22) contacts the first side wall (54) and the second side wall (56) of the water tray (12).

9. The refrigeration unit (10) of claim 8, wherein the second side wall (56) is coupled to the first side wall (54) via a corner (52).

10. The refrigeration unit (10) of claims 8 or 9, wherein the guide feature (22) is coupled to a portion of the upper rim (18) that extends along at least a portion of the first side wall (54) and a portion of the upper rim (18) that extends along at least a portion of the second side wall (56).

11. The refrigeration unit (10) of any one of claims 8-10, wherein the guide feature (22) comprises:

a shelf (66) that extends over the upper rim (18);
a skirt (72) that extends downward from the shelf (66) along an exterior surface (50) of at least one of the first and second side walls (54, 56) opposite a cavity (20) of the water tray (12); and
at least one tab (74) that extends downward from the shelf (66) into the cavity (20) of the water tray (12), such that a portion of at least one of the first side wall (54) and the second side wall (56) is positioned between the skirt (72) and the at least one tab (74).

12. The refrigeration unit (10) of claim 11, wherein the skirt (72) extends downward from the shelf (66) along the exterior surface (50) of first and second side walls (54, 56) opposite a cavity (20) of the water tray (12).

13. The refrigeration unit (10) of claims 11 or 12, wherein the at least one tab (74) comprises:
first and second tabs (76, 78) that extend downward from the shelf (66) into the cavity (20) of the water tray (12).

14. The refrigeration unit (10) of claim 13, wherein the first tab (76) extends downward from the shelf (66), such that a portion of the first side wall (54) is positioned between the skirt (72) and the first tab (76), and the second tab (78) extends downward from the shelf (66), such that a portion of the second side wall (56) is positioned between the skirt (72) and the second tab (78).

15. The refrigeration unit (10) of claim 1, wherein the drain conduit (26) includes first and second drain pipes (32, 34), a Y-shaped connector (36) arranged in the machine compartment (46), and a consolidated drain pipe (38), and wherein the first and second drain pipes (32, 34) convey water condensate from

a first evaporator and a second evaporator of the refrigeration unit (10), respectively, to the Y-shaped connector (36), whereby water travels out of an outlet (44) of the Y-shaped connector (36), through the consolidated drain pipe (38) coupled with the outlet (44) and into the water tray (12).

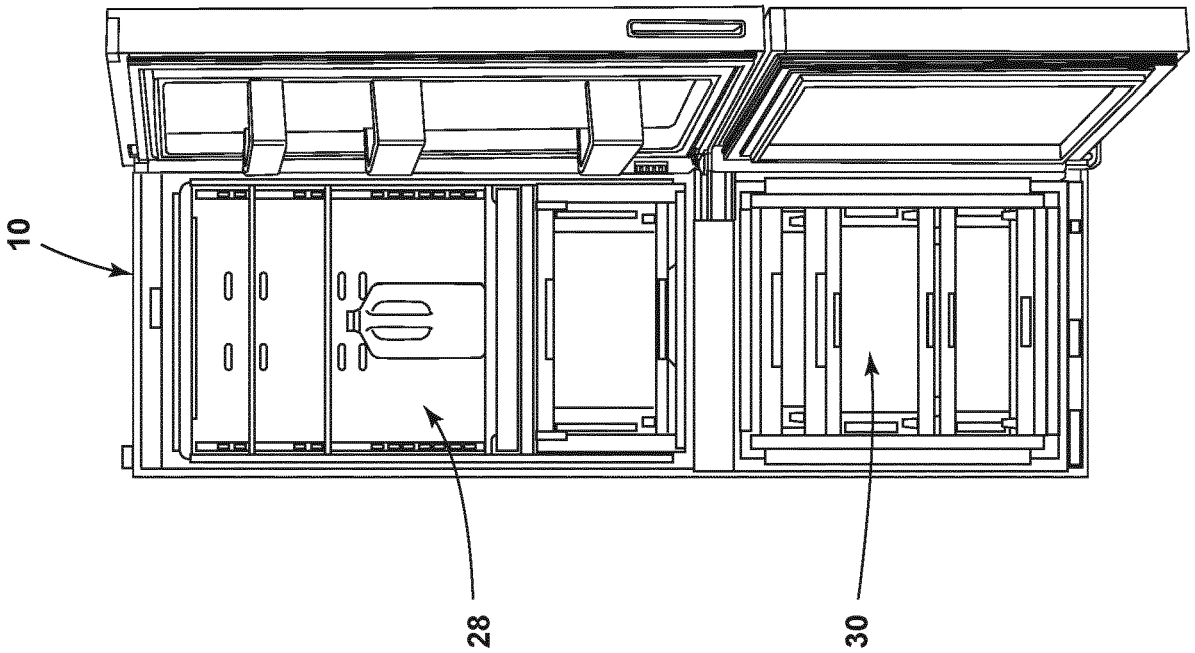

FIG. 1

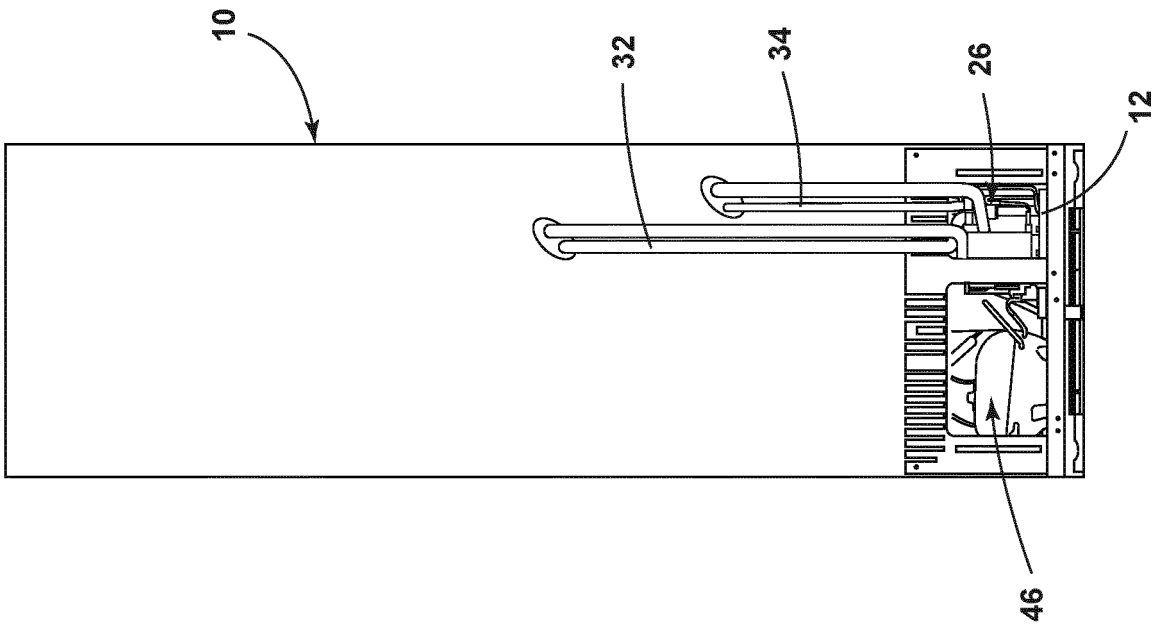

FIG. 2

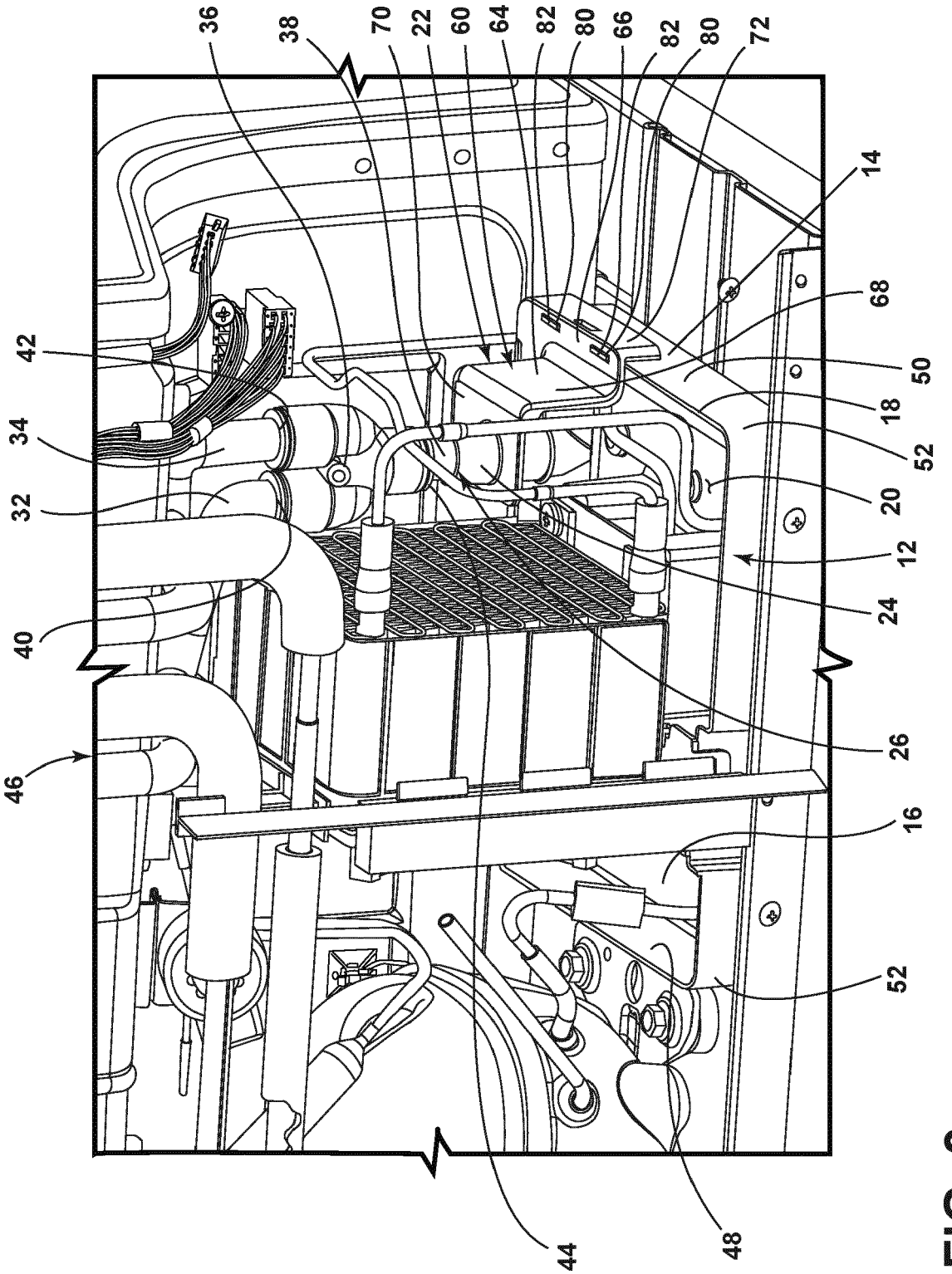
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FIG. 3

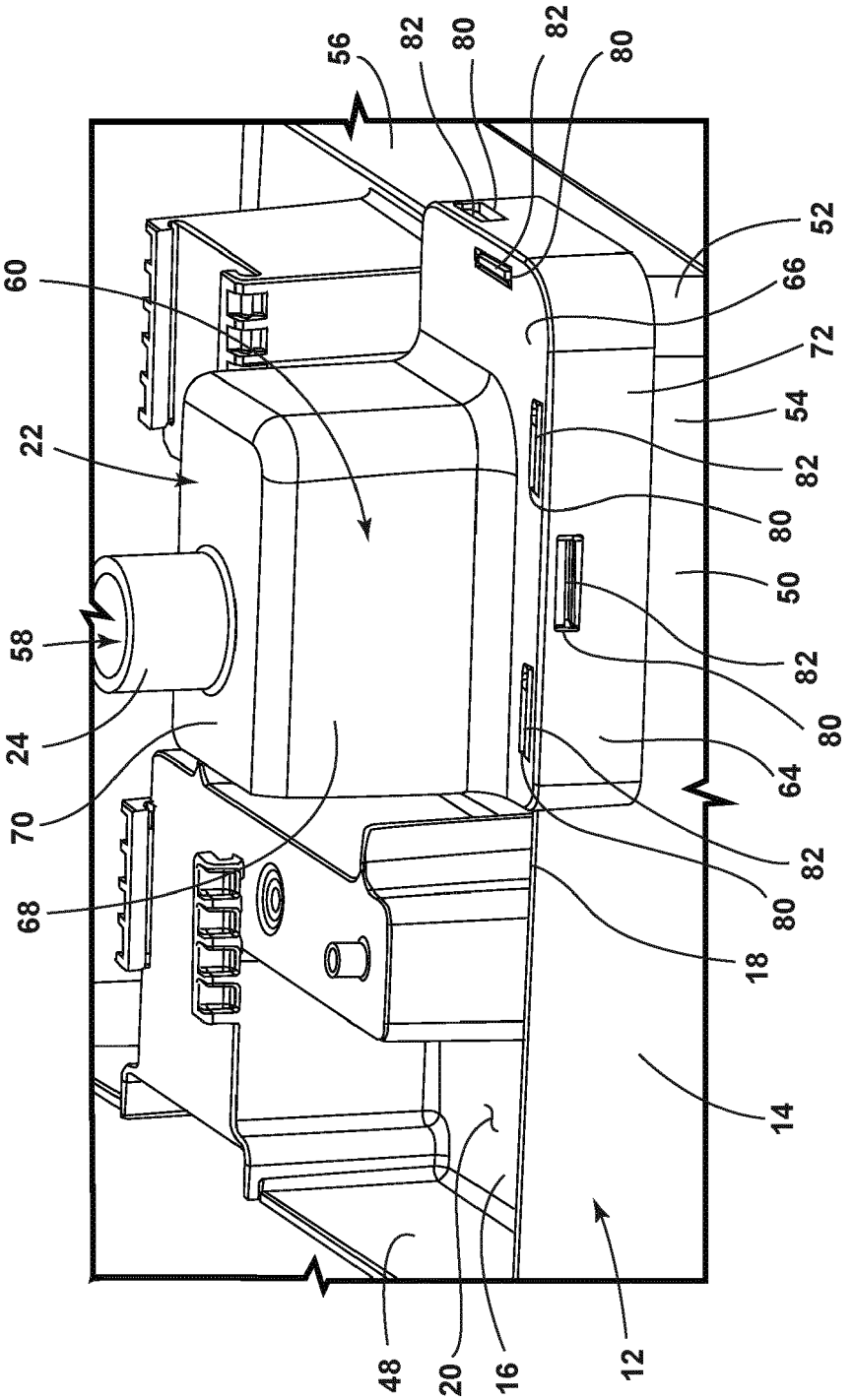
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FIG. 4

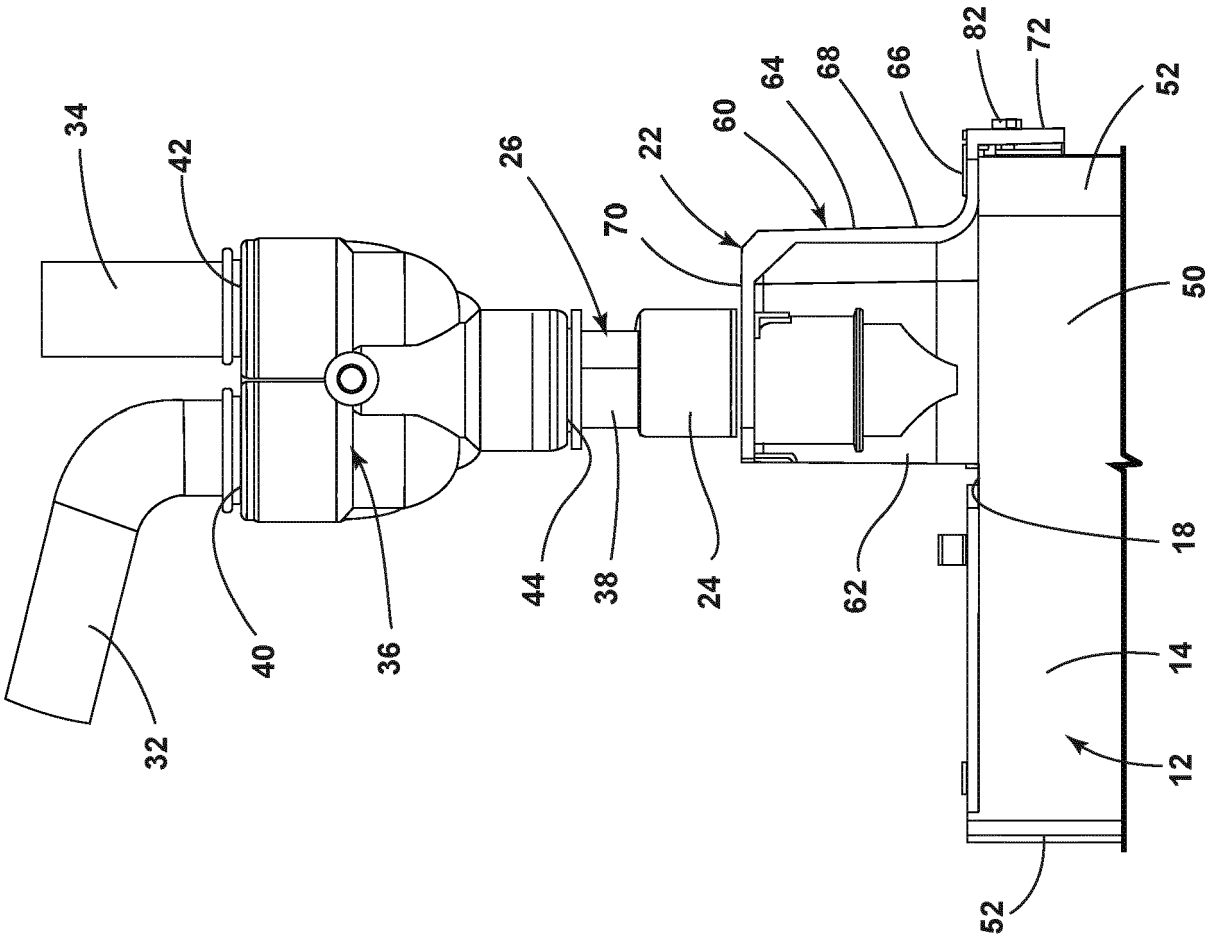

FIG. 5

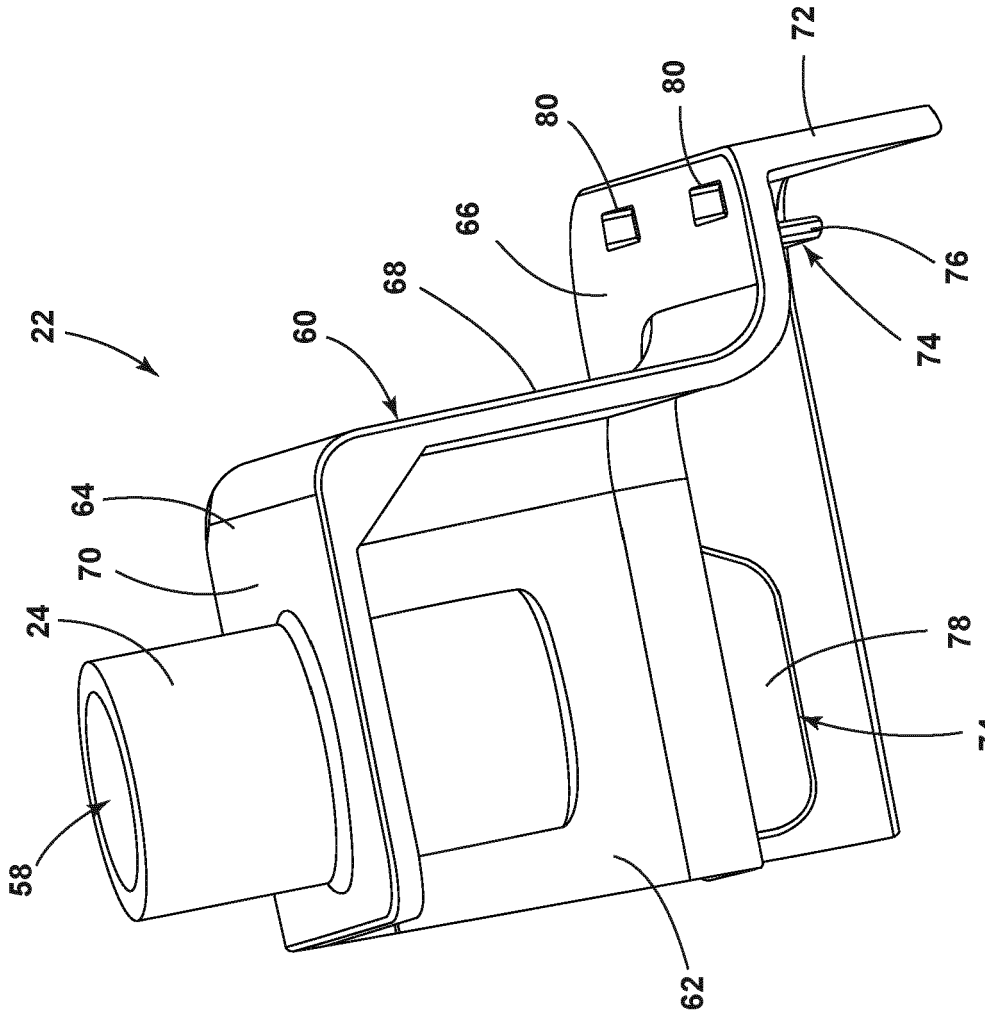

FIG. 6

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EUROPEAN SEARCH REPORT

Application Number
EP 22 15 6201

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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TECHNICAL FIELDS SEARCHED (IPC)

F25D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	11 July 2022	Yousufi, Stefanie

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11-07-2022

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