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(54) **REFRIGERATED STORAGE STRUCTURE**

(57) A drawer refrigerator (104) includes an insulated cabinet (107), a drawer (144), a base member (112), a refrigeration system (152), and a center brace (158). The insulated cabinet (107) may define a refrigerated space and the drawer (144) may be disposed in the refrigerated space. The base member (112) may be provided with a first portion (112a) and a second portion (112b). The first and second portions (112a, 112b) may collectively define

a portion of a machine compartment (142). The refrigeration system (152) may be configured to refrigerate the refrigerated space. The base member (112) supports the refrigeration system (152) and the insulated cabinet (107). The center brace (158) may be fixed to the base member (112) and may be configured to separate the first and second portions of the base member (112).

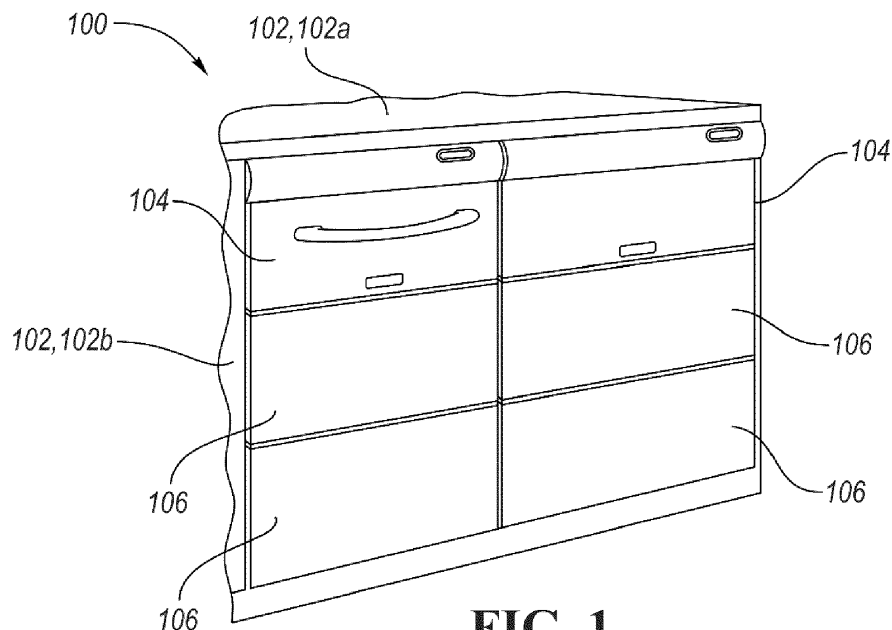


FIG. 1

Description

TECHNICAL FIELD

[0001] The present disclosure relates to a household appliance such as a refrigerator or a refrigerated storage cabinet.

BACKGROUND

[0002] Refrigerators must maintain a low temperature to prevent food and beverages from spoiling while being stored within a food storage space. The food storage space may be insulated to block or mitigate heat from outside air from penetrating the food storage space. The food storage space may be formed of an insulative structure and may include one or more heat exchangers that may absorb heat inside the food storage space or dissipate heat to an area external to the food storage area.

SUMMARY

[0003] A drawer refrigerator includes an insulated cabinet, a drawer, a base member, a refrigeration system, and a center brace. The insulated cabinet may define a refrigerated space and the drawer may be disposed in the refrigerated space. The base member may be provided with a first portion and a second portion. The first and second portions may collectively define a portion of a machine compartment. The refrigeration system may be configured to refrigerate the refrigerated space. The base member supports the refrigeration system and the insulated cabinet. The center brace may be fixed to the base member and may be configured to separate the first and second portions of the base member.

[0004] In one or more embodiments, the refrigeration system may include a condenser, a compressor, a drain tray, a condenser fan, and a drier.

[0005] According to at least one embodiment, the condenser may be disposed on the first portion of the base member, the compressor may be disposed in the machine compartment on the second portion of the base member, the drain tray and the condenser fan may each be disposed in the machine compartment on the first portion of the base member, and the drier may be operatively connected to the condenser and may be disposed in the machine compartment on the first portion of the base member.

[0006] According to at least one embodiment, the first portion of the base member forms a cold air path and the second portion forms a warm air path.

[0007] In one or more embodiments, the center brace is Z-shaped and configured to separate the cold air path and the warm air path.

[0008] In one or more embodiments, the base member is hollow and an end of the base member defines an aperture configured to receive an air grill.

[0009] In at least one embodiment, the drawer refriger-

erator further comprises a foamed cabinet including a number of insulated panels each provided with a liner and a wrapper.

[0010] According to at least one embodiment, a screw anchor is disposed between the liner and the wrapper and a fastener extends through the base member and into the screw anchor to fix the base member to the foamed cabinet.

[0011] According to some embodiments, the drawer refrigerator further comprises a number of plates disposed on the condenser wherein the plates are configured to dissipate heated air flowing over the condenser.

[0012] In one or more embodiments, the insulated cabinet includes (i) an outer wrapper provided with a number of joined walls, (ii) an inner liner spaced apart from the outer wrapper and provided with a number of joined walls, and (ii) insulation material disposed between the outer wrapper and the inner liner.

[0013] In at least one embodiment, the drawer refrigerator further comprises a trim breaker coupled with an edge of the outer wrapper and an edge of the inner liner.

[0014] In one or more embodiments, a space between the outer wrapper and the inner liner forms an insulation space and the insulation space is sealed at a pressure below ambient pressure.

[0015] A drawer includes a number of panels, an aesthetic panel, a hanger bracket, and a mounting bracket. The number of panels may form a receptacle and may include a front receptacle panel. The aesthetic panel may be configured to cover the front panel and the hanger bracket may be fixed to either the aesthetic panel or the front receptacle panel. The hanger bracket may include a main body and a hook that may extend from the main body. The mounting bracket may be fixed to the other of the aesthetic panel or the front receptacle panel. The mounting bracket may define a number of apertures and the number of the apertures may be configured to receive the hook of the hanger bracket.

[0016] According to at least one embodiment, the hanger bracket is fixed to the aesthetic panel.

[0017] According to some embodiments, the mounting bracket is fixed to the front receptacle panel.

[0018] In one or more embodiments, a support bracket is fixed to the front receptacle panel and is configured to carry the aesthetic panel.

[0019] According to at least one embodiment, the support bracket includes a mating portion lying along the front receptacle panel.

[0020] In one or more embodiments, a support portion extends orthogonally to the mating portion and is configured to carry the aesthetic panel.

[0021] In at least one embodiment, the aesthetic panel includes a main body and a protrusion where the protrusion extends beyond a lower edge of the main body to conceal the support portion.

[0022] A drawer refrigerator includes an insulated cabinet, a drawer, a base member, a refrigeration system, and a center brace. The insulated cabinet may define a

refrigerated space and the drawer may be disposed in the refrigerated space. The base member may be provided with a first portion and a second portion. The first and second portions may collectively define a portion of a machine compartment. The refrigeration system may be configured to refrigerate the refrigerated space and the base member may be configured to support the refrigeration system and the insulated cabinet. The center brace may be fixed to the base member and may separate the first and second portions of the base member.

[0023] According to at least one embodiment, the second portion is disposed closer to the insulated cabinet than the first portion.

[0024] In one or more embodiments, the center brace includes a first leg, a second leg, and a medial portion extending therebetween.

[0025] In at least one embodiment, the first and second legs extend in a horizontal direction and the medial portion extends in a vertical direction substantially orthogonal to the horizontal direction.

[0026] According to at least one embodiment, the first leg lies on the first portion of the base member and the second leg lies on the second portion of the base member.

[0027] According to some embodiments, the insulated cabinet includes an outer wrapper and an inner liner spaced apart to form an insulation space.

[0028] In one or more embodiments, the insulation space includes foam insulation.

BRIEF DESCRIPTION OF THE DRAWINGS

[0029]

FIG. 1 illustrates a perspective view of an exemplary refrigerated storage structure;

FIG. 2 illustrates a perspective-exploded view of another exemplary refrigerated storage structure;

FIG. 3 illustrates an exploded view of a portion of the refrigerated drawer assembly;

FIG. 3A illustrates a detailed magnified view of a hanger bracket from area A-A in Fig. 3;

FIG. 4 illustrates a perspective view of a mounting bracket according to one or more embodiments;

FIG. 5 illustrates a front panel and an aesthetic panel according to one or more embodiments;

FIG. 6 illustrates a partial-cross-sectional view of a portion of the exemplary refrigerated drawer assembly taken along line 6-6 in Figure 2;

FIG. 6A illustrates a magnified view of area B-B in Fig. 6;

FIG. 7 illustrates a perspective cross-sectional view of the exemplary refrigerated drawer assembly taken along line 6-6 in Figure 2;

FIG. 7A illustrates a magnified view of area C-C in Fig. 7;

FIG. 8 illustrates a top-view of an exemplary refrigeration system;

FIG. 9 illustrates a rear-perspective view of a portion of the refrigeration system;

FIG. 10 illustrates a front-perspective view of a portion of the refrigeration system;

FIG. 10A illustrates a detailed-perspective view of a portion of the exemplary refrigerated drawer assembly;

FIG. 11 illustrates a front-perspective view of the exemplary refrigerated drawer assembly;

FIG. 12 illustrates a front-cross-sectional-plan view of the exemplary refrigerated drawer assembly taken along line 12-12 in Figure 2;

FIG. 12A illustrates a magnified view of the area D-D in Fig. 11;

FIG. 13 illustrates a front-cross-sectional-plan view of the exemplary refrigerated drawer assembly taken along line 12-12 in Figure 2; and

FIG. 13A illustrates a magnified view of area E-E in Fig. 12.

DETAILED DESCRIPTION

[0030] As required, detailed embodiments of the present invention are disclosed herein; however, it is to be understood that the disclosed embodiments are merely exemplary of the invention that may be embodied in various and alternative forms. The figures are not necessarily to scale; some features may be exaggerated or minimized to show details of particular components. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a representative basis for teaching one skilled in the art to variously employ the present invention.

[0031] This invention is not limited to the specific embodiments and methods described below, as specific components and/or conditions may, of course, vary. Furthermore, the terminology used herein is used only for the purpose of describing particular embodiments of the present invention and is not intended to be limiting in any way.

[0032] As used in the specification and the appended

claims, the singular form "a," "an," and "the" comprise plural referents unless the context clearly indicates otherwise. For example, reference to a component in the singular is intended to comprise a plurality of components.

[0033] The term "substantially" or "about" may be used herein to describe disclosed or claimed embodiments. The term "substantially" or "about" may modify a value or relative characteristic disclosed or claimed in the present disclosure. In such instances, "substantially" or "about" may signify that the value or relative characteristic it modifies is within $\pm 0\%$, 0.1% , 0.5% , 1% , 2% , 3% , 4% , 5% or 10% of the value or relative characteristic.

[0034] When an element or layer is referred to as being "on," "engaged to," "connected to," or "coupled to" another element or layer, it may be directly on, engaged, connected or coupled to the other element or layer, or intervening elements or layers may be present. In contrast, when an element is referred to as being "directly on," "directly engaged to," "directly connected to," or "directly coupled to" another element or layer, there may be no intervening elements or layers present. Other words used to describe the relationship between elements should be interpreted in a like fashion (e.g., "between" versus "directly between," "adjacent" versus "directly adjacent," etc.). The term "and/or" includes any and all combinations of one or more of the associated listed items.

[0035] Although the terms first, second, third, etc. may be used to describe various elements, components, regions, layers and/or sections, these elements, components, regions, layers and/or sections should not be limited by these terms. These terms may be only used to distinguish one element, component, region, layer or section from another region, layer or section. Terms such as "first," "second," and other numerical terms when used herein do not imply a sequence or order unless clearly indicated by the context. Thus, a first element, component, region, layer or section discussed below could be termed a second element, component, region, layer or section without departing from the teachings of the example embodiments.

[0036] Spatially relative terms, such as "inner," "outer," "beneath," "below," "lower," "above," "upper," and the like, may be used for ease of description to describe one element or feature's relationship to another element(s) or feature(s) as illustrated in the figures. Spatially relative terms may be intended to encompass different orientations of the device in use or operation in addition to the orientation depicted in the figures. For example, if the device in the figures is turned over, elements described as "below" or "beneath" other elements or features would then be oriented "above" the other elements or features. Thus, the example term "below" can encompass both an orientation of above and below. The device may be otherwise oriented (rotated 90 degrees or at other orientations) and the spatially relative descriptors used herein interpreted accordingly.

[0037] Fig. 1 illustrates an exemplary storage assembly 100 according to one or more embodiments. The storage assembly 100 may include a cabinet 102 or surround that forms a storage space or cavity that receives a number of storage members including a refrigerated drawer assembly 104 and a non-refrigerated drawer 106. As shown here, the refrigerated drawer assembly 104 and the non-refrigerated drawer 106 are in closed positions, in which interior portions of the drawers 104, 106 are inaccessible. The drawers 104, 106 may move e.g., translate linearly or pivot outwardly to an open position, in which the interior portions of the drawers 104, 106 are accessible. The refrigerated drawers 104 may include a refrigeration system to maintain a temperature in which perishable food or drinks may be stored. While two of the drawers 104, 106 are refrigerated, in one or more embodiments, one or all of the drawers 104, 106 may be refrigerated. The cabinet 102 may include one or more walls or panels such as a top panel 102a and a number of side panels 102b. As an example, the cabinet 102 may be formed of wood or a number of composite materials as required.

[0038] Fig. 2 illustrates an exploded view of another exemplary storage assembly 101. The storage assembly 101 may include the cabinet 102 provided with top and bottom panels 102a that are connected to one another by the side panels 102b. The refrigerated drawer assembly 104 may be disposed in the interior space formed by the cabinet 102 and may include a refrigerated cabinet 107 that may be fixed to a base plate or member 112. One or more mounting brackets 114 may be fixed to the side panels 102b to support the base member 112. As an example, the mounting brackets 114 may be L-shaped including a first leg 114a and a second leg 114b that may be substantially orthogonal to the first portion 114a. The first leg 114a may be fixed to the side panels 102b by one or more fasteners (not illustrated) and the base member 112 may be fixed to the second leg 114b.

[0039] The refrigerated drawer assembly 104 may include a refrigerated drawer 144, represented by hidden lines 144, that may be disposed in a refrigerated space formed by the refrigerated cabinet 107. The refrigerated drawer 144 may include a front panel 108, represented by hidden lines 108, and an outer panel such as an aesthetic panel 110. The aesthetic panel 110 may include a number of images or decorative designs including but not limited to one or more logos, patterns, and engravings. As an example, the aesthetic panel may be formed of wood or other material that may match or compliment finished surfaces of the storage assembly 101, appliances, or other storage assemblies.

[0040] Fig. 3 illustrates an exploded view of a portion of the refrigerated drawer assembly 104 and Fig. 3A illustrates a magnified view of a hanger bracket 116 from area A-A in Fig. 3. It is noted that the perspective of the hanger bracket 116 is different in Figs. 3 and 3A. The aesthetic panel 110 may include a front or finished surface 110a and a rear or non-finished surface 110b that

may oppose the finished surface 110a. The hanger bracket 116 may be fixed to the non-finished surface 110b by a number of fasteners (not illustrated). As an example, the fasteners may only partially extend into the aesthetic panel 110 so that the fasteners do not extend into or protrude through the finished surface 110a. As another example, a number of cabinet pulls (not illustrated) may be fixed to or cover the fasteners that fix the hanger bracket 116 to the aesthetic panel 110. In one or more embodiments, the hanger bracket 116 may include a hook 118 that may form a cutout 120.

[0041] In one or more embodiments, the hanger bracket 116 may be formed of metal such as aluminum or another alloy or material suitable to support the aesthetic panel 110. The hanger bracket 116 may be U-shaped and may include a first arm, a second arm, and a medial portion extending therebetween. The medial portion may define a number of apertures 122 and the fasteners may extend through the apertures 122 to fix the hanger bracket 116 to the aesthetic panel 110.

[0042] Fig. 4 illustrates a perspective view of a mounting bracket 124. Fig. 5 illustrates a front panel 108 that may be fixed to the aesthetic panel 110. The mounting bracket 124 may include a first wall 125 and a second wall 127 that may be connected to and offset from the first wall 125 in the Z-direction. The mounting bracket 124 may have an elongated shape, meaning the length of the bracket in the X-direction is greater than the height of the mounting bracket 124 in the Y-direction. A number of apertures or slots 126 may be formed between the first wall 125 and the second wall 127 and one or more apertures 129 may be formed by second wall 127. The slots 126 and the apertures 129 may receive portions of the hanger bracket 116 so that the hanger bracket 116 is fixed to the mounting bracket 124. As an example, an upper portion of an inner periphery 129a of the aperture 129 may rest on an inner periphery of the cutout 120 and the hook 118 of the hanger bracket 116 may be disposed in one of the slots 126.

[0043] A support bracket 128 may be fixed to the front panel 108. The support bracket 128 may be configured to support and fix a bottom portion of the aesthetic panel 110 to the front panel 108. The support bracket 128 may include a mating portion 132 that may extend and lie along an outer surface of the front panel 108. A support portion 130 may extend from the mating portion 132 in a direction substantially orthogonal to the mating portion 132. The support portion 130 may be configured to carry the aesthetic panel 110. As an example, the support portion 130 may support the aesthetic panel 110 in three separate areas, front and rear ends and a medial area disposed therebetween.

[0044] Fig. 6 illustrates a partial-cross-sectional view of the refrigerated drawer assembly 104. For purposes of clarity, an insulated side panel of the cabinet 107 and edges of the aesthetic panel 110 are not illustrated. As an example, the cabinet 107 may be a vacuum insulated cabinet that may include an insulation space 134 that

may be formed by an outer wrapper 136 and an inner liner 138. The outer wrapper 136 may include a number of walls including a top wall 136a and a bottom wall 136b that may be connected to one another. The inner liner 138 may include a number of walls including a top wall 138a and a bottom wall 138b that may be connected to one another. Insulation material may be disposed in the insulation space 134 and a vacuum may be applied prior to sealing the insulation space 134 so that the pressure within the insulation space 134 is less than an ambient pressure. It is generally contemplated that the insulation materials may be a glass-type material, a carbon-based powder, silicon oxide-based materials, fumed silica insulating gasses, and other insulation as required. In one or more embodiments, the cabinet 107 may include a trim breaker 140 or other suitable sealing member 143 configured to seal the insulation space 134.

[0045] Fig. 6A illustrates a magnified view of area B-B in Fig. 6. As previously mentioned, the front panel 108 may be connected to the aesthetic panel 110 by the hanger bracket 116 and the mounting bracket 124. The mounting bracket 124 may be fixed to the front panel 108 and the hanger bracket 116 may be fixed to the aesthetic panel 110. However, in another embodiment, the mounting bracket 124 may be fixed to the aesthetic panel 110 and the hanger bracket 116 may be fixed to the front panel 108. The hook 118 may be disposed in the aperture 129 formed by the mounting bracket 124.

[0046] Fig. 7 illustrates a perspective view of the refrigerated drawer assembly 104 according to one or more embodiments. The refrigerated drawer assembly 104 may include the base member 112 that may carry the cabinet 107. The base member 112 may extend rearward of the cabinet 107 and a portion of the base member 112 disposed rearward of the cabinet 107 may form a machine compartment 142. The machine compartment 142 may house one or more components of a refrigeration system 152 including but not limited to a compressor 146 and a controller 148. The controller 148 may include a memory provided with stored instructions that may be used to actuate the compressor 146 or other components of the refrigeration system 152, as required. As an example, the controller 148 may be configured to control the activation, duty cycle, and operation of the compressor 146.

[0047] Fig. 7A illustrates a magnified view of the area C-C in Fig. 7. As mentioned above, the support bracket 128 may be configured to fix the aesthetic panel 110 to the front panel 108. The support bracket 128 includes the support portion 130 that carries the aesthetic panel 110. One or more fasteners 150 may extend through the support portion 130 of the support bracket 128 into the aesthetic panel 110 so that a bottom portion of the aesthetic panel 110 is fixed to the support portion 130. In one or more embodiments, the aesthetic panel 110 may include a protrusion 156 that may extend from a main body 154 of the aesthetic panel 110. The protrusion 156 may be positioned to cover or hide the fastener 150 and

the support portion 130 so that only the finished surface 110a is visible.

[0048] Fig. 8 illustrate a top view of a portion of the refrigeration system 152. The refrigeration system 152 may be supported by the base member 112. The base member 112 may include a first portion 112a and a second portion 112b that may be separated by a brace such as a center brace 158. The refrigeration system 152 may include a drain catchment, drain tray, or drain pan 160, a fan 162, and a fan shroud 164 that may be fixed to the fan 162. As an example, the fan shroud 164 may be fixed to or supported by the drain pan 160. The drain pan 160, the fan 162, and the fan shroud may each be disposed in the machine compartment 142 and disposed on the first portion 112a of the base member 112. The machine compartment 142 may also house a drier 166 of the refrigeration system 152 that may be disposed between the compressor 146 and the drain pan 160.

[0049] The fan 162 may be configured to draw air over the first portion 112a of the base member 112 and a condenser 168 that may be supported by the first portion 112a of the base member 112. The fan 162 may form a cold air path as indicated by the directional arrow D1. The second portion 112b of the base member 112 may form a warm air path as indicated by the directional arrow D2, in which warm air may flow over the second portion 112b. The cold air path D1 may enter through an air grill 172 and the warm air path D2 may exit the base member 112 through the air grill 172. In one or more embodiments, a number of plates 170 may be positioned above the condenser 168. The plates 170 may be configured to transfer or dissipate heat from the air passing over the plates 170.

[0050] Fig. 9 illustrates a rear-perspective view of the refrigeration system 152. As mentioned above, the machine compartment 142 may house the drain pan 160 that may support the fan shroud 164 and the fan 162 that may be fixed to the fan shroud 164. The drier 166 may be disposed between the fan 162 and the compressor 146. In one or more embodiments, the center brace 158 may be Z-shaped and may include a first leg 174, a second leg 178, and a medial portion or leg 176 that may extend between the first leg 174 and the second leg 178. The first leg 174 may extend or lie along the second portion 112b of the base member 112. The second leg 178 may extend in the Z-direction and may be spaced apart, in the Y-direction, from the first portion 112a of the base member 112.

[0051] As an example, the second leg 178 may cover portions of the condenser 168. The medial portion 176 may extend between the first and second legs 174, 178 in the Y-direction. The medial portion 176 may be configured to block or separate the cold air path D1 from the warm air path D2 (Fig. 8). As an example, the center brace 158 may provide structural stiffness to the base member 112. In other words, the center brace 158 may mitigate or prevent twisting of the first portion 112a of the base member with respect to the second portion 112b of

the base member 112. In one or more embodiments, a number of fasteners 180 may extend from the second leg 178 of the center brace 158. The fasteners 180 may be configured to fix the cabinet 107 to the base member.

[0052] Fig. 10 illustrates a front-perspective view of the refrigeration system 152 according to one or more embodiments. Fig. 10A illustrates a detailed perspective view of a portion of the refrigeration system 152 from Fig. 10. In one or more embodiments, the base member 112 may be hollow and may include a top portion 112c and a bottom portion 112d that may be spaced apart from one another. As an example, the bottom portion 112d may include a pair of flanges that may include a vertical section 182 and a horizontal portion 184 that may extend from the vertical section 182. The vertical section 182 and the horizontal portion 184 may be arranged to curl from the bottom portion 112d and around forming the top portion 112c and forming a hollow structure that may receive the air grill 172.

[0053] As best illustrated in Fig. 10A, the top portion 112c may include a first section, identified by 112c', that may form the first portion 112a of the base member 112. The top portion 112c may also include a second section 112c' that may be spaced apart, in a vertical direction, from the first section 112c'. The center brace 158 may extend between the first and second sections 112c, 112c'. As an example, the second leg 178 may extend along the first section 112c' and the first leg 174 may extend along the second section 112c.

[0054] Fig. 11 illustrates a front-perspective view of a portion of the refrigerated drawer assembly 104 disposed on the base member 112. As mentioned above, the base member 112 may include a bottom portion 112d that may be disposed opposite the top portion 112c. The refrigerated drawer assembly 104 may include the cabinet 107, in which the drawer 144 (FIG. 7) is disposed. The front panel 108 may be attached to the drawer 144 and the mounting bracket 124 may be fixed to the front panel 108. The hanger brackets 116 are disposed on or detachably fixed to the mounting bracket 124. Generally, the aesthetic panel 110 (FIG. 2) is attached to the hanger brackets 116. However, the aesthetic panel 110 is not shown in Figure 11 for illustrative purposes.

[0055] Fig. 12 illustrates a front-cross-sectional plan view of a portion of the refrigerated drawer assembly 104 disposed on the base member 112. In one or more embodiments, the cabinet 107 may be insulated with foam 188 disposed between the outer wrapper 136 and the inner liner 138. As an example, the foam 188 may be a polyurethane foam insulation or another foam material as required. One or more support members such as isolators 186 may be disposed in the base member 112 to support the cabinet 107.

[0056] Fig. 12A illustrates a magnified view of area D-D in Fig. 12. In one or more embodiments, the cabinet 107 may be fixed to the base member 112 by one or more fasteners. As an example, a screw anchor 190 may be disposed in the insulation space 134 formed by the

outer wrapper 136 and the inner liner 138. A screw 192 may extend through an aperture of the base member 112 to fix the base member 112 to the cabinet 107.

[0057] Fig. 13 illustrates a front- cross-sectional plan view of a portion of the refrigerated drawer assembly 104 disposed on the base member 112. In one or more embodiments, the refrigerated drawer assembly 104 may include a vacuum insulated cabinet 107' that may house the drawer 144. The cabinet 107' may include the outer wrapper 136 and an inner liner 138 that may be spaced apart from one another to form the insulation space 134. As an example, insulation material 198 may be disposed in the insulation space 134 and a vacuum may be applied prior to sealing the insulation space 134 so that the pressure within the insulation space 134 is less than an ambient pressure.

[0058] Fig. 13A illustrates a magnified view of area E-E in Fig. 13. As an example, a threaded fastener, such as a stud 196 may extend from the outer wrapper 136 through an aperture of the base member 112. Another fastener, such as a nut 194 may be threaded on the stud 196 to fix the base member 112 to the cabinet 107.

Claims

1. A drawer refrigerator (104) comprising:

an insulated cabinet (107) defining a refrigerated space;
a drawer (144) disposed in the refrigerated space;
a hollow base member (112) provided with a first portion (112a) and a second portion (112b), the first and second portions (112a, 112b) collectively defining a portion of a machine compartment (142);
a refrigeration system (152) configured to refrigerate the refrigerated space, wherein the base member (112) supports the refrigeration system (152) and the insulated cabinet (107),
and wherein the refrigeration system (152) comprises:

a condenser (168) disposed on the first portion (112a) of the base member (112);
a compressor (146) disposed in the machine compartment (142) on the second portion (112b) of the base member (112);
a drain tray (160) disposed in the machine compartment (142) on the first portion (112a) of the base member (112);
a condenser fan (162) disposed in the machine compartment (142) on the first portion (112a) of the base member (112); and
a drier (166) operatively connected to the condenser (168) and disposed in the machine compartment (142) on the first portion

(112a) of the base member (112),
the drawer refrigerator further comprising a center brace (158) fixed to and extending along the base member (112), the center brace (158) separating the first and second portions (112a, 112b) of the base member (112),

wherein the fan (162) of the refrigeration system (152) is configured to draw air over the first portion (112a) of the base member (112) and the condenser (168) and forms a cold air path (D1), and wherein the second portion (112b) of the base member (112) forms a warm air path (D2) exiting the base member (112).

2. The drawer refrigerator (104) of claim 1, wherein the center brace (158) is Z-shaped and includes a first leg (174) extending along the second portion (112b) of the base member (112), a second leg (178) extending along the first portion (112a) of the base member (112), and a medial portion (176) that extends between the first leg (174) and the second leg (178).

3. The drawer refrigerator (104) of claim 1, wherein the base member (112) an end of the base member (112) defines an aperture configured to receive an air grill (172).

4. The drawer refrigerator (104) of claim 1, where the insulated cabinet (107) is a foamed cabinet (107) including a number of insulated panels each provided with a liner (138) and a wrapper (136), and wherein the drawer refrigerator (104) further comprises:

a screw anchor (190) disposed between the liner (138) and the wrapper (136); and
a fastener (192) extending through the base member (112) and into the screw anchor (190) to fix the base member (112) to the foamed cabinet (107).

5. The drawer refrigerator (104) of claim 1, further comprising:

a number of plates (170) disposed on the condenser (168) wherein the plates (170) are configured to dissipate heated air flowing over the condenser (168).

6. The drawer refrigerator (104) of claim 1, wherein the insulated cabinet (107) includes:

an outer wrapper (136) provided with a number of joined walls (136a, 136b),
an inner liner (138) spaced apart from the outer wrapper (136) and provided with a second number of joined walls (138a, 138b), and
insulation material (188) disposed between the

outer wrapper (136) and the inner liner (138).

7. The drawer refrigerator (104) of claim 6, further comprising a trim breaker (140) coupled with an edge of the outer wrapper (136) and an edge of the inner liner (138).
8. The drawer refrigerator (104) of claim 6, wherein a space (134) between the outer wrapper (136) and the inner liner (138) forms an insulation space (134) and the insulation space (134) is sealed at a pressure below ambient pressure.
9. The drawer refrigerator (104) of claim 1, wherein the insulated cabinet (107) includes a number of panels forming a receptacle and including a front receptacle panel (108), and wherein the drawer refrigerator (104) further comprises:
 - an aesthetic panel (110) configured to cover the front panel (108);
 - a hanger bracket (116) fixed to either the aesthetic panel (110) or the front receptacle panel (108), wherein the hanger bracket (116) includes a main body and a hook (118) extending therefrom; and
 - a mounting bracket (124) fixed to the other of the aesthetic panel (110) and the front receptacle panel (108), wherein the mounting bracket (124) defines a number of apertures (126) configured to receive the hook (118) of the hanger bracket (116).
10. The drawer refrigerator (104) of claim 9, wherein the hanger bracket (116) is fixed to the aesthetic panel (110) and the mounting bracket (124) is fixed to the front receptacle panel (108).
11. The drawer refrigerator (104) of claim 9, further comprising:
 - a support bracket (128) fixed to the front receptacle panel (108) and configured to carry the aesthetic panel (110), wherein the support bracket (128) includes a mating portion (132), lying along the front receptacle panel (108), and a support portion (130) extending orthogonally to the mating portion (132) and configured to carry the aesthetic panel (110).
12. The drawer refrigerator (104) of claim 11, wherein the aesthetic panel (110) includes a main body (154) and a protrusion (156), wherein the protrusion (156) extends beyond a lower edge of the main body (154) to conceal the support portion (130).
13. The drawer refrigerator (104) of claim 1, wherein the center brace (158) includes a first leg (174), a second leg (178), and a medial portion (176) extending therebetween, wherein the first and second legs (174,

178) extend in a horizontal direction and the medial portion (176) extends in a vertical direction substantially orthogonal to the horizontal direction.

14. The drawer refrigerator (104) of claim 13, wherein the first leg (174) lies on the first portion (112a) of the base member (112) and the second leg (178) lies on the second portion (112b) of the base member (112).

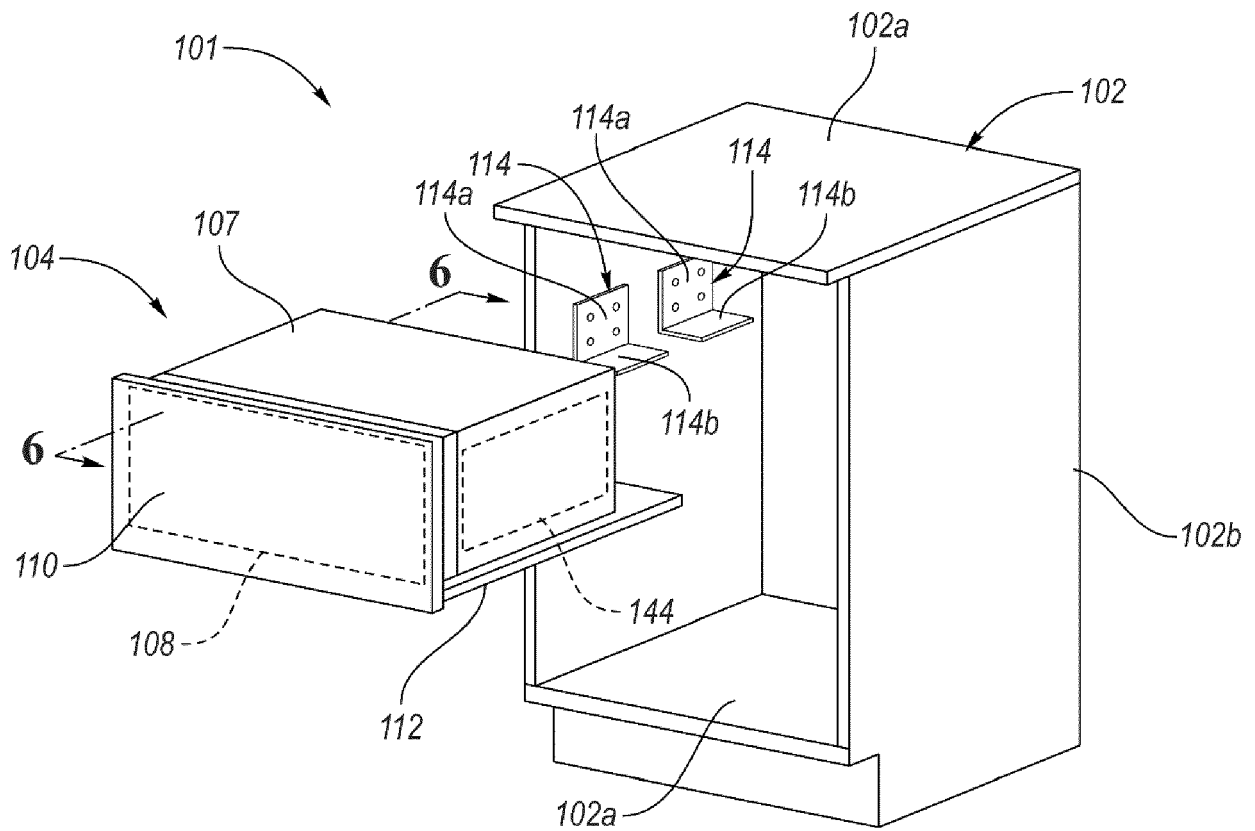
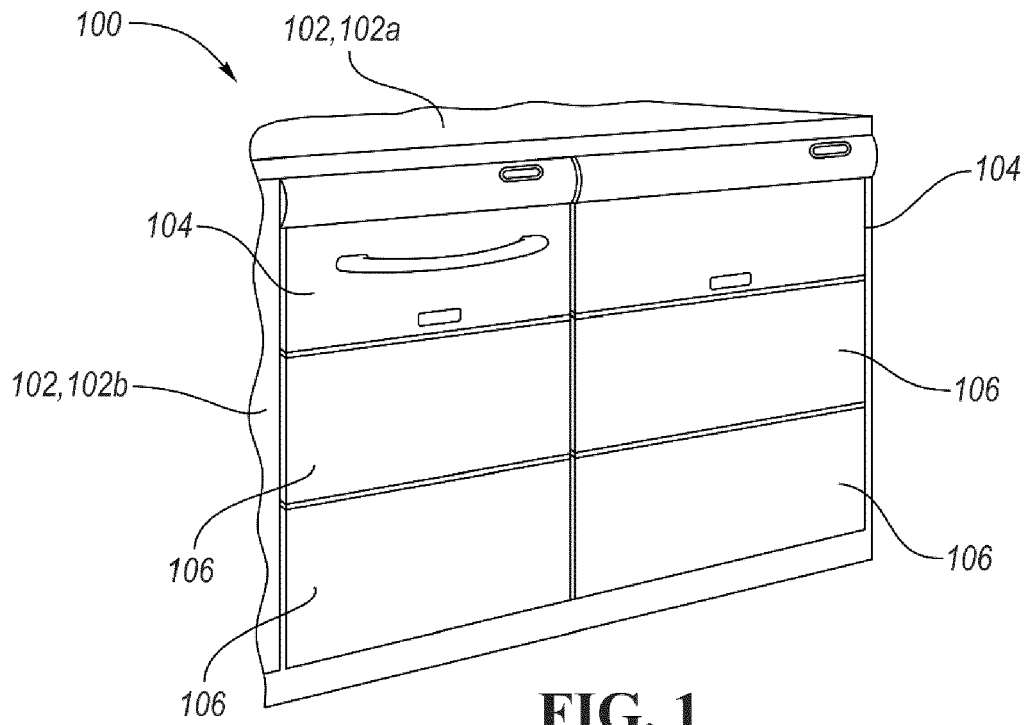


FIG. 2

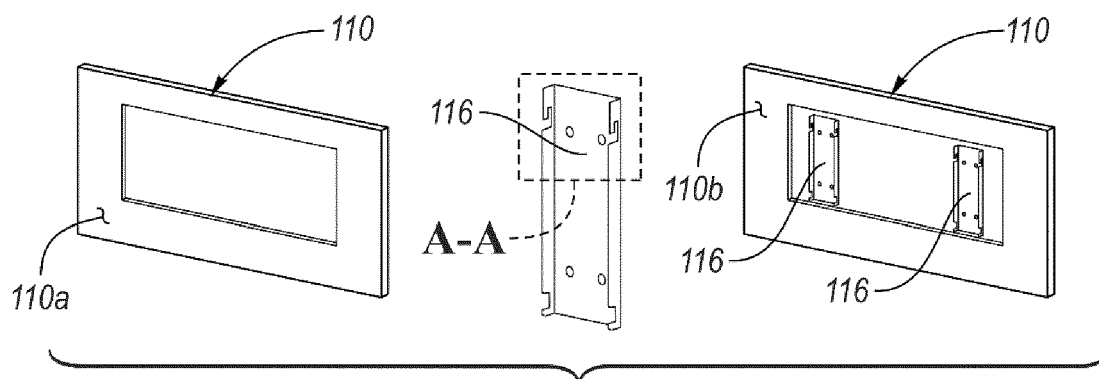


FIG. 3

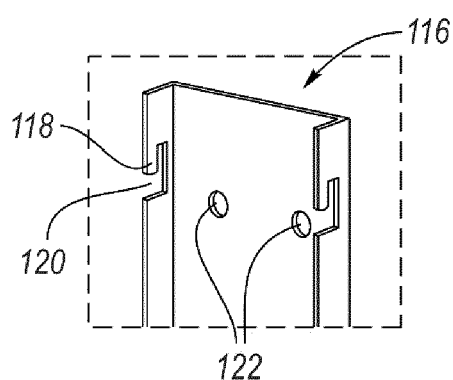


FIG. 3A

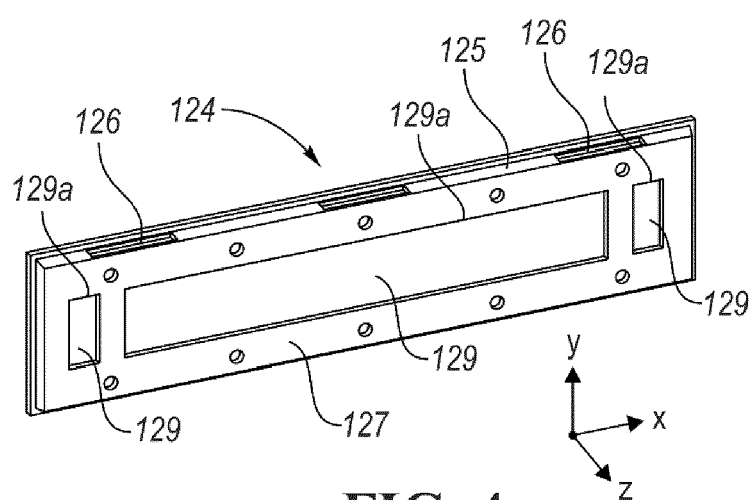


FIG. 4

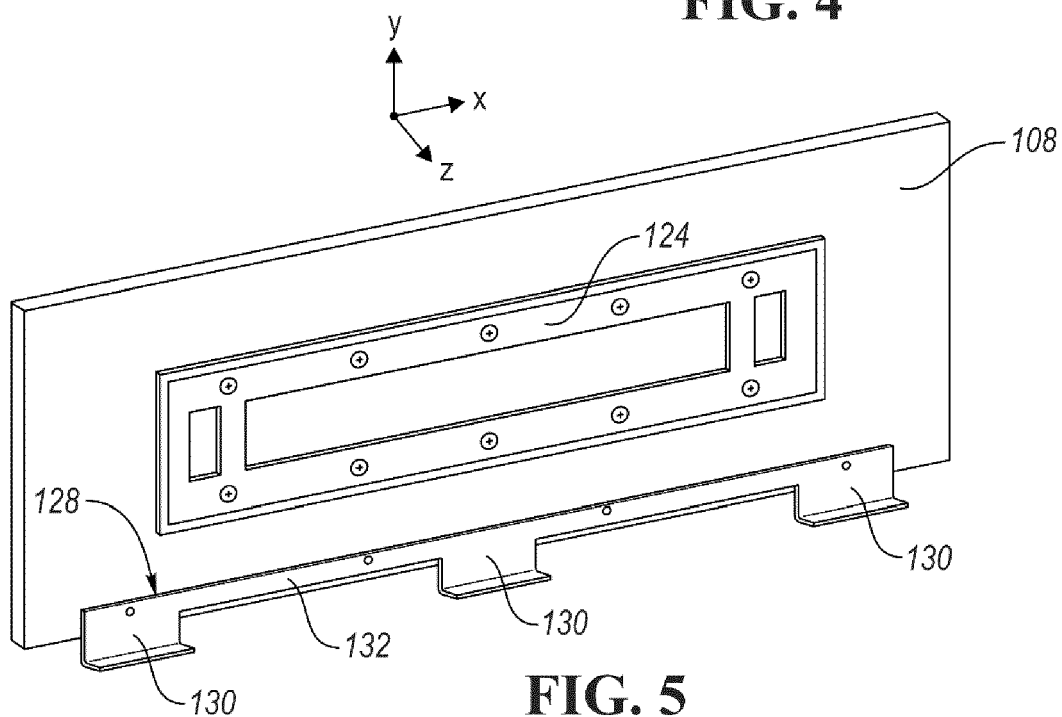
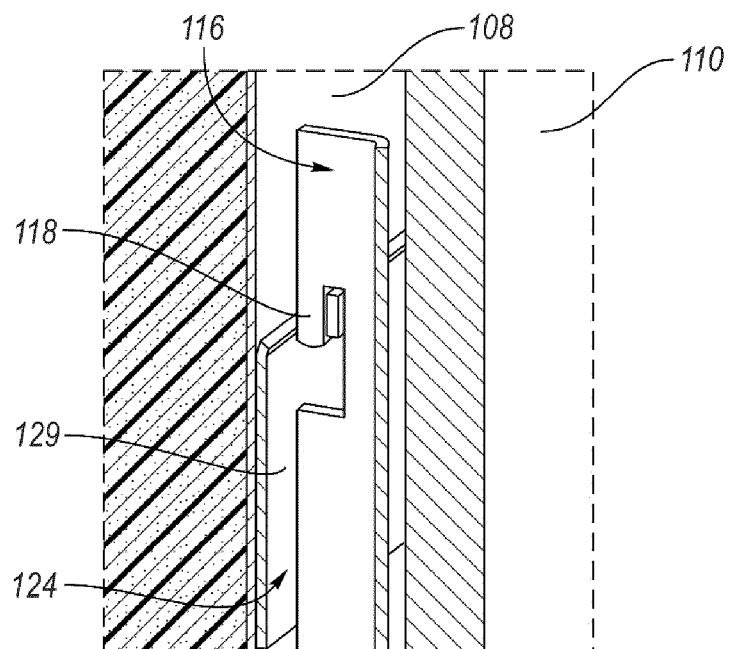
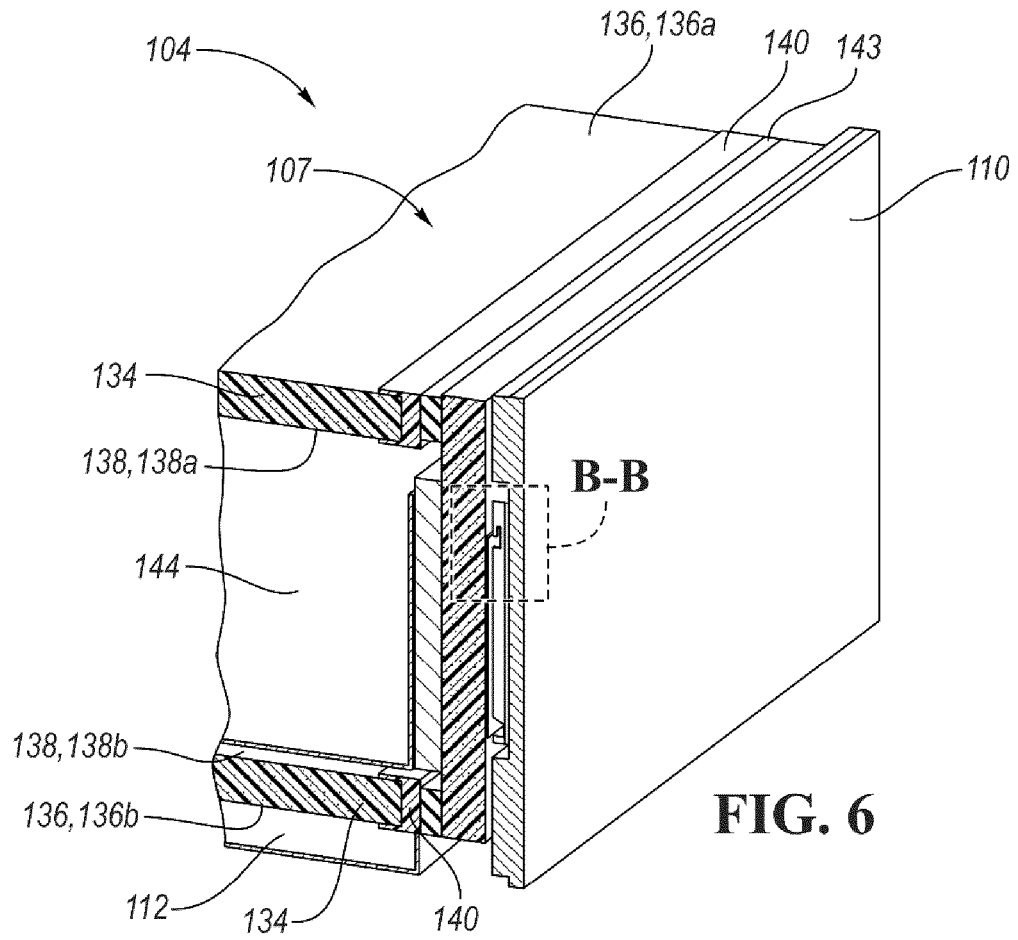
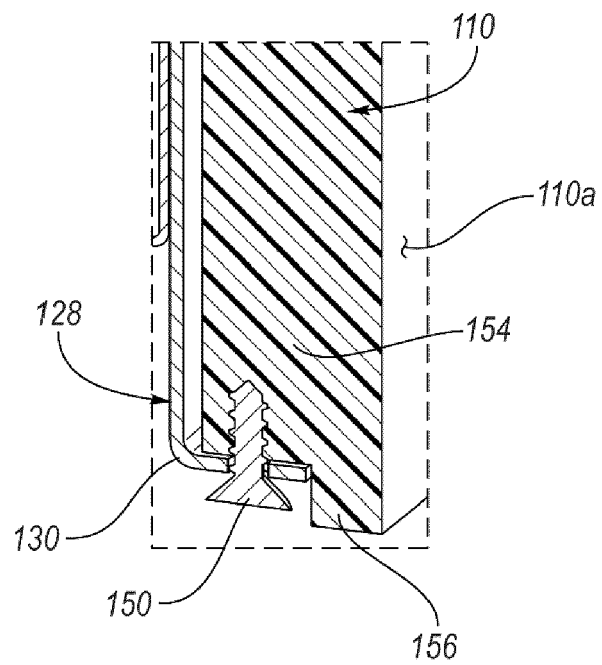
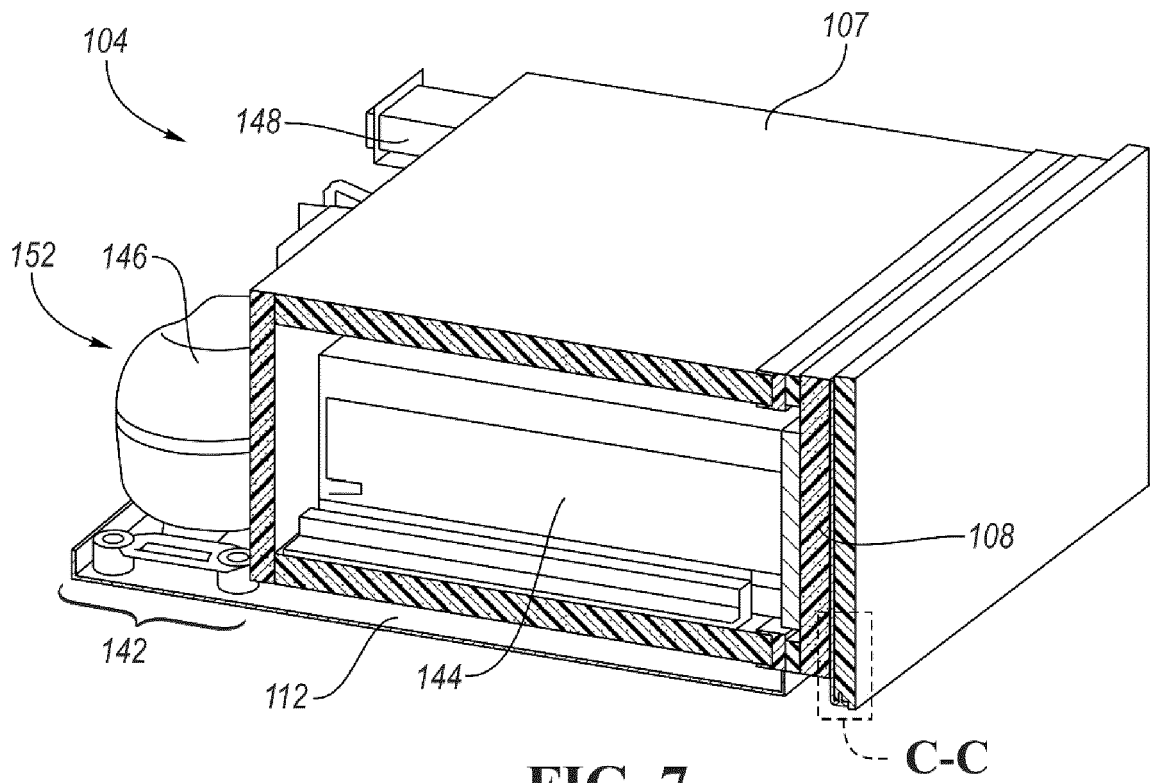


FIG. 5





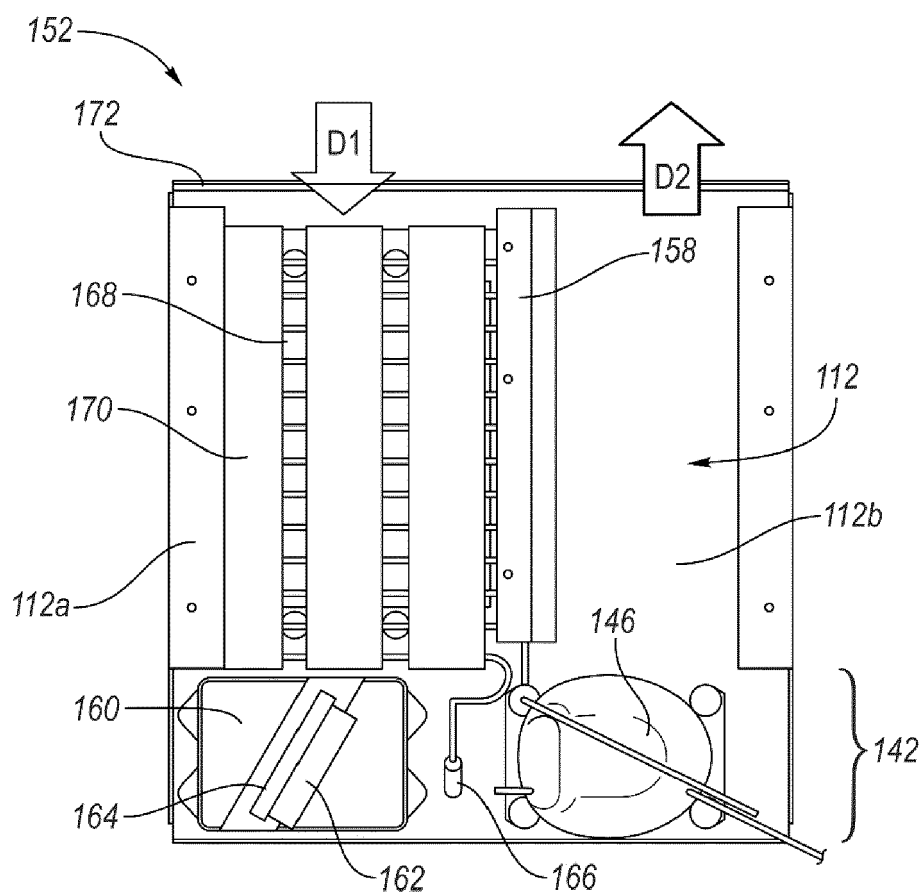


FIG. 8

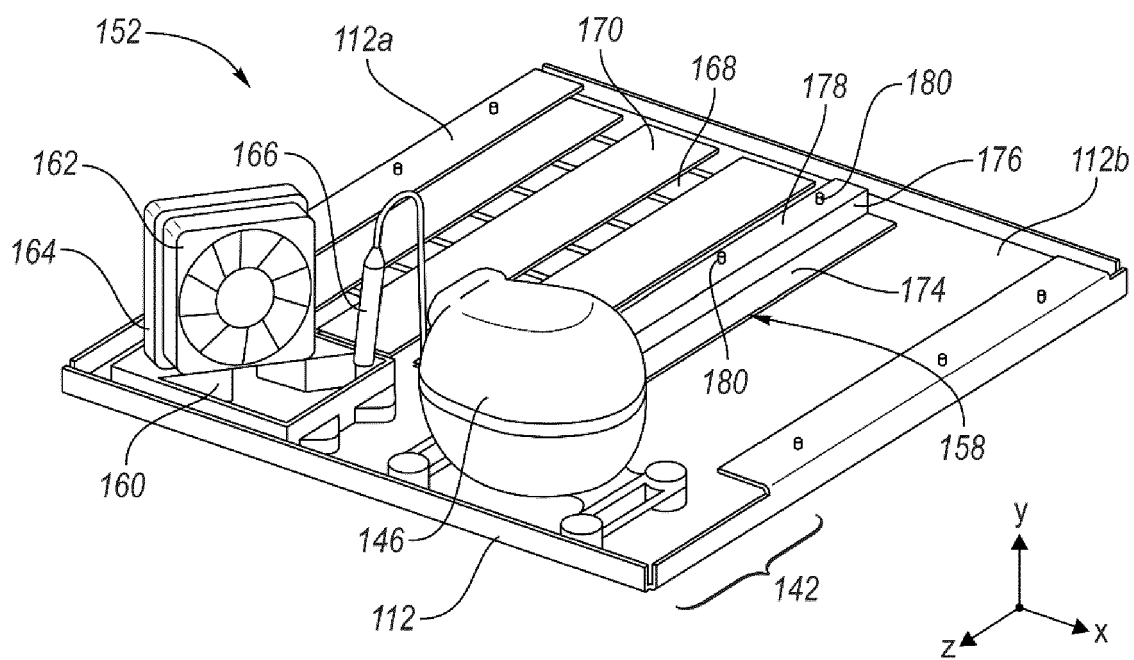


FIG. 9

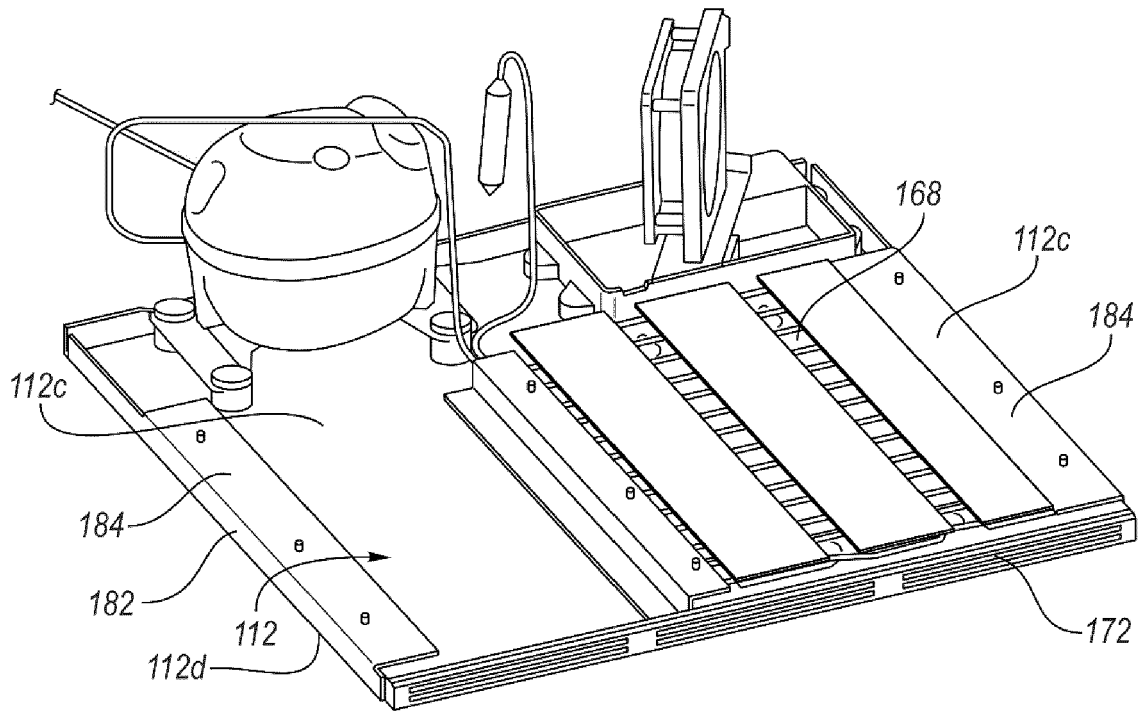


FIG. 10

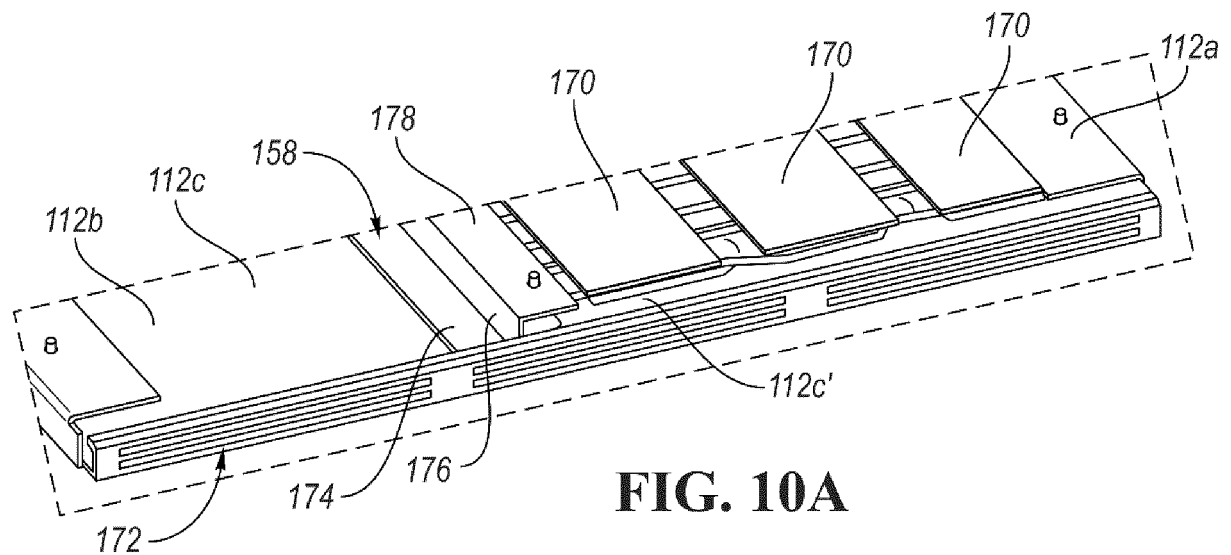
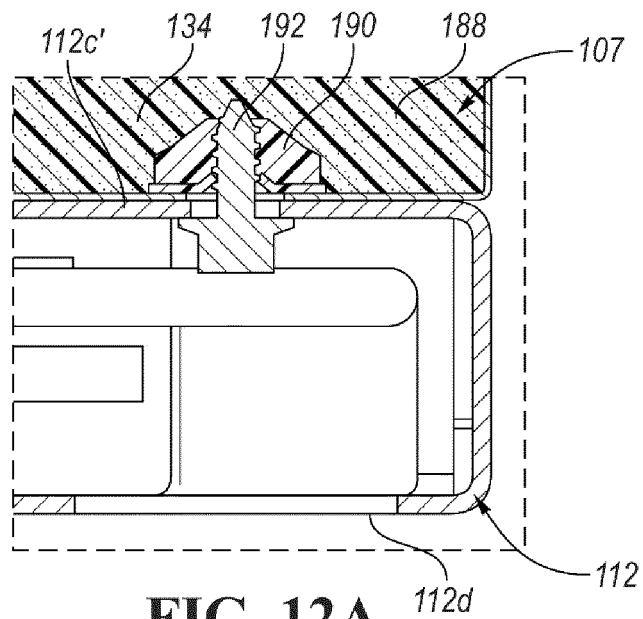
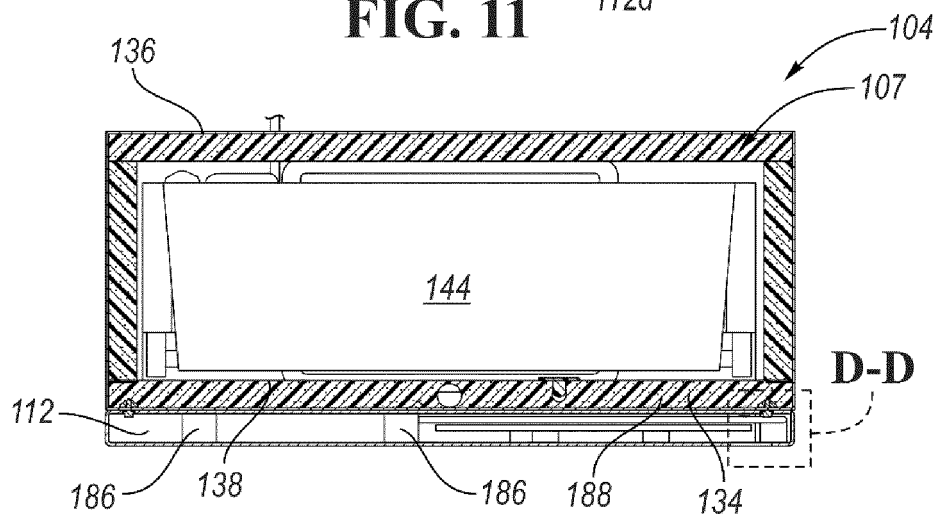
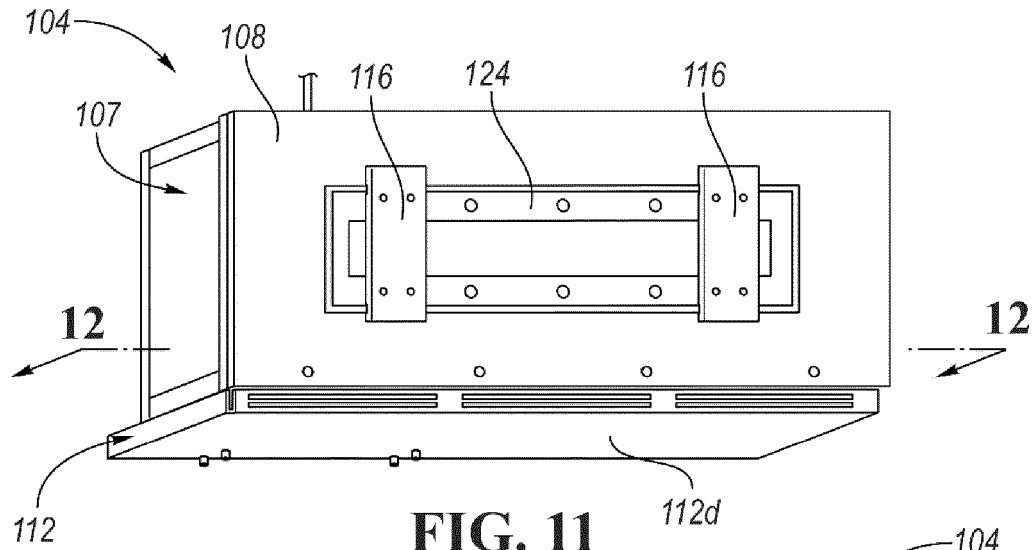


FIG. 10A



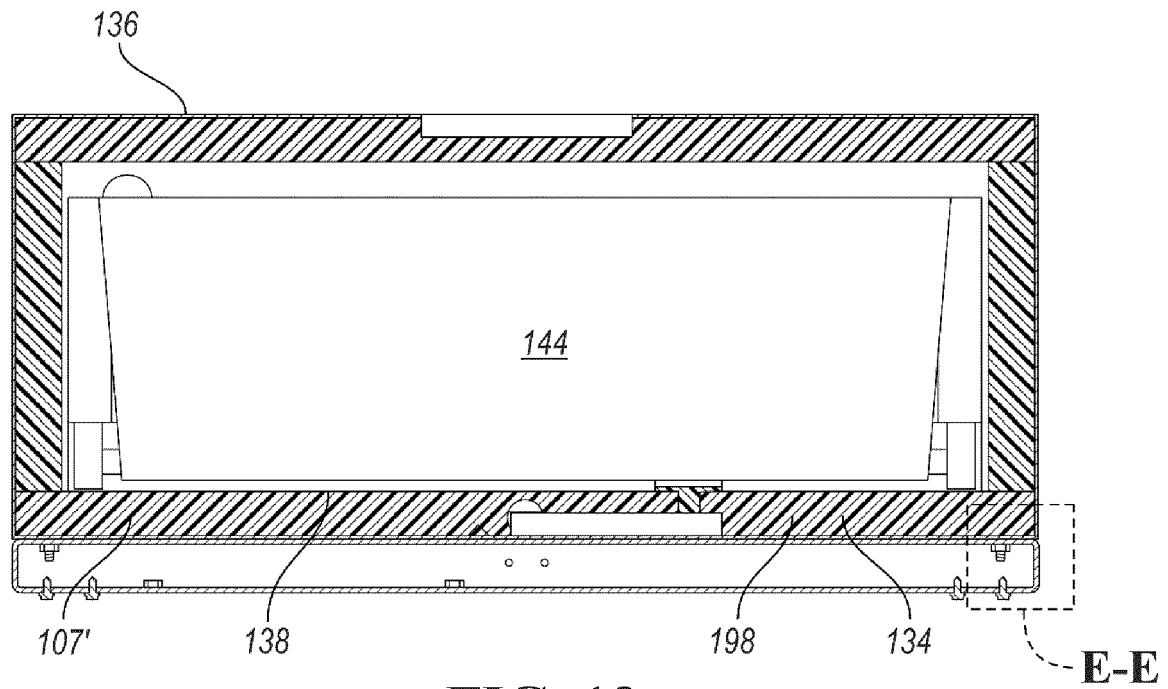


FIG. 13

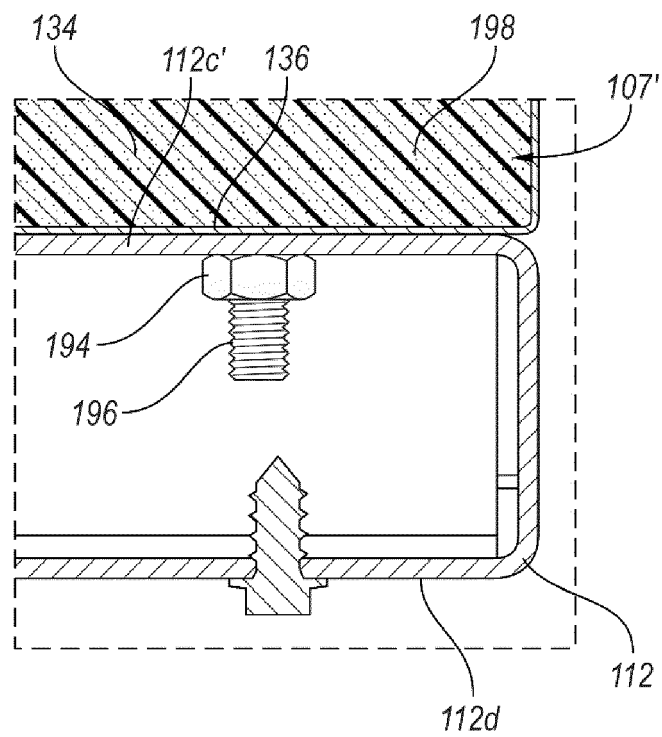


FIG. 13A



EUROPEAN SEARCH REPORT

Application Number

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Y	* figure 8 *	2, 4, 9, 13, 14	

X	EP 1 586 253 A1 (WHIRLPOOL CO [US]) 19 October 2005 (2005-10-19)	1, 6, 7	
Y	* figures 11-22 *	2, 9, 13, 14	

Y	WO 2021/096301 A1 (LG ELECTRONICS INC [KR]) 20 May 2021 (2021-05-20) * figure 7 *	4	

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			F25D
Place of search		Date of completion of the search	Examiner
The Hague		20 March 2023	Vigilante, Marco
CATEGORY OF CITED DOCUMENTS			
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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