COMPARTMENT FOR AIR CONDITIONER CONDENSER

Inventor: Steve Jay Meyer, Scottsdale, AZ (US)

Correspondence Address:
QUARLES & BRADY LLP
RENAISSANCE ONE, TWO NORTH CENTRAL AVENUE
PHOENIX, AZ 85004-2391

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ABSTRACT

An air conditioner condenser compartment includes a base. A three-sided frame is mounted to the base, each side of the frame incorporating a top, bottom, and side rail portion. A receiving bracket is formed along a surface of the side rail portion. A panel has top, bottom and side rail portions. The side rail portion of the panel is adapted to slide through the bracket formed along the three-sided frame. A fabric material is alternatively dispensed over or integrated into the top, bottom, and side rail portions of the panel to render a screen structure. A top portion has two congruent side surfaces and a front surface. The side surfaces and front surface extend from a top opening outward to conform to a surface of the three-side frame. The top opening remains unobstructed to accommodate air movement.
COMPARTMENT FOR AIR CONDITIONER CONDENSER

FIELD OF THE INVENTION

[0001] The present invention relates in general to air conditioning equipment and, more particularly, to a compartment for an air conditioning condenser unit.

BACKGROUND OF THE INVENTION

[0002] Air conditioners, and correspondingly, the outdoor condenser units which are associated are found virtually everywhere in today's society. Essentially, every new house that is constructed, in any climate, makes use of air conditioning equipment for at least a portion of each year. In many areas of the country, heat pump units, due to high efficiency, serve to electrically cool homes in the summer and heat the homes in the winter months. Condenser units are found in use in most commercial and residential settings.

[0003] The outdoor condenser unit that services air conditioning and heat pump equipment characteristically has a square or rectangular shape, with a flat base, four sides, which are generally ventilated to allow air into the condenser, and a top portion with an integrated fan to blow heated air into the outdoor environment. Typically, air conditioning and heat pump condenser units are set on a small concrete slab at the exterior of a building, or on the roof. Copper piping draws Freon into the interior of the building where the piping junctions with a coil portion of an air handler. The Freon is drawn back to the condenser with separate copper piping to complete the circuit.

[0004] Condenser units are generally clad with a sheet metal housing. Because the condenser units are located at the exterior of a building, either on the roof or ground, the condenser units are constantly exposed to the environment. As a result, in hotter climates, the units are exposed to sunshine which tends to have a corrosive effect on the unit, as well as a heating effect. Temperatures inside a condenser unit in extreme environments such as the desert southwest can be many degrees hotter than the ambient surrounding air. Hotter internal temperatures have a tendency to make the condenser unit less efficient, as the unit has to work harder to dissipate heat.

[0005] Exposed condenser units in cooler climates are subject to snowfall and other harsh conditions which also serve to plague the units by exposing electronic equipment located in the units to extreme temperatures and other environmental conditions. Condenser units also pose a safety hazard, since while in operation the condenser fan which is generally located on top of a condenser unit can activate at any time, potentially harming children or pets which may place themselves in close proximity. Finally, the look of many condenser units is aesthetically unappealing to many individuals.

[0006] Thus, a need exists for a compartment which houses an air conditioning or heat pump condenser unit which provides additional protection from the elements to boost the operating efficiency of the units. In addition, a need exists for a compartment which is easy to manufacture, easy to install, and easy to maintain. Finally, a need exists for a compartment which is aesthetically appealing.

SUMMARY OF THE INVENTION

[0007] In one embodiment, the present invention is an air conditioner condenser compartment, comprising a base, a three-sided frame mounted to the base, each side of the frame incorporating a top, bottom, and side rail portion, wherein a receiving bracket is formed along a surface of the side rail portion, a panel having top, bottom and side rail portions, the side rail portion of the panel adapted to slide through the bracket formed along the three-sided frame, wherein a fabric material is alternatively disposed over or integrated into the top, bottom, and side rail portions of the panel to render a screen structure, and a top portion having two congruent side surfaces and a front surface, wherein the side surfaces and front surface extend from a top opening outward to conform to a surface of the three-sided frame, and the top opening remains unobstructed to accommodate air movement.

[0008] In another embodiment, the present invention is an air conditioner condenser compartment, comprising a substantially flat, rubberized base, a three-sided frame adapted to attach to the rubberized base, the frame having top, bottom, and side portions of unitary construction, a panel having top, bottom, and side rail portions of unitary construction, the panel adapted to couple to the top, bottom, or side portions of the three-sided frame, wherein the panel incorporates a screen structure composed of polyester yarn fibers having a vinyl coating disposed thereon, the screen structure connected to each of the top, bottom, and side rail portions of the panel, and a top portion adapted to mount to a top surface of the three-sided frame, the top portion having a front and two side surfaces extending outward to a first end, which conforms to the top surface of the three-sided frame, wherein the top and side surfaces form a rectangular opening at a second end located opposite from the first end to allow for exposure of the condenser to outside air.

[0009] In another embodiment, the present invention is an air conditioner condenser compartment, comprising a four-sided frame having rail, upper stile, and lower stile portions, wherein the lower stile portion is formed to correspond to a pitch of a roof, a panel having upper stile, lower stile, and side rail portions, the panel adapted to couple to the rail or upper or lower stile portions of the four-sided frame, wherein the panel incorporates a screen structure composed of woven fibers, the screen structure adapted to connect to the rail, upper, or lower stile portion of the panel, and a top portion adapted to mount to a top surface of the four-sided frame, wherein a rectangular opening is formed in the top portion to allow for exposure of the condenser to outside air.

[0010] In another embodiment, the present invention is an air conditioner condenser compartment, comprising a base, a three-sided frame mounted to the base, the three-sided frame incorporating screen panels removably attached to the three-sided frame, a top portion secured to the three-sided frame, piping removable disposed along an exterior surface of the compartment, the piping having a plurality of nozzle outlets for disbursing a water mist, and a high-pressure pump connected to the piping for generating the water mist.

[0011] In still another embodiment, the present invention is a method of manufacturing an air conditioner condenser compartment, comprising providing a base, providing a three-sided frame mounted to the base, each side of the frame incorporating a top, bottom, and side rail portion, wherein a receiving bracket is formed along a surface of the three-sided frame, a top portion having top, bottom, and side rail portions, the side rail portion of the panel adapted to slide through the bracket formed along the three-sided frame, wherein a fabric material is alternatively disposed over or integrated into the top, bottom, and side rail portions of the panel to render a screen structure, and providing a top portion having two congruent side surfaces and a front surface, wherein the side surfaces and front surface extend from a top opening outward to conform to a surface of the
three-side frame, and the top opening remains unobstructed to accommodate air movement.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 illustrates an example air conditioner condenser compartment in a first embodiment;

[0013] FIG. 2 illustrates assembly features of an air conditioner condenser compartment;

[0014] FIG. 3 depicts a detail illustration of a screen sub-structure interfacing with a frame sub-structure of one embodiment of an air conditioner condenser compartment;

[0015] FIG. 4 depicts a detail illustration of a screen sub-structure interfacing with a frame sub-structure of an additional embodiment of an air conditioner condenser compartment;

[0016] FIG. 5 depicts a detail illustration of a screen and rail interface in one embodiment;

[0017] FIG. 6 depicts a detail illustration of a screen and rail interface in another embodiment;

[0018] FIG. 7 depicts a first detail illustration of an example connection between top and side panels of an air conditioner condenser compartment;

[0019] FIG. 8 depicts a second detail illustration of an example connection between top and side panels of an air conditioner condenser compartment;

[0020] FIG. 9 depicts a lower structure integrated into a top portion of an example air conditioning condenser compartment;

[0021] FIG. 10 illustrates an air conditioner package unit compartment for existing roof-mounted applications;

[0022] FIG. 11 illustrates an air conditioner package unit compartment for new constructed roof-mounted applications; and

[0023] FIG. 12 illustrates a misting and cooling system integrated into an example air conditioning condenser compartment.

DETAILED DESCRIPTION OF THE DRAWINGS

[0024] The present invention is described in one or more embodiments in the following description with reference to the Figures, in which like numerals represent the same or similar elements. While the invention is described in terms of the best mode for achieving the invention’s objectives, it will be appreciated by those skilled in the art that it is intended to cover alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims and their equivalents as supported by the following disclosure and drawings.

[0025] Turning to FIG. 1, an example air conditioner condenser compartment 10 is depicted in one embodiment. Compartment 10 in the depicted embodiment is intended to enclose an air conditioner condenser which is mounted to a concrete slab or other solid surface in close proximity to a side of a home or building. Compartment 10 includes a front surface 12 and two side surfaces 12, which can form a frame to provide structural support. Surfaces 12 can be constructed of steel, aluminum, an alloy metal, a rigid polymer-based material, or other materials. In the depicted embodiment, surfaces 12 are comprised of a solid, rubberized material, forming a rubberized, solid base 12. The rubberized material 12 can act to absorb and cushion vibration emanating from the condenser unit. Furthermore, the rubberized base acts to isolate the vibration to the condenser unit and not transfer the vibration to adjoining surfaces.

[0026] Three screens 14, a front screen 14 and two side screens 14 are integrated into each front and side surface 12. Again, an opening 16 is found in the rear portion of the compartment 10 where a compartment 10 faces the surface of a home or building 26. Screens 14 are held in place by a series of rails 18 and/or stiles 18, also capable of being manufactured with steel, aluminum, alloys, naturally or synthetically-based polymer material, and the like. Screens 14 allow air to enter into compartment 10 and circulate within compartment 10. In one embodiment, a screen structure can incorporate polyester yarn fibers with a vinyl coating disposed over a surface of the fibers. Such an embodiment can render a screen material which becomes highly resistant to outdoor elements, particularly harsh sunlight. Screens 14 can also be constructed with wire fibers which are woven into a mesh. Screens 14 can be constructed with a fabric-like material. Screens 14 can be fabricated using a variety of materials which allow for unobstructed air movement, while at the same time obscuring direct sunlight. In one embodiment, rails/stiles 18 are manufactured with unitary construction to render a frame structure 18 which is seamless in construction to provide for increased strength and rigidity. In a separate embodiment, a frame 18 can be a steel or alloy frame which is overmolded with an epoxy coating.

[0027] Returning to FIG. 1, a top structure 22 is disposed over the three-sided frame structure. Structure 22 includes two congruent side surfaces 20 and a front surface 20 which forms a pyramid-type shape to direct air movement inwards and upwards towards opening 24 in structure 22. Opening 24 is purposefully maintained without any obstruction to allow for the greatest possible air movement and circulation throughout compartment 10. Finally, compartment 10 is seen secured to an outside surface 26 of a home or other building.

[0028] Compartment 10 is a cost-effective, efficient solution to providing protection to an air conditioner condenser from harsh outdoor elements. Compartment 10 is intended to fasten over an existing condenser. The existing skin of an existing condenser becomes shaded from harmful sunlight elements. At most times of the day, no direct sunlight reaches the air conditioner condenser. As a result, the ambient air temperature of the interior of the condenser is reduced, as the compartment 10 absorbs and/or reflects radiant energy. The design of compartment 10 is intended to not interfere in any way with the normal circulation of air which occurs through a condenser. Screens 14 are large and allow unimpeded air movement so as not to encumber the operational characteristics of a particular condenser. Likewise, opening 24 is large to accommodate air movement from the interior of a condenser, without impeding the air movement. The result is an air conditioner condenser which operates in a cooler environment, resulting in greater efficiency. In addition, compartment 10 provides an additional degree of security to various subcomponents located in a typical air conditioner condenser, such as the fan mechanism which can randomly activate and potentially injure children or animals.

[0029] FIG. 1 also depicts a portion of a cooling mechanism for compartment 10, which includes pipe 114, mounting brackets 116 or clamps 116, elbow fittings 122, nozzles 118 and mist 120. The cooling mechanism is removably attached to the structure 22 as shown, and will be discussed in greater detail following.

[0030] FIG. 2 depicts an example assembly mechanism for a compartment 10. Here again, screens 14, opening 16, rails and stiles 18, and surfaces 20 are depicted. Top portion
US 2008/0083239 A1

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22 with opening 24 is shown having pin mechanisms 28 integrated into the bottom surface of portion 22. Pins 28 extend downward from portion 22. Pins 28 are received by a recess or opening 30 in a top portion of rails 18 as shown, to removably attach portion 22 to the rail/stile structure 18 holding screens 14. Pins 28 describe a embodiment which can be used to mechanically attach portion 22 to rails 18, however, one skilled in the art will realize that several known mechanisms can be employed to attach portion 22 in a similar manner, while providing ease of removal in a particular situation.

[0031] In addition, screen structures 14 are configured to be removable from rail/stiles 18 as shown. FIGS. 3 and 4 describe two example mechanisms which allow rails/stiles 18 to be removably attached to compartment 10. FIG. 3 shows a mechanism whereby compartment 10 is configured to insert rails/stiles 18 into recesses created by a frame 34 having angled surfaces 36, 38 to receive a rail or stile 18. Rails 18 have an exterior surface which is made flush with an exterior surface of frame 34 as shown. Angle surface 38 forms a back surface on which rail or stile 18 ultimately contacts. To secure rails/stiles 18 into the recess, a wing nut 20 is turned to securely hold rails/stiles in position. Optionally, nut 20 can include a locking mechanism 42 such as a tubular pin tumbler lock 42 or radial lock 42. Here again, several attachment mechanisms such as a wing nut mechanism, lever mechanism, tongue and groove mechanism, or latch mechanism can be used to secure the screen structure 14 into position.

[0032] FIG. 3a illustrates the attachment mechanism depicted in FIG. 3 along with an example hinge mechanism 35 which allows a screen 14 to open and pivot outwards in one embodiment for ease of servicing the condenser. Hinge 35 can be disposed along an entire length of stile 18. In the depicted embodiment, a hinge 35 is disposed at the top portion of stile 18 and frame 34, and also can be disposed at the bottom portion of stile 18 and frame 34. A technician can easily access a condenser unit by unlocking tumbler lock 42, turning nut 40, and opening screen 14 along hinges 35.

[0033] FIG. 4 depicts an additional attachment mechanism for securing screens 14 to frame 34. Frame 34 includes surfaces 36, 38 as shown in FIG. 3, adding front surface 44 to form a "U" shape bracket 46 or recess 46 through which a particular rail 18 slides from the top down, until a top surface of stile 18 is flush with a top surface of frame 34 as shown. Recess 46 is configured to be slightly larger than the dimensions of rail 18 to allow for movement through the recess, but to provide sufficient friction force to retain rail 18 in a particular position.

[0034] FIG. 5 refers to an example screen 14 retention mechanism 48 to securely hold screen 14 material in place by providing sufficient tension, shown in a cross-sectional view. In the depicted embodiment, screen 14 is wrapped around a post structure 50 and locked in place using spacer 52. Rail 18 is integrated around the holding post structure 50 as shown. Post 50 with attached screen 14 material can, in one embodiment, be slid across a cavity created in rail 18 to receive post 50.

[0035] A similar holding structure 54 for screen 14 material is shown in FIG. 6, also in cross-section format. Screen 14 material is again pulled around a support post, here the rail 18 itself. A pin mechanism 56 securely holds screen 14 material in position.

[0036] FIG. 7 depicts an example attachment mechanism 58 for top portion 22 in a cross-sectional view. A bottom surface of surface 20 is shown having pin structure 60, which is received by an opening in a top surface of rail or stile 18 to removably secure top portion 22 in place.

[0037] Similarly, the attachment 62 as shown in FIG. 8 makes use of another U-shape bracket 64 or mechanism 64 to secure top portion 22 to rail or stile 18.

[0038] Referring now to FIG. 9, an additional embodiment of a top portion 22 is depicted. Portion 22 includes several louvers 66 which are intended to enhance airflow throughout the compartment 10.

[0039] Turning to FIG. 10, a compartment 68 is depicted which is intended for preexisting roof-mounted applications. An air duct 70 is attached to air conditioner condenser 72 as shown, the condenser mounted to a pitched roof surface 74 using a roof-mount brace structure 76. In the depicted embodiment, compartment 68 includes rails and stiles 18 as previously depicted. However, stile 78 is angled to conform to the pitch of the roof surface 74 using angle brackets 80. As shown, slides 18 are longer than rails 18 to render a rectangular, four-sided shape which fully encloses the condenser. 72. A bottom panel 82 has an angled side to correspond to a certain pitch of a roof. In one embodiment, panel 82 includes louvers 66 as shown. The dimensions of bottom panel 82, angle brackets 80 or stile 78 can be varied to suit a particular roof application, such as varying pitches or varying dimensions of condenser units.

[0040] Compartment 68 includes similar features as found in compartments 10 for ground-mount applications, such as screens 14 which allow for air circulation, a top portion 22 (in this case depicted as a substantially flat structure) with an opening 24 for air circulation as shown. In additional embodiments, a top portion 22 can be utilized which is similar in shape and design to that described previously and associated with compartment 10 (see FIG. 1, for example) which utilizes similar pins or other attachment mechanisms to secure to rails/stiles 18.

[0041] FIG. 11 depicts a condenser compartment 86 which is intended for new construction applications. Here again, a duct 88 and condenser unit 90 is shown. In the depicted example, rails and stiles 18 provide support for the base of condenser unit 90, in effect, replacing the pre-existing support brace 76. In a typical new installation, compartment 86 would first be placed on a roof deck 74. A condenser unit 90 and air duct 88 would then be mounted to the interior of the compartment 86. Again, much of the same features are seen, including top portion 22 with opening 24 screens 14, rails and stiles 18, louvers 66 and panels 82. FIGS. 11 and 12 also illustrate a portion of a cooling mechanism 92 which will be further described following.

[0042] FIG. 12 depicts an optional additional cooling mechanism 92 which can be associated with compartments 10, 68, or 86 in a particular embodiment. Mechanism 92 provides misted water to lower ambient air temperature surrounding the compartment 10 and increase the operating efficiency of a condenser 72, 90. Mechanism 92 depicts an air handler unit 94 which drains condensate water through pipe 96 into a fresh water supply tank 98 holding a volume of water 100. As the air handler 94 operates, condensate moisture is formed on an interior coil as it is removed from surrounding air. The moisture is then drained into tank 98 and stored. The condensate moisture is cold, due to the source of the moisture, further lowering ambient air temperature and increasing the overall operating efficiency of a condenser unit 72, 90.

[0043] Tank 98 is fluidly connected through a pipe 102 or similar means to the outside compartment 92 as shown. A controller 104 serves to coordinate the activity of the air handler, condenser, and misting mechanism 92. The con-
controller can include a microprocessor which detects an interior temperature of ambient air surrounding the condenser unit 72. The controller can be programmed to activate the mechanism 104 when the temperature reaches and/or exceeds a predetermined threshold. Controller 104 can operate in conjunction with compressor pump 106 which may include a valve to allow pressurized water to enter pipe 114. Pump 106 can also include a relay which communicates to controller 104 that a switch 112 has turned the condenser unit 72 on. Controller 104 can then power on pump 106 to provide pressurized water to pipe 114. Controller 104 working in conjunction with pump/relay 106 and switch 112 can serve to turn mechanism 92 on or off depending on a variety of conditions. The conditions may simply be tied to temperature, as described, or other factors, such as time-of-day, can be utilized in the programming of controller 104 to suit a particular application.

Pipe 114 is attached to an exterior surface of compartment 10 as shown, and is mounted to the surface using “c-clamp” fittings 116 or similar. A series of spray nozzles 118 are disposed at regular intervals along the pipe 114 to provide outlets for the pressurized water 120 to be misted throughout the interior of compartment 92. Pipes 114 include elbow fittings 122 and end cap 124 as shown to terminate the system.

Ultimately, mechanism 92 serves to additionally reduce temperature, and thereby, strain on a condenser 72 which translates into greater operating efficiency and lower overall operating cost. Use of cooling mechanism 92 can increase efficiency in a condenser 72 beyond the use of a compartment 10 itself, particularly in harsh or extreme environments where temperatures routinely climb into the one hundred teens degrees Fahrenheit in the summer months.

Use of compartment 10, 68, 86 and/or mechanism 92 provide a simple, cost-effective solution to improving operating efficiency, providing longer operating life, and enhancing security of air conditioner condenser units. Again, subcomponents of compartments 10, 68, 86 and 04 mechanism can be manufactured using commonly known methods and materials in the art. Specialized materials, such as certain polymer or composite materials can be chosen for a particular resistance to heat, sunlight, or for absorption of vibration, for example.

While one or more embodiments of the present invention have been illustrated in detail, the skilled artisan will appreciate that modifications and adaptations to those embodiments may be made without departing from the scope of the present invention as set forth in the following claims.

What is claimed is:

1. An air conditioner condenser compartment, comprising:
a base;
a three-sided frame mounted to the base, each side of the frame incorporating a top, bottom, and side rail portion, wherein a receiving bracket is formed along a surface of the side rail portion;
a panel having top, bottom, and side rail portions, the side rail portion of the panel adapted to slide through the bracket formed along the three-sided frame, wherein a sunscreen fabric material is alternatively disposed over or integrated into the top, bottom, and side rail portions of the panel to render a screen structure; and
a top portion having two congruent side surfaces and a front surface, wherein the side surfaces and front surface extend from a top opening outward to conform to a surface of the three-side frame, and the top opening remains unobstructed to accommodate air movement.

2. The air conditioner condenser compartment of claim 1, further including a plurality of Louver openings formed in the front and side surfaces of the top portion to accommodate air movement through the plurality of openings.

3. The air conditioner condenser compartment of claim 1, wherein the fabric material is further comprised of polyester yarn fibers having a vinyl coating disposed thereon to provide shade and protection to the condenser.

4. The air conditioner condenser compartment of claim 3, wherein the fabric is removable attached to the top, bottom, and side rail portions using a pin mechanism.

5. The air conditioner condenser compartment of claim 1, wherein the fabric material is further comprised of woven wire mesh fibers to provide shade and protection to the condenser.

6. The air conditioner condenser compartment of claim 1, wherein the base is formed from a rubberized material to isolate vibration from the condenser.

7. The air conditioner condenser compartment of claim 1, wherein the three-sided frame and top portion are formed from a naturally-occurring or synthesized polymer material to resist corrosion.

8. The air conditioner condenser compartment of claim 1, further including:
piping disposed along an exterior surface of the compartment having a plurality of nozzle outlets, and
a pump connected to the piping to pressurize water from a water source and disburse a mist from the plurality of nozzle outlets.

9. An air conditioner condenser compartment, comprising:
a substantially flat, rubberized base;
a three-sided frame adapted to attach to the rubberized base, the frame having top, bottom, and side portions of unitary construction;
a panel having top, bottom, and side rail portions of unitary construction, the panel adapted to couple to the top, bottom, or side portions of the three-sided frame, wherein the panel incorporates a screen structure composed of polyester yarn fibers having a vinyl coating disposed thereon, the screen structure connected to each of the top, bottom, and side rail portions of the panel; and
a top portion adapted to mount to a top surface of the three-sided frame, the top portion having a front and two side surfaces extending outward to a first end which conforms to the top surface of the three-sided frame, wherein the top and side surfaces form a rectangular opening at a second end located opposite from the first end to allow for exposure of the condenser to outside air.

10. The air conditioner condenser compartment of claim 9, further including a plurality of Louver openings formed in the front and side surfaces of the top portion to accommodate air movement through the plurality of openings.

11. The air conditioner condenser compartment of claim 9, wherein the screen structure is removable attached to the top, bottom, and side rail portions using a pin mechanism.

12. The air conditioner condenser compartment of claim 9, wherein the three-sided frame and top portion are formed from a naturally-occurring or synthesized polymer material to resist corrosion.
13. The air conditioner condenser compartment of claim 9, further including:
piping disposed along an interior surface of the compart-
ment having a plurality of nozzle outlets, and
a pump connected to the piping to pressurize water from
a water source and disburse a mist from the plurality of
nozzle outlets.
14. An air conditioner condenser compartment, compris-
ing:
a four-sided frame having rail, upper stile, and lower stile
portions, wherein the lower stile portion is formed to
correspond to a pitch of a roof;
a panel having upper stile, lower stile, and side rail
portions, the panel adapted to couple to the rail or upper
or lower stile portions of the four-sided frame, wherein
the panel incorporates a screen structure composed of
woven fibers, the screen structure adapted to connect to
a rail, upper, or lower stile portion of the panel; and
a top portion adapted to mount to a top surface of the
four-sided frame, wherein a rectangular opening is
formed in the top portion to allow for exposure of the
condenser to outside air.
15. The air conditioner condenser compartment of claim
14, wherein the screen structure is further comprised of
polyester yarn fibers having a vinyl coating disposed thereon
to provide shade and protection to the condenser.
16. The air conditioner condenser compartment of claim
14, wherein the screen structure is further comprised of wire
mesh fibers to provide shade and protection to the condenser.
17. The air conditioner condenser compartment of claim
14, wherein the four-sided frame and top portion are formed
from a naturally-occurring or synthesized polymer material
to resist corrosion.
18. An air conditioner condenser compartment, compris-
ing:
a base;
a three-sided frame mounted to the base, the three-sided
frame incorporating screen panels removably attached
to the three-sided frame;
piping removably disposed along an interior surface of the
compartment, the piping having a plurality of nozzle
outlets for discharging a water mist; and
a high-pressure pump connected to the piping for gener-
ating the water mist.
19. The air conditioner condenser compartment of claim
18, wherein the screen panel is further comprised of poly-
ester yarn fibers having a vinyl coating disposed thereon to
provide shade and protection to the condenser.
20. The air conditioner condenser of claim 19, wherein the
three-sided frame and top portion are formed from a natu-
 rally or synthesized polymer material to resist corrosion.
21. A method of manufacturing an air conditioner con-
denser compartment, comprising:
providing a base;
providing a three-sided frame mounted to the base, each
side of the frame incorporating a top, bottom, and side
rail portion, wherein a receiving bracket is formed
along a surface of the side rail portion;
providing a panel having top, bottom and side rail por-
tions, the side rail portion of the panel adapted to slide
through the bracket formed along the three-sided
frame, wherein a fabric material is alternatively dis-
posed over or integrated into the top, bottom, and side
rail portions of the panel to render a screen structure;
and
providing a top portion having two congruent side sur-
faces and a front surface, wherein the side surfaces and
front surface extend from a top opening outward to
conform to a surface of the three-side frame, wherein
the top opening remains unobstructed to accommodate
air movement.
22. The method of manufacturing an air conditioner con-
denser compartment of claim 21, wherein the fabric
material is further comprised of polyester yarn fibers having
a vinyl coating disposed thereon to provide shade and
protection to the condenser.
23. The method of manufacturing an air conditioner con-
denser compartment of claim 21, wherein the fabric is
removably attached to the top, bottom, and side rail por-
tions using a pin mechanism.
24. The method of manufacturing an air conditioner con-
denser compartment of claim 1, wherein the fabric material is further comprised of wire mesh fibers to
provide shade and protection to the condenser.
25. The method of manufacturing an air conditioner con-
denser compartment of claim 1, wherein the base is
formed from a rubberized material to isolate vibration from
the condenser.
26. The method of manufacturing an air conditioner con-
denser compartment of claim 1, further including:
providing piping disposed along an interior surface of the
compartment having a plurality of nozzle outlets, and
providing a pump connected to the piping to pressurize
water from a water source and disburse a mist from the
plurality of nozzle outlets.

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