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(54) **BATHROOM CABINET AND METHOD OF INSTALLATION**

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(57) **ABSTRACT**

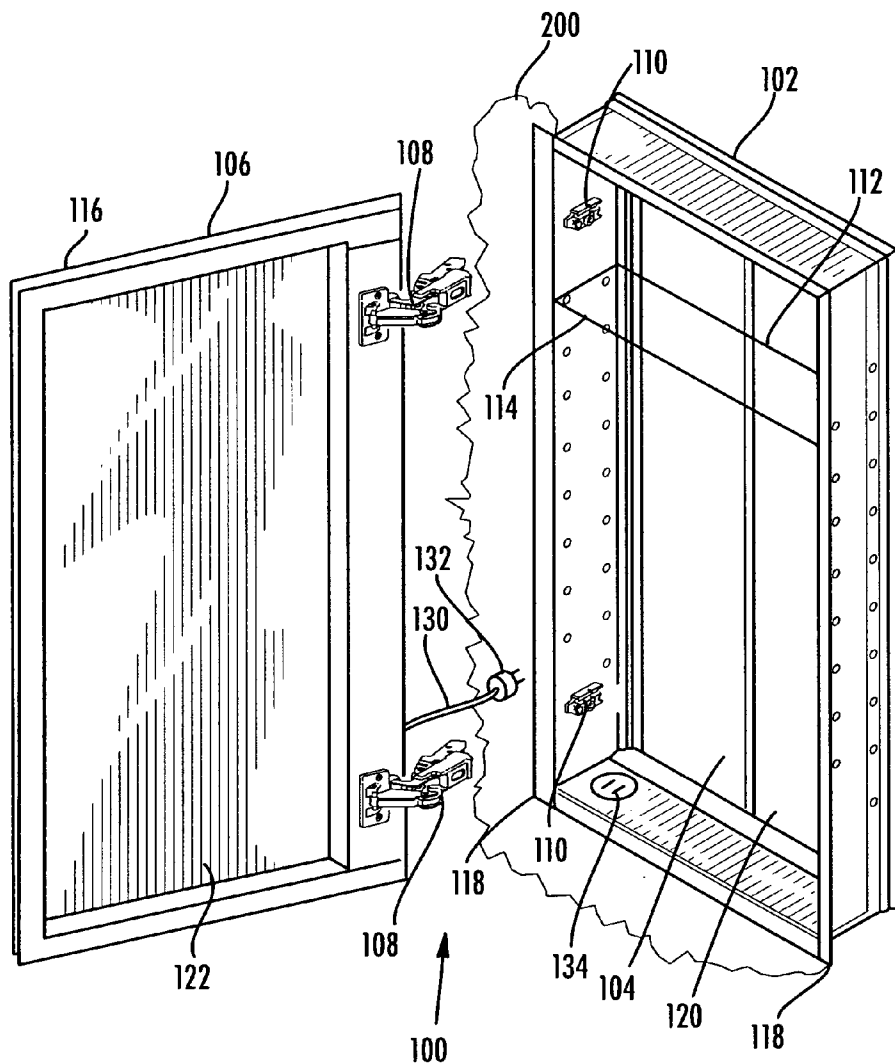
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Related U.S. Application Data

(63) Continuation-in-part of application No. 10/807,226, filed on Mar. 23, 2004, now abandoned.

A bathroom cabinet is packaged and designed for easy mounting on a wall. The mirrored wall mounted cabinet uses quick release door hinges, enabling easy rapid installation of the cabinet by an individual while protecting the mirrored door and hinge attachment components from damage. The cabinet door is then attached to the mounted cabinet body without using tools.



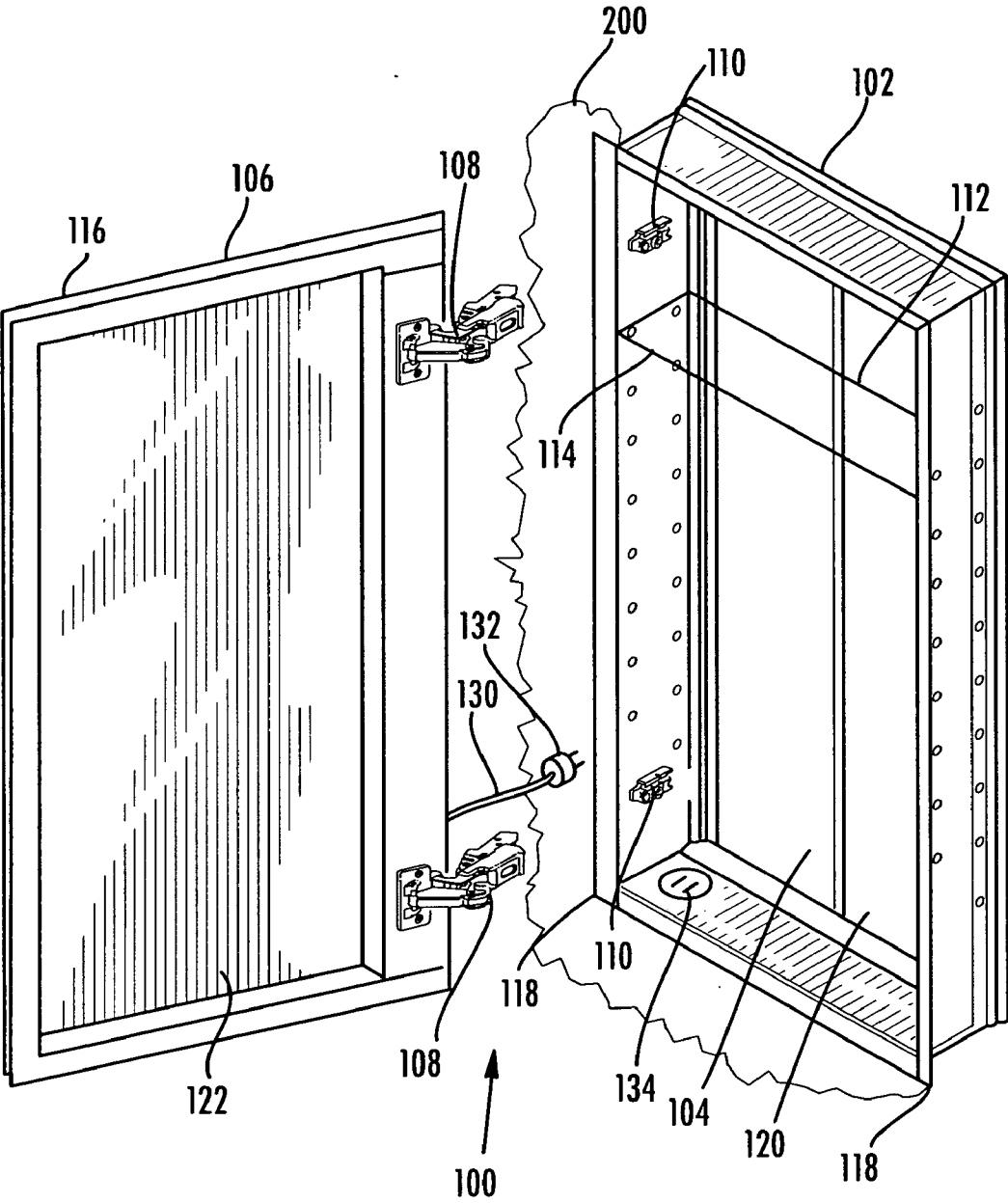


FIG. 1

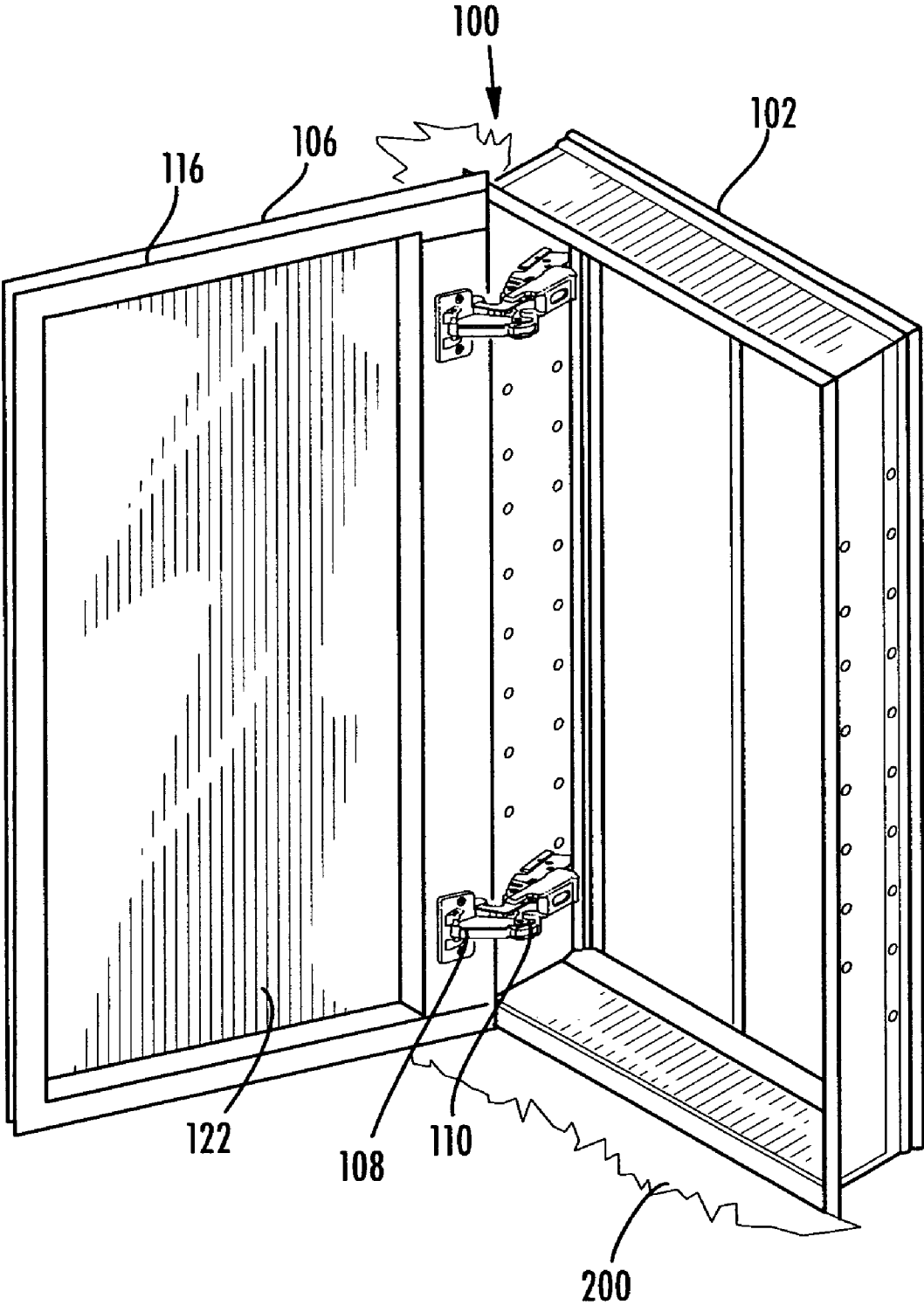


FIG. 2

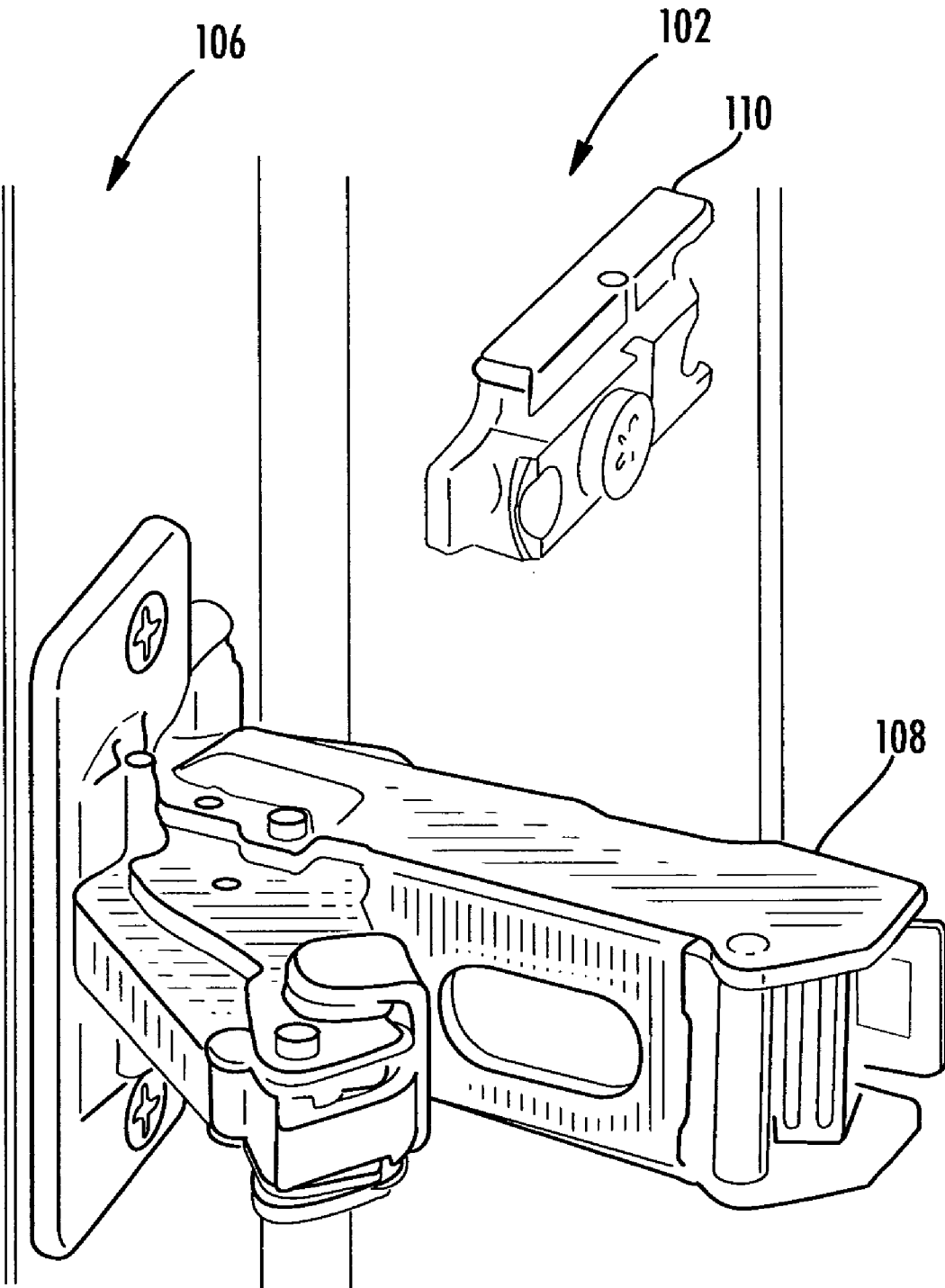


FIG. 3a

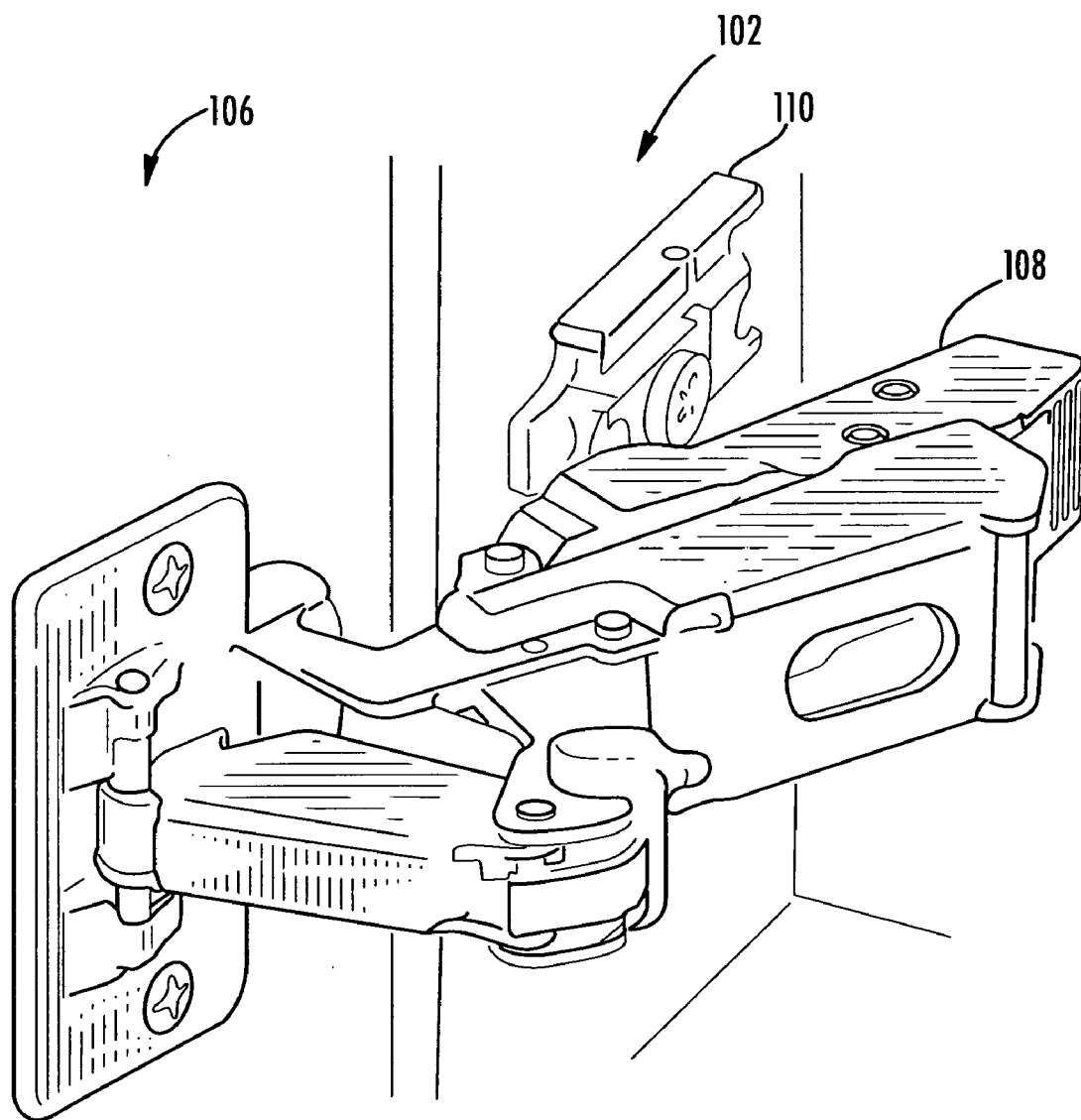


FIG. 3b

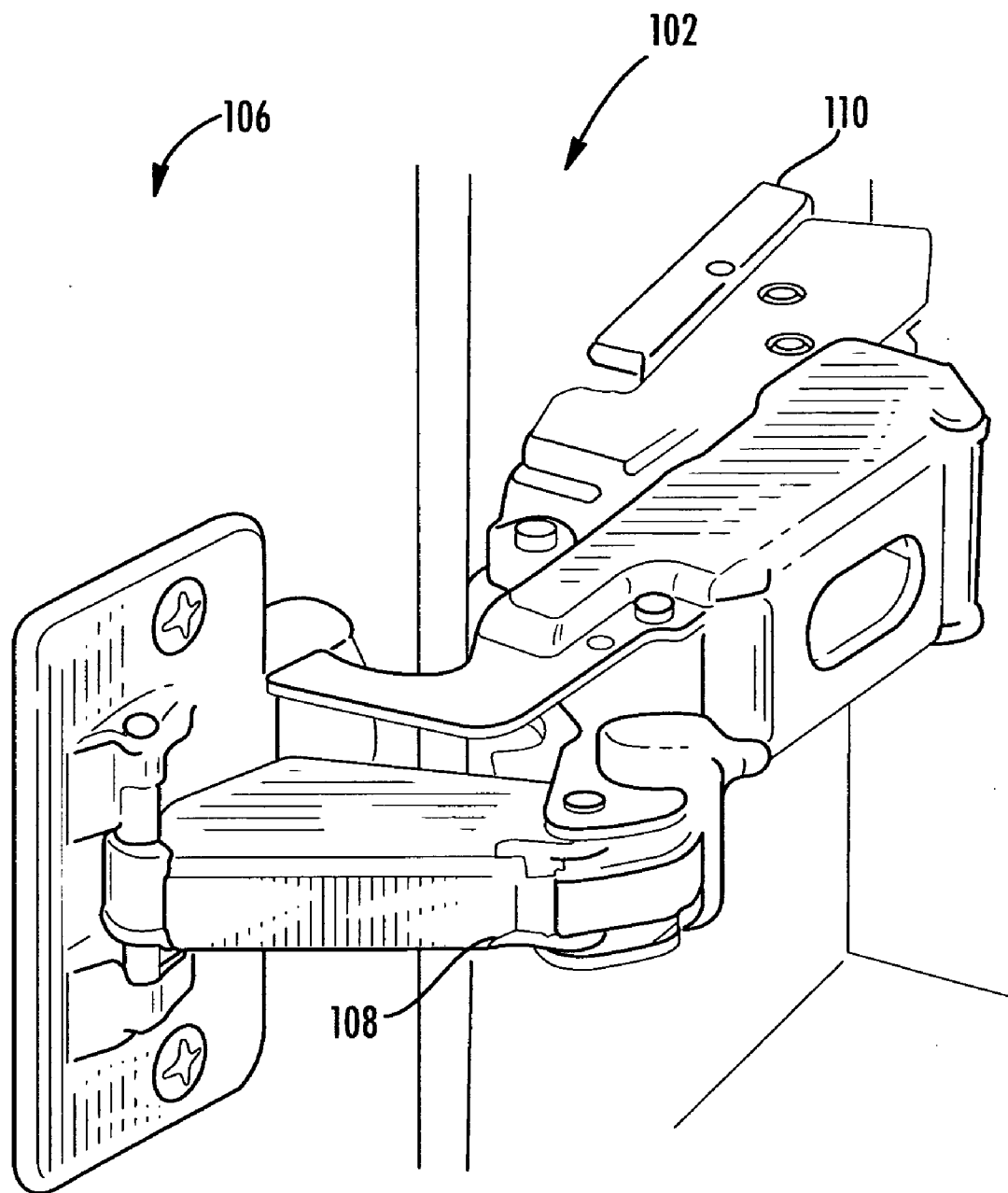


FIG. 3c

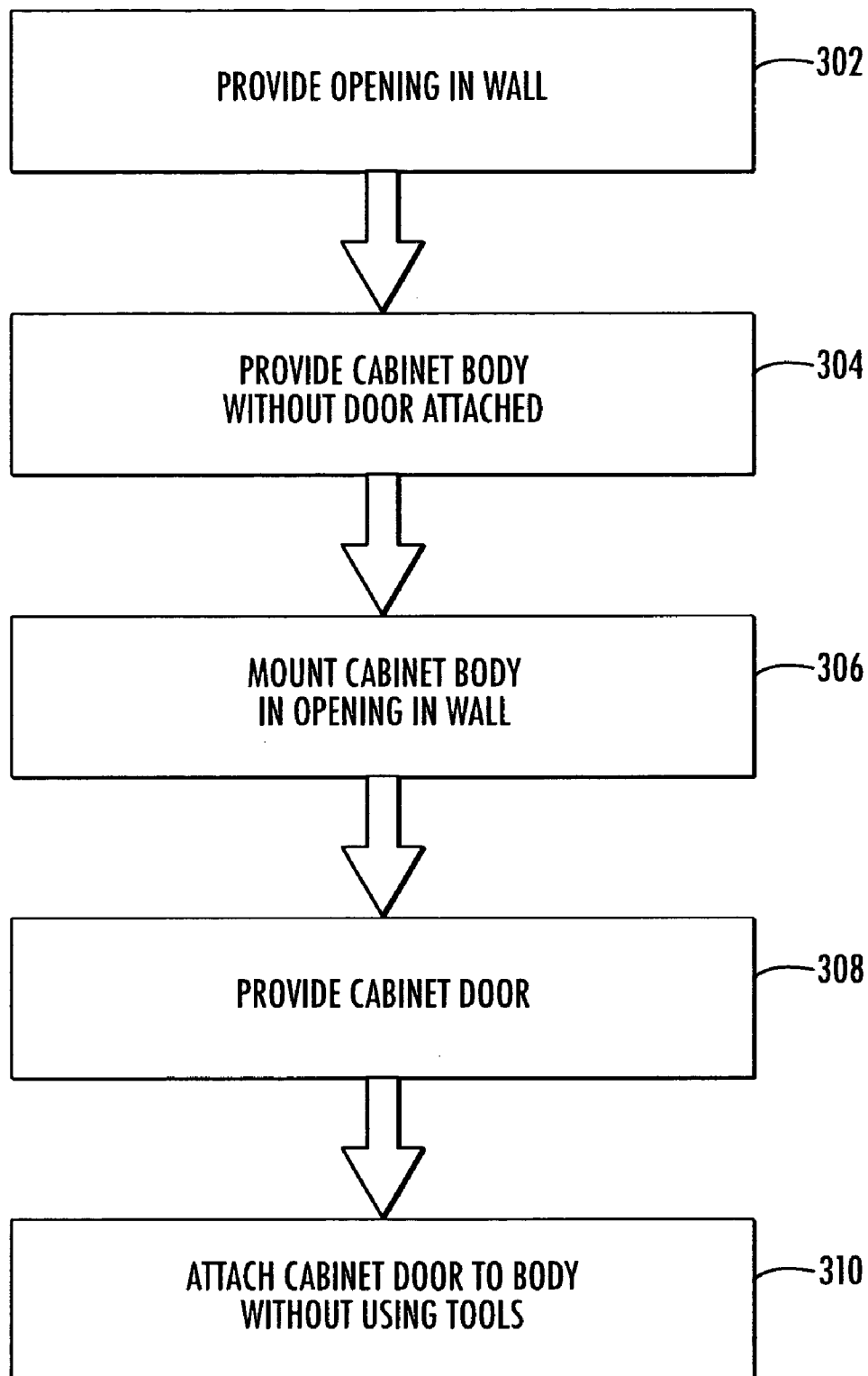


FIG. 4

BATHROOM CABINET AND METHOD OF INSTALLATION

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit under 35 U.S.C. 119(e) of United States Provisional Application Ser. No. 60/793,861, entitled Bathroom Cabinet And Method Of Installation, filed on Apr. 21, 2006. This application is a Continuation-in-Part of co-pending U.S. application Ser. No. 10/807,226 entitled Bathroom Cabinet And Method Of Manufacture, filed on Mar. 23, 2004.

FIELD OF INVENTION

[0002] The present invention relates to wall cabinets and more particularly to the installation of a wall mounted cabinet.

BACKGROUND OF THE INVENTION

[0003] The construction of a cabinet, and more to cabinets adapted for wall mounting, such as bathroom cabinets vary greatly in appearance, cost and features. Typically, all bathroom cabinets include a cabinet body, which defines an internal storage area, and a door coupled to the cabinet body by a hinge or series of hinges.

[0004] When a bathroom cabinet door is closed, typically a mirrored surface is presented to the viewer. The mirrored surface can be coupled to the hinge, framed, or mounted. The appearance, style and shape cabinet door is typically selected to suitably match and complement the decorum and style of the bathroom. When the cabinet door is open, the storage area is revealed along with the details of the cabinet body.

[0005] Human nature is such that even a visitor using the bathroom facilities will be curious to open the bathroom cabinet and look at the contents. Not only does the visitor get a look at what the owner stores in their bathroom cabinet, but they are also given a look under the decorative coverings to reveal the quality of the materials and construction. Unfinished corners, open seams, and other construction and installation details are clearly visible. Given the high costs of decorating and finishing a bathroom, incomplete, sloppy or crude construction details of one component can distort the impression the bathroom renders and taint the observer with a vision of cheap and shoddy workmanship and poor taste.

[0006] A mirrored bathroom cabinet is frequently installed as an assembled unit. This is awkward and difficult for one worker to do as the cabinet is out of balance during installation since the door must be opened for attachment of the cabinet within the wall opening. While the removal of the mirrored door before installing the cabinet and its reattachment after installation enables a balanced cabinet to be more easily handled, the mirrored door can easily be broken or damaged as well as the hinge attachment fasteners can be misaligned or even stripped.

[0007] Therefore, there is a need to provide a bathroom cabinet which presents a clean professional designed interior which does not reveal rough construction details, but is easy to install in such a way that the mirrored door is unlikely to be damaged or broken.

SUMMARY OF THE INVENTION

[0008] The present invention is a method for installing a wall mounted bathroom cabinet. A cabinet body for mounting on the wall, and a mirrored door are supplied separately. The cabinet body has an internal storage area for receiving items to be stored and a cabinet body lip. The cabinet body is securely mounted on the wall. After mounting the cabinet body the mirrored cabinet door is coupled to the cabinet body, without using tools, by at least two quick release hinges whereby the mirrored cabinet door is pivotally mounted to the mounted cabinet body.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] A more complete understanding of the present invention may be obtained from consideration of the following description in conjunction with the drawings in which:

[0010] FIG. 1 is a perspective view of the assembled cabinet wall mounted with the door detached;

[0011] FIG. 2 is a perspective view of the assembled cabinet wall mounted with the door pivotally mounted to the cabinet body;

[0012] FIG. 3a, 3b and 3c are a series of perspective views showing the tool-less sequence of attachment of the door to the cabinet; and,

[0013] FIG. 4 is a diagram of the steps of the present invention method.

DESCRIPTION OF VARIOUS ILLUSTRATIVE EMBODIMENTS

[0014] The present invention is a method for installing a bathroom cabinet which presents a clean professional designed interior and provides a barrier to the high level of humidity in the bathroom from the contents of the bathroom cabinet while being easy to install. Although the present invention bathroom cabinet is particularly well suited for use as a wall mounted cabinet and shall be so described herein, it is equally well suited for use with other types of mounting including partially recessed, framed, surface mounted as well as other mounting configurations that are known to those skilled in the art.

[0015] The present invention is a method for installing a wall mounted bathroom cabinet. A cabinet body for mounting on the wall, and a mirrored door are supplied separately. The cabinet body has an internal storage area for receiving items to be stored and a cabinet body lip. The cabinet body is securely mounted on the wall. After mounting the cabinet body the mirrored cabinet door is coupled to the cabinet body, without using tools, by at least two quick release hinges whereby the mirrored cabinet door is pivotally mounted to the mounted cabinet body.

[0016] A bathroom cabinet body for mounting on a wall has an internal storage area for receiving items to be stored and a cabinet body lip. The cabinet body comprising a top sidewall, a bottom sidewall, a hinge sidewall and a non-hinge sidewall, the top sidewall connected to the hinge sidewall by a first corner structural element, the top sidewall connected to the non-hinge sidewall by a second corner structural element; the bottom sidewall connected to the hinge sidewall by a third corner structural element, the

bottom sidewall connected to the non-hinge sidewall by a forth corner structural element. A cabinet door to be pivotally mounted to the cabinet body is supplied detached from the cabinet with quick release hinges attached. The cabinet door is separately packaged thus allowing for it to be safely secured on site or remotely during construction even after the cabinet body is installed. After the cabinet body is mounted to the wall the cabinet door is attached to the cabinet body with quick release hinges without the need for attachment tools.

[0017] Conventional bathroom typically have a pair of spaced apart vertically extending side walls interconnected with upper and lower spaced apart horizontal walls.

[0018] A mirrored bathroom cabinet is typically installed as an assembled unit. This is awkward and difficult for one worker to do as the cabinet is out of balance during installation since the door must be opened for attachment of the cabinet within the wall opening. This can be resolved by employing two skilled craftsmen to complete the installation. Alternately, the removal of the mirrored door before installing the cabinet and its reattachment after installation enables a balanced cabinet to be handled by a single craftsman. However, this is time consuming and slows the installation. In addition the mirrored door can easily be broken or damaged as well as the hinge attachment fasteners can be misaligned or even stripped.

[0019] The present invention method for installing a mirrored wall mounted cabinet with quick release door hinges overcomes these difficulties, enables easy rapid installation of the cabinet while protecting the mirrored door and hinge attachment components from damage.

[0020] Similar elements are numbered the same in FIGS. 1, 2, 3a, 3b and 3c. Referring to FIG. 1 there is shown a perspective view of the assembled cabinet wall mounted with the door detached. The assembled bathroom cabinet 100 comprises a cabinet body 102 having an internal storage area 104 and a cabinet door 106 which is pivotally attached to the cabinet body 102 by two or more hinges 108 to corresponding hinge mounts 110 such that the cabinet door 106 pivots with respect to the cabinet body 102 when the bathroom cabinet 100 is opened and closed. Hinges 108 are single hand quick release snap lock hinges. Details of the particular quick release hinge selection are dictated by design, style as well as structural elements of the bathroom cabinet 100.

[0021] The internal storage area 104 is adjustably divided with shelves 112 which are positioned by shelf pins 114. Both the position and number of the shelves 112 may be varied according to personal preferences. Mounted on the surface of the cabinet door 106 is a continuous cabinet seal 116. The cabinet seal 116 may be attached by an adhesive to the cabinet door 106 as well as other suitable means. The cabinet seal 116 is positioned such that it forms a gasket between the cabinet door 106 and the contact area 118 of the cabinet body 102 when the bathroom cabinet 100 is in the closed position. Although not air tight, a pliable bumper may be used in place of a continuous cabinet seal.

[0022] The cabinet seal 116 can be made of a generally pliable polymeric material, such as polyvinylchloride. However, it is understood by those skilled in the art, that other materials can be used to construct the gasket, such as neoprene, polyethylene or rubber (e.g., buna N) as well as other suitable materials.

[0023] The cabinet body 102 has an interior back mirror 120 and the cabinet door 106 has an interior surface mirror 122. The exterior of the cabinet door 106 has an exterior mirror (not shown).

[0024] After the cabinet body 102 is mounted securely to the wall 200 the cabinet door 106 is attached to the cabinet body with out the use of tools. Referring to FIG. 2 there is shown a perspective view of the assembled cabinet wall mounted with the door pivotally mounted to the cabinet body.

[0025] FIG. 3a, 3b and 3c are a series of perspective views showing the tool-less sequence of attachment of the door to the cabinet. Referring to FIG. 3a there is shown in a close up view, the attachment of the single hand quick release snap lock hinge 108 to the cabinet door 106 and the corresponding hinge mounts 110 which are attached to the cabinet body 102. To easily attached the cabinet door 106 without the use of tools, the hinge 108 is as shown in FIG. 3b which is then simply pressed (snapped) into hinge mounts 110 (as shown in FIG. 3c) such that the cabinet door 106 pivots with respect to the cabinet body 102 when the bathroom cabinet 100 is opened and closed.

[0026] When used in new construction or renovation of existing bathrooms, the bathroom cabinet 100 is package such that the cabinet body 102 can be opened and mounted in a suitably prepared wall location without any risk of the mirrored cabinet door 106 being damaged or broken, as the cabinet door 106 is still in its protective packaging, which may be remotely stored, or stored in the bathroom within the protective packaging. The cabinet body 102 is balanced, lighter than the complete assembly, and easily positioned into and held aligned in the suitably prepared wall location with one hand, thus enabling the mounting of the cabinet body 102 by fasteners (not shown) to the wall 200 to be completed rapidly by a single skilled craftsman.

[0027] The mirrored cabinet door 106 may be easily installed after the cabinet body 102 is mounted to the wall 200 without the use of tools. The mirrored cabinet door 106 may also be safely stored for later installation, thus reducing the risk of damage. Optionally the mirrored cabinet door 106 may include an internal electrical heating element (not shown) which is powered through power cord 130 and plug 132 which is plugged into an outlet 134 mounted in the cabinet body 102 and coupled to a suitable power source (not shown). This internal heating element enables the mirrored cabinet door 106 to avoid fogging up in a steam-filled bathroom.

[0028] Referring to FIG. 4 there is shown a flow diagram of the steps in the present method. In step 302 an opening is provided in the wall 200 of the bathroom. In step 304 the bathroom cabinet 100 is package such that the cabinet body 102 can be opened without any risk of the mirrored cabinet door 106 being damaged or broken, as the cabinet door 106 is still in its protective packaging. In step 306 the cabinet body 102 is balanced, lighter than the complete assembly, and easily positioned into and held aligned in the suitably prepared wall location with one hand, thus enabling the mounting of the cabinet body 102 by fasteners (not shown) to the wall 200 to be completed rapidly by a single skilled craftsman. In step 308 the cabinet door, which may have been remotely stored or stored in the bathroom within the protective packaging is unpacked. In step 310 the cabinet

door 106 is easily attached without the use of tools by a rapidly by a single craftsman or homeowner. The hinge 108 then simply pressed (snapped) into hinge mounts 110 such that the cabinet door 106 pivots with respect to the cabinet body 102 when the bathroom cabinet 100 is opened and closed.

[0029] Numerous modifications and alternative embodiments of the invention will be apparent to those skilled in the art in view of the foregoing description. The cabinet door can be hinged on the left side or inverted and hinged on the right side. Accordingly, this description is to be construed as illustrative only and is for the purpose of teaching those skilled in the art the best mode of carrying out the invention. Details of the structure may be varied substantially without departing from the spirit of the invention and the exclusive use of all modifications, which come within the scope of the appended claims, is reserved.

What is claimed:

1. A method for installing a wall mounted bathroom cabinet comprising the following steps:

supplying a cabinet body for mounting on the wall, the cabinet body having an internal storage area for receiving items to be stored and a cabinet body lip;

fastening the cabinet body securely to the wall;

supplying a mirrored cabinet door separately;

coupling without tools the mirrored cabinet door to the cabinet body by at least two quick release hinges wherein the mirrored cabinet door is pivotally mounted to the mounted cabinet body.

2. The method for installing a wall mounted bathroom cabinet as recited in claim 1 wherein the step of supplying a mirrored cabinet door separately further comprising supplying the mirrored cabinet door package such that the cabinet body can be accessed while the mirrored cabinet door is still in protective packaging.

3. The method for installing a wall mounted bathroom cabinet as recited in claim 1 wherein the step of coupling without tools wherein the mirrored cabinet door is pivotally mounted to the cabinet body on the right side.

4. The method for installing a wall mounted bathroom cabinet as recited in claim 1 wherein the step of coupling without tools wherein the mirrored cabinet door is pivotally mounted to the cabinet body on the left side.

5. The method for installing a wall mounted bathroom cabinet as recited in claim 1 wherein the step of coupling without tools wherein the mirrored cabinet door is pivotally mounted to the cabinet body selectively on the right side or the left side.

6. The method for installing a wall mounted bathroom cabinet as recited in claim 1 further comprising the step of removably coupling an electrical heating element within the mirrored cabinet door to a power source provided within the cabinet body.

7. The method for installing a wall mounted bathroom cabinet as recited in claim 1 wherein the mirrored cabinet door further comprises a cabinet bumper of generally pliable material.

8. The method for installing a wall mounted bathroom cabinet as recited in claim 7 wherein the generally pliable material is polymeric.

9. The method for installing a wall mounted bathroom cabinet as recited in claim 7 wherein the generally pliable material is at least partially hollow.

10. The method for installing a wall mounted bathroom cabinet as recited in claim 7 wherein the cabinet seal is coupled to the mirrored cabinet door by adhesive.

11. A method for installing a wall mounted mirrored bathroom cabinet comprising the following steps:

supplying a packaged cabinet body for mounting on the wall, the cabinet body having an internal storage area for receiving items to be stored and a cabinet body lip;

unpacking the cabinet body;

fastening the cabinet body securely to the wall;

supplying a packaged mirrored cabinet door separately;

unpacking the mirrored cabinet door;

coupling without tools the mirrored cabinet door to the cabinet body by at least two quick release hinges wherein the mirrored cabinet door is pivotally mounted to the mounted cabinet body.

12. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 11 wherein the step of coupling without tools wherein the mirrored cabinet door is pivotally mounted to the cabinet body on the right side.

13. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 11 wherein the step of coupling without tools wherein the mirrored cabinet door is pivotally mounted to the cabinet body on the left side.

14. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 11 wherein the step of coupling without tools wherein the mirrored cabinet door is pivotally mounted to the cabinet body selectively on the right side or the left side.

15. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 11 wherein the step of coupling without tools uses single hand quick release snap lock hinges.

16. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 11 further comprising the step of removably coupling an electrical heating element within the mirrored cabinet door to a power source provided within the cabinet body.

17. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 11 wherein the mirrored cabinet door further comprises a cabinet bumper of generally pliable material.

18. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 17 wherein the generally pliable material is polymeric.

19. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 17 wherein the generally pliable material is at least partially hollow.

20. The method for installing a wall mounted mirrored bathroom cabinet as recited in claim 17 wherein the cabinet seal is coupled to the mirrored cabinet door by adhesive.

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