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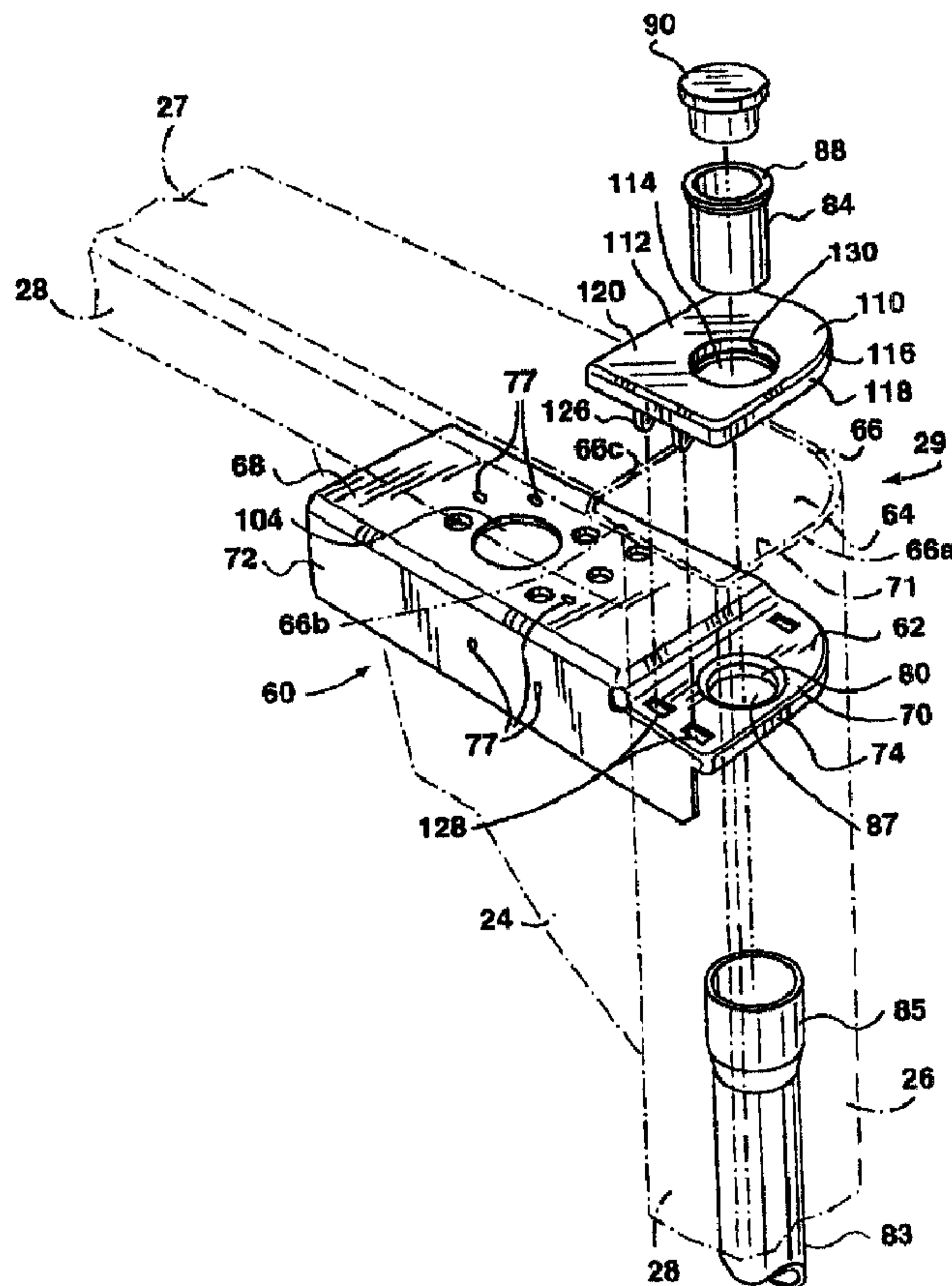
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(54) Titre : EPAULETTE POUR PORTE DE REFRIGERATEUR

(54) Title: REFRIGERATOR DOOR EPAULET



(57) Abrégé/Abstract:

A refrigerator door has an outer door panel having an outer skin with rearwardly extending peripheral vertical and horizontal side walls. Four corners are located between adjacent horizontal and vertical side walls. An inner door liner is secured to the outer

(57) Abrégé(suite)/Abstract(continued):

door panel to define a cavity between the inner liner and the sheet. Cut-out sections are formed in the horizontal side walls adjacent the corners to define exposed edges extending along the vertical side wall, the horizontal side wall and outer skin of the door. A reinforcing corner bracket is positioned within the cavity adjacent each cut-out section assuming normal loading forces associated with the door. Epaulet covers extend over the cut-out sections and the exposed edges. The epaulet covers each have a flange depending therefrom and adapted to overlay an outside surface portion of the outer door skin and the vertical side wall. The epaulet covers have a plurality of ribs extending therefrom adjacent the flange for engaging the inside of the outer door skin and the vertical side wall. The epaulet cover has fasteners comprising an extension and hook shaped end that pass through slotted apertures in the corner bracket permitting the hook shaped surface to engage a rear side of the corner bracket. The slotted apertures are sized larger than the fasteners to permit lateral movement of each epaulet cover relative to its corresponding corner bracket as the epaulet cover is secured over the at least one exposed edge.

REFRIGERATOR DOOR EPAULET ABSTRACT OF THE DISCLOSURE

A refrigerator door has an outer door panel having an outer skin with rearwardly extending peripheral vertical and horizontal side walls. Four corners are located between adjacent horizontal and vertical side walls. An inner door liner is secured to the outer door panel to define a cavity between the inner liner and the sheet. Cut-out sections are formed in the horizontal side walls adjacent the corners to define exposed edges extending along the vertical side wall, the horizontal side wall and outer skin of the door. A reinforcing corner bracket is positioned within the cavity adjacent each cut-out section assuming normal loading forces associated with the door. Epaulet covers extend over the cut-out sections and the exposed edges. The epaulet covers each have a flange depending therefrom and adapted to overlay an outside surface portion of the outer door skin and the vertical side wall. The epaulet covers have a plurality of ribs extending therefrom adjacent the flange for engaging the inside of the outer door skin and the vertical side wall. The epaulet cover has fasteners comprising an extension and hook shaped end that pass through slotted apertures in the corner bracket permitting the hook shaped surface to engage a rear side of the corner bracket. The slotted apertures are sized larger than the fasteners to permit lateral movement of each epaulet cover relative to its corresponding corner bracket as the epaulet cover is secured over the at least one exposed edge.

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REFRIGERATOR DOOR EPAULET

Technical Field of the Invention

The present invention relates to a door for a refrigerator that has door corner epaulet covers.

Background of the Invention

5 For several years the trend in domestic refrigerator cabinets has been to increase the size and in particular the width of the food compartments and doors in top or bottom mount refrigerators.

Typically, the refrigerator door is constructed from an outer door panel of sheet steel material having rearwardly extending side walls. The door has an inner liner wall of plastic material attached to the door panel.
10 Foam insulation is injected in the space between the outer panel and the inner liner. The foam expands and cures to thermally insulate and rigidize the door.

In order to conserve costs, the amount of steel used in the manufacture of these doors is optimized. The practice is to use a relatively thin sheet of steel for the outer panel. Often this sheet is in the order of 0.017 inches thick. Consequently, in order for the refrigerator door to maintain it's integrity and support articles or items stored on door mounted shelves, the most common approach to reinforce the door has
15

been to use cross braces located within the door cavity between the inner liner and the outer door panel. The metal cross braces extend from the corners of the refrigerator outer panel in an X configuration to reinforce the refrigerator door.

5 To further strengthen the door outer skin, the corners of the door formed when the skin is rolled back onto itself to provide a supporting peripheral flange for the door liner, have been welded. However, this welded corner results in the corner hinge bearing the door load and transferring loading stresses across the outer door skin. Further, the
10 welding of the door outer skin at the corners does not permit the use of a pre-painted door outer skin for door manufacture since the skin paint at the corners is effected by the weld. Also, the welding of the corners fixes the corner shape so that minor changes in door construction must be accounted for during door manufacture. Clearly, there is a need for a
15 refrigerator door corner construction that eliminates the problems associated with welding the outer skin door corners, reduces the load transfer from the door onto the relatively thin steel outer skin wall of the refrigerator door and does not have an unpleasant finish.

SUMMARY OF THE INVENTION

20 It is an object of the present invention to provide a refrigerator door that transfers reduced door corner stresses onto the outer skin of the door without having a detrimental effect on the appearance of the refrigerator door.

It is another object of the present invention to provide a
25 refrigerator door that has corners that do not require welding to complete the door corner.

The present invention relates to a door for a refrigerator appliance comprising an outer door panel having an outer skin sheet with rearwardly extending peripheral vertical and horizontal side walls. The side walls form corners at a location adjacent and between the horizontal and vertical side walls. The horizontal side walls each have an open section that may be formed by the manner in which the vertical side wall of the door is formed or, preferably as a cut-out section located adjacent where the door is normally mounted through hinge pins to the refrigerator appliance. A corner supporting bracket is located within the door for receiving the door hinge pins. By having an open section or a removed cut-out section in the horizontal side wall of the door skin, there is a reduction of door loading stresses transferred from the corner of the door to the outer door skin. The removed edge section creates a sharp exposed edge in the side walls adjacent the corner. The exposed edge extends along any one of, and preferably all of, the outer door skin, the vertical side wall, and the horizontal wall. Of course, depending on the construction of the refrigerator door, in-turned flanges formed from further extensions of the vertical and horizontal side walls may also provide an exposed edge extending along the cut-out or open section. Further, it is envisaged that the cut-out or open section may not extend completely across the depth of the horizontal wall, or may be spaced from the vertical wall by a remaining portion of the horizontal side wall. In the present invention, a door epaulet covers the removed cut-out or open section and the exposed edges of the side walls. The epaulet cover does not assume any of the loading forces carried by the reinforcing corner bracket and, consequently, does not distribute such loading forces onto the outer door skin of the refrigerator door.

In accordance with one aspect of the present invention there a door for a refrigerator appliance comprising an outer door panel having an outer skin sheet with rearwardly extending peripheral vertical and horizontal side walls. The door panel has a plurality of corners located between adjacent horizontal and vertical side walls. The door has an inner door liner secured to the outer door panel spaced from the outer door skin sheet to define a cavity between the inner liner and the sheet. At least one cut-out or open section is removed from one of the horizontal side walls adjacent one of the corners to define at least one exposed edge extending along at least one of the vertical side wall, horizontal side wall and outer skin sheet of the door. A reinforcing corner bracket is positioned within the cavity adjacent the at least one cut-out or open section of the one horizontal side wall. The reinforcing corner bracket extends along and is secured to at least one of the one horizontal side wall and the adjacent vertical side wall. The door includes an epaulet cover extending over a portion of the one horizontal side wall, the one cut-out or open section and the at least one exposed edge. The epaulet cover has at least one first fastener for securing the epaulet cover tightly over the at least one exposed edge.

The reinforcing corner bracket preferably has a horizontal plate extending in abutting relation to the horizontal side wall, a load bearing portion recessed in spaced relation from the horizontal side wall and extending across the at least one cut-out or open section of the one horizontal side wall to engage the vertical side wall inwardly of the at least one exposed edge. The bracket has a first central opening in the recessed load bearing portion. The epaulet cover preferably has a second central opening aligned with, and of larger diameter than, the first central

opening. The door further includes a thimble member having an elongate shaft inserted through the first central opening of each reinforcing corner bracket. The thimble member has a stepped flange head resting on the load bearing portion of the corner bracket for supporting a hinge pin on the stepped flange head within the second
5 central opening of the epaulet cover.

The epaulet cover preferably has a flange depending therefrom and adapted to overlay an outside surface portion of at least one of the outer door skin and the vertical side wall. The first fastener preferably
10 comprises a plurality of ribs extending from the epaulet cover adjacent the flange for engaging inside surface portions of at least one of the outer door skin and the vertical side wall.

The epaulet cover preferably includes at least one second fastener extending from the epaulet cover towards the reinforcing corner bracket for engagement thereto. The second fastener comprises an extension
15 having a hook shaped end. The reinforcing corner bracket includes a corresponding slotted aperture through which the extension of the second fastener passes permitting the hook shaped surface to engage a rear side or underside of the reinforcing corner bracket. The slotted aperture in the
20 bracket is sized larger than the extension of the second fastener to permit lateral movement of the epaulet cover relative to the reinforcing corner bracket as the epaulet cover is secured over the at least one exposed edge.

BRIEF DESCRIPTION OF THE DRAWINGS

25 For a better understanding of the nature and objects of the present invention reference may be had to the following detailed description

when taken in conjunction with the accompanying diagrammatic drawings wherein:

Figure 1 is a perspective view of a top mount refrigerator appliance having top and bottom doors constructed in accordance with the present invention;

Figure 2 is a sectional view taken at lines 2-2 of Figure 1 showing the construction for a refrigerator door;

Figure 3 is a perspective partially exploded view showing the outer door skin from an inside view with the corner reinforcing brackets assembled and the reinforcing tubes about to be assembled;

Figure 4 is a perspective view of the lower left hand bracket shown in Figure 3 relative to the side wall of the outer door skin;

Figure 5 is an exploded view of the door corner construction and epaulet;

Figure 6 is a front view looking up at the epaulet shown in Figure 5;

Figure 6A is a side elevational view of the epaulet of Figure 6; and

Figures 7 and 7a are sectional views showing the assembly of the corner reinforcement bracket and the epaulet for the refrigerator respectively at corners having a hinge pin and mounting cap.

DETAILED DESCRIPTION OF EMBODIMENTS

Referring to Figure 1 there is shown a refrigerator 10 comprising a cabinet 12, a top door 14 and a lower door 16. Each of doors 14 and 16 are shown in a closed position and in the preferred embodiment have a width of 30 inches or larger. The top door 14 is typically adapted to close the freezer food compartment 18 and the lower door 16 typically closes the fresh food compartment 20. Of course it is understood that the

position of the freezer compartment 18 relative to the fresh food compartment 20 could be reversed as in a bottom mount refrigerator, or alternatively, the invention has application in side-by-side refrigerator doors. However, in accordance with the present invention, the preferred refrigerator construction is that shown having doors 14 and 16 respectively closing the upper and lower food compartments 18 and 20.

In Figures 1 to 3 the construction of door 16 is shown. Door 16 has an outer metal panel 22. Door panel 22 has a sheet or an outer skin 24 with upstanding or rearwardly extending curved vertical side walls 26 and flat horizontal side walls 27. The vertical side walls 26 and horizontal side walls 27 extend towards each other and would normally meet at corners 29. However, a cut-out or open section 64 is cut out from the horizontal side wall 27 at the corner 29 so that the horizontal side wall does not meet or join the vertical side wall 26. The vertical and horizontal side walls 26, 27 each further include in-turned flanges 28 that preferably extend parallel to the sheet 24 and overlap at the corners 29.

Mounted on top of the in-turned flanges 28 of the door panel 22 is an inner door liner 30 of preferably plastic material. Liner 30 is spaced from the generally flat sheet 24 of the outer door panel 22 to define a cavity 32. The liner 30 has dyke side walls 36 and an interior vertical wall 38. Shelf supports 41 are integrally molded to walls 36 and 38. The shelf supports 41 carry shelves 43 which in turn carry articles (not shown). The liner 30 includes a peripheral edge or flange 44 secured by suitable screw fasteners (not shown) to the in-turned flanges 28 of the outer door panel 22. Mounted over the liner flange 44 and door panel flange 28 is a gasket 47 which seals the door in an airtight fashion with

the refrigerator appliance 10. Foamed insulation 48 fills the cavity or space 32 defined between the liner 30 and the outer panel 22.

The refrigerator door 16 as shown in Figures 3 through 7 has two unique features. The first unique feature resides in the use of brackets 60, positioned at opposing corners 29, and the reinforcing tube 83 that extends between the brackets 60 supporting the brackets 60 in the door cavity 32. This feature improves the rigidity of the door 16 by providing localized corner reinforcement adjacent the vertical side walls 26 of the refrigerator door 16. By using the bracket 60 and tube 83 in combination with the cut-out section 64 of the horizontal side wall 27, the stresses associated with loading hinge pins 92 of the refrigerator door 16 are distributed through the bracket 60 and are not distributed directly to the outer skin 22. Such direct distribution of force could otherwise cause large heavy doors 16 to warp over extended periods of use. The second unique feature relates to use of an epaulet cover 110 that covers exposed edges of the door corner 29. The epaulet cover 110 covers the exposed edges and effectively joins the side walls of the door corner 29 eliminating the need for welding these side walls to each other at the corner 29. The epaulet cover 110 also compensates for and hides manufacturing imperfections at the door corners 29. The epaulet further improves the visual appearance of the door corners by smoothing the corners and eliminating the visual gap between the epaulet wall and door side walls.

Referring to Figures 3 to 5, 7 and 7a, the reinforcing corner brackets 60 are shown positioned within the cavity 32 adjacent to the corners 29. Each bracket 60 comprises a plate 62 that extends across a removed or cut-out section 64 from the horizontal wall 27 at the corner

29 adjacent the vertical side wall 26. The width of the bracket 60 is chosen to be substantially the width of the door 16 adjacent the horizontal wall 27 so that the bracket snugly fits into the door corners 29.

5 The cut-out section 64 of the horizontal side wall 27 leaves exposed peripheral edges 66, 66a, 66b, 66c respectively extending along the outer door skin 24, the curved vertical side wall 26, the in-turned flanges 28, and along the horizontal side wall 27. The exposes edge 66, 66a, 66b, 66c and the removed section 64 can best be seen in Figure 5.

10 The bracket plate 62 has a first portion 68 which extends in abutting relation adjacent the horizontal side wall 27. The corner bracket further includes a load bearing surface portion 70 that is recessed in spaced relation from the horizontal wall 27. The load-bearing portion 70 extends across the removed horizontal wall section 64 to engage in abutting relation the inside surface 71 of the vertical side wall 26.

15 The bracket plate 60 includes opposite side flanges 72 and an end flange 74 which depend from the bracket plate 60 towards the interior cavity 133 of the door. The opposite side flanges 72 respectively abut inside surfaces of the outer door skin 24 and the in-turned flange portions 28 associated with the horizontal side walls 27. The opposite side
20 flanges 72 and the first portion 68 are crimped at 77 by a crimping tool to engage the horizontal side wall 27 and the in-turned flange 28 in a tag and lock fastening arrangement.

25 The load bearing portion 70 of the bracket member 60 further includes a dependent ring or rim 80. The reinforcing tube 83, preferably metal, has opposed flared ends 85 placed around and engaging rim 80 of the load bearing bracket portion 70 of the bracket member 60. The rim 80 defines a first central opening 87 into which a plastic thimble 84 is

inserted in interference fit into the flared ends 85 of the metal tube 83. The thimble 84 has a shaft 86 in interference fit with the metal tube 83. The thimble 84 includes an out-turned head portion 88 which rests on the recessed load bearing surface portion 70 of the bracket member 60.

5 Mounted within the hollow thimble 84 is either an end cap 90 (Figure 7A) or a hinge pin 92 (Figure 7). Hinge pin 92 is shown to have a central portion 97 which is of a greater diameter than the diametrically opposed hinge pins 98. The diametrically opposed hinge pins 98 may be hollow to allow for the insertion or passage of conduit or wire along the
10 metal tube between doors. The hinge pin central has threads 94 threadably mounted to a hinge bracket 95 mounted to the refrigerator cabinet. The hinge pin 92 is a central hinge pin for supporting doors 14 and 16. Alternatively, hinge pin 92 could be a lower hinge pin or an upper hinge pin depending on its location.

15 The door tube 83 is typically foamed in place within the door to rigidly locate the opposing corner brackets 60 between the ends of the rigid tube 83. The door corner reinforcing bracket 60 and metal tube 83 co-operate to reinforce the door corners 29 along the vertical side walls 26 of the refrigerator door 16 and to bear the load associated with the
20 loading of the door 16 onto the hinge pin 92. The bracket reduces the load transferred from the hinge pin 92 directly onto the horizontal side wall 27 and the outer door skin 24. Consequently, the stresses and strains associated with door loading are not directly transferred from the area of the hinge pin 92 onto the outer skin 24 of the door 16. The
25 reduction in the transference of these stresses and the additional reinforcement provided by the metal bracket member 60 and the reinforcing metal tube 83 further rigidizes the door.

In order to assist in venting of gases from the door during the foaming of insulation into the door 16, the horizontal portion 68 of the bracket member 60 extending adjacent the horizontal side wall 27 has a recess or opening 104. Opening 104 is located adjacent a corresponding opening in the horizontal side wall 27. Recess opening 104 is covered with a vent tape 106 which allows gases to escape through the wall 27 and yet prevents the escape of foam. The opening 104 is closed by cap 108 which is shown in Figures 7 and 7A secured by interference fit through the horizontal side wall 27 and the horizontal extending bracket portion 68.

Referring to Figures 5 through 7A, the epaulet 110 used to cover the cut-out section 64 to complete the door 16 construction is shown. The epaulet 110 has a relatively flat and smooth outer surface 112 having a circular central recess 114 through which the thimble 84 passes. The epaulet 110 has a beveled corner 116 from which depends downwardly or rearwardly a peripheral flange 118.

As shown in Figure 5, the epaulet 110 is positioned over the cut-out section 64 such that a flange 118 overlaps outside surface portions of the side wall 26, outer skin 24, and the in-turned flange at 28 of the door. The epaulet cover 110 further has a portion 112 that is adapted to overlay a portion of the horizontal side wall 27.

As best seen in Figure 6, 7 and 7A, a bottom surface 122 of the epaulet cover 110 has a series of first fasteners or ribs 124. The ribs 124 are spaced a distance from the flange 118 that is equal to or slightly less than the thickness of the metal used in the outer door panel 22. The ribs 124 are adapted to engage inside surface 71 of the vertical sidewall 26 and an inside portion of the other door skin 24.

Thus, as the epaulet cover 110 is inserted onto the horizontal side wall 27 over the cut-out section 64, the ribs 124 co-operate with the depending flange 118 to tightly secure the epaulet cover 110 over the exposed edges 66, 66a, and 66b. The epaulet cover also overlays a portion of the horizontal side wall 27 covering the exposed edge 66c.

As of the epaulet cover 110, is moved into the position covering the cut-out section 66, second fasteners or extensions 124 depending from the underside of the epaulet cover 110 pass through slotted apertures 128 located in the recessed load bearing surface portion 70 of the bracket 60. The extensions 124 of the epaulet cover 110 have hooks 126 that engage the under surface of the bracket 60 preventing of the epaulet cover 110 from being pulled away from the bracket 60. The slotted apertures 128 have a width of that is larger than the width of the extensions 124 so that relative lateral movement of the epaulet cover 110 with respect to the bracket 60 may occur in the longitudinal direction of the horizontal side wall 27.

As best shown in Figures 6, 7 and 7A, epaulet cover 110 has a depending circular rim 130 that rests on the recessed load bearing surface 70 of bracket 60. The opening 114 within the rim 130 is aligned with the opening 87 of the bracket 60 and the opening 114 is slightly larger in diameter than the opening 87 of the bracket 60. As a result the rim 130 defines an opening 87 that is adapted to receive hinge pin 92 in a manner that the hinge pin 92 does not translate any loading door forces onto the epaulet cover 110. Hinge pin 92 loads the thimble 84 by resting on the head 88 of the thimble 84 which in turn rests on the recessed load bearing surface 70. The head 88 of thimble 84 is spaced from the rim 130 and does not touch the rim 130. Hence loading of the thimble 84 is

not translated onto the epaulet cover 110. The thimble 84 through its interference engagement with a the tube 83 supports the hinge pin 92 relative to the tube 83 with minimal loading of the bracket 60 and with substantially no loading of the epaulet cover 110. This reduces stresses
5 or loads associated with supporting the door 16 to the refrigerator through the hinge pin 90 from being distributed over the other door skin 24 of the door panel 22.

In Figure 7a, a cap 90 replaces pin 92. This permits the opposed vertical sides of the door 16 to be structurally symmetrical with one side
10 of the door pivotally mounted to the cabinet and the other side of the door capped.

As is apparent from the foregoing disclosure, various other embodiments and alterations and modifications which may differ from the embodiments disclosed may be readily apparent to one skilled in the
15 art. It should be understood that the scope of the patent shall be defined by the claims and those embodiments which come within the scope of the claims that follow.

What is claimed is:

1. A door for a refrigerator appliance comprising:

an outer door panel having an outer skin sheet with rearwardly extending peripheral vertical and horizontal side walls, and a plurality of corners located between adjacent horizontal and vertical side walls;

an inner door liner secured to the outer door panel spaced from the sheet to define a cavity between the inner liner and the outer door skin sheet;

at least one open section in one of the horizontal side walls adjacent one of the corners to define at least one exposed edge extending along at least one of the vertical side wall, horizontal side wall and outer skin sheet of the door;

a reinforcing corner bracket positioned within the cavity adjacent the at least one open section of the one horizontal side wall, the reinforcing corner bracket extending along and secured to at least one of the one horizontal side wall and the adjacent vertical side wall; and

an epaulet cover extending over a portion of the one horizontal side wall, the one open section and the at least one exposed edge, the epaulet cover including at least one first fastener securing the epaulet cover tightly over the at least one exposed edge.

2. The door for a refrigerator appliance of claim 1 wherein the epaulet cover includes a flange depending therefrom and adapted to overlay an outside surface portion of at least one of the outer door skin and the vertical side wall, and wherein the first fastener comprises a plurality of ribs extending from the epaulet cover adjacent the flange for engaging at least an inside surface portion of at least one of the outer door skin and the vertical side wall.

3. The door for a refrigerator appliance of claim 2 wherein the epaulet cover includes at least one second fastener extending from the epaulet cover towards the reinforcing corner bracket for engagement thereto.

5 4. The door for a refrigerator appliance of claim 3 wherein the second fastener comprises an extension having a hook shaped end, and the reinforcing corner bracket includes a corresponding slotted aperture through which the extension of the second fastener passes permitting the hook shaped surface to engage a rear side of the reinforcing corner bracket.

10 5. The door for a refrigerator appliance of claim 4 wherein the slotted aperture in the bracket is sized larger than the extension of the second fastener to permit lateral movement of the epaulet cover relative to the reinforcing corner bracket as the epaulet cover is secured over the at least one exposed edge.

15 6. The door for a refrigerator appliance of claim 1 wherein the epaulet cover includes at least one second fastener extending from the epaulet cover towards the reinforcing corner bracket for engagement thereto.

20 7. The door for a refrigerator appliance of claim 6 wherein the second fastener comprises an extension having a hook shaped end, and the reinforcing corner bracket includes a corresponding slotted aperture through which the extension of the second fastener passes permitting the hook shaped surface to engage a rear side of the reinforcing corner bracket.

25 8. The door for a refrigerator appliance of claim 7 wherein the slotted aperture in the bracket is sized larger than the extension of the second fastener to permit lateral movement of the epaulet cover relative to the reinforcing corner bracket as the epaulet cover is secured over the at least one exposed edge.

9. The door for a refrigerator appliance of claim 1 wherein:

the reinforcing corner bracket comprises a horizontal plate extending in abutting relation to the horizontal side wall, a load bearing portion recessed in spaced relation from the horizontal side wall and extending across the at least one open section of the one horizontal side wall to engage the vertical side wall inwardly of the at least one exposed edge, and a first central opening in the recessed load bearing portion; and,

the epaulet cover includes a second central opening aligned with, and of larger diameter than, the first central opening.

10. The door for a refrigerator appliance of claim 9 further including a thimble member having an elongate shaft inserted through the first central opening of each corner bracket, and the thimble member having a stepped flange head resting on the load bearing portion of the corner bracket for supporting a hinge pin on the stepped flange head within the second central opening of the epaulet cover.

11. The door for a refrigerator appliance of claim 10 wherein the epaulet cover includes a flange depending therefrom and adapted to overlay an outside surface portion of at least one of the outer door skin and the vertical side wall, and wherein the first fastener comprises a plurality of ribs extending from the epaulet cover adjacent the flange for engaging at least an inside surface portion of at least one of the outer door skin and the vertical side wall.

12. The door for a refrigerator appliance of claim 11 wherein the epaulet cover includes at least one second fastener extending from the epaulet cover towards the reinforcing corner bracket for engagement thereto.

13. The door for a refrigerator appliance of claim 10 wherein the

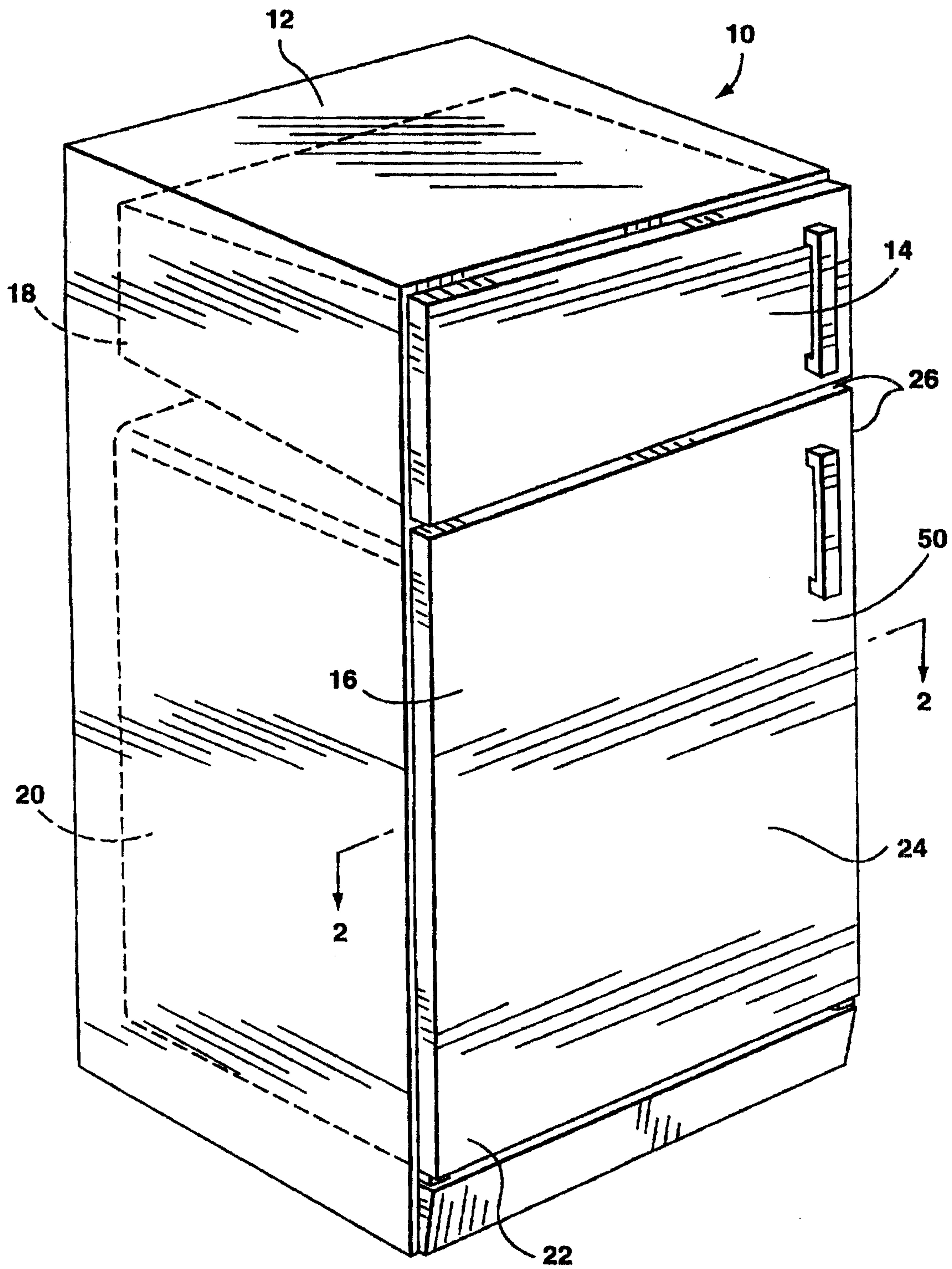
epaulet cover includes at least one second fastener extending from the epaulet cover towards the reinforcing corner bracket for engagement thereto.

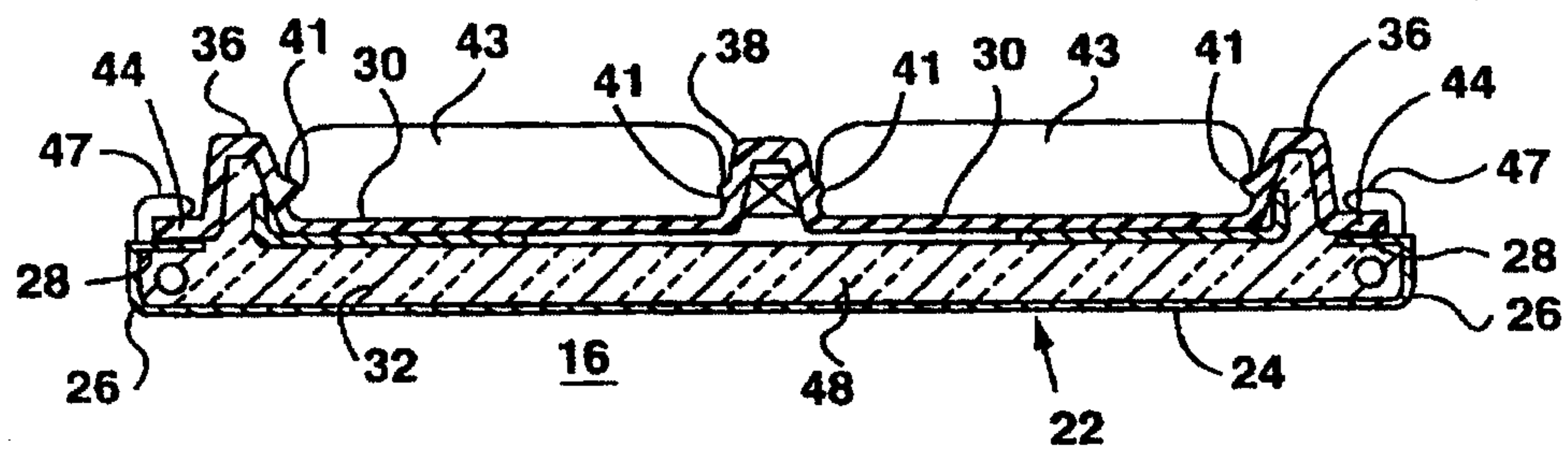
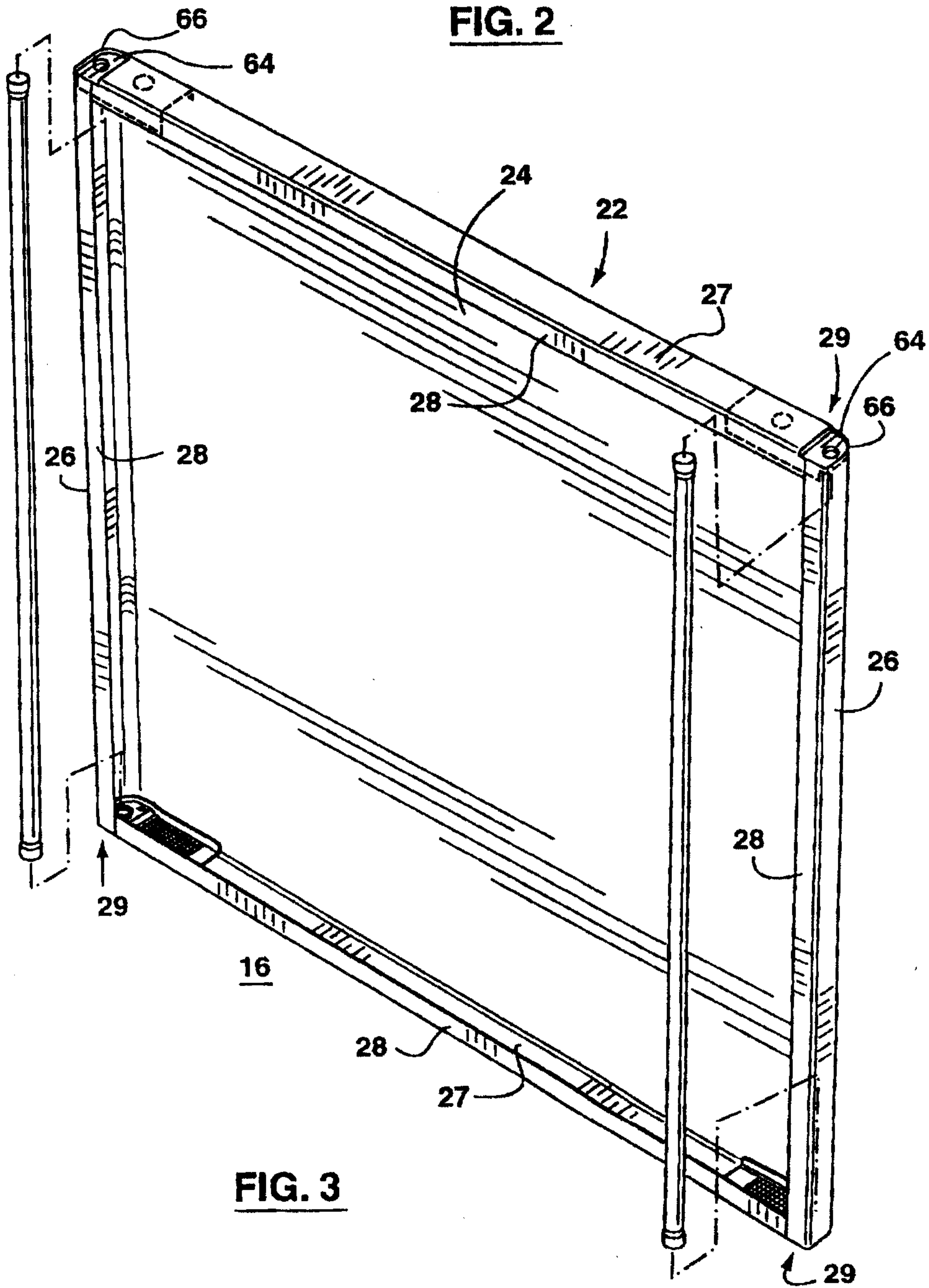
14. The door for a refrigerator appliance of claim 13 wherein the second fastener comprises an extension having a hook shaped end, and the reinforcing corner bracket includes a corresponding slotted aperture through which the extension of the second fastener passes permitting the hook shaped surface to engage a rear side of the reinforcing corner bracket.

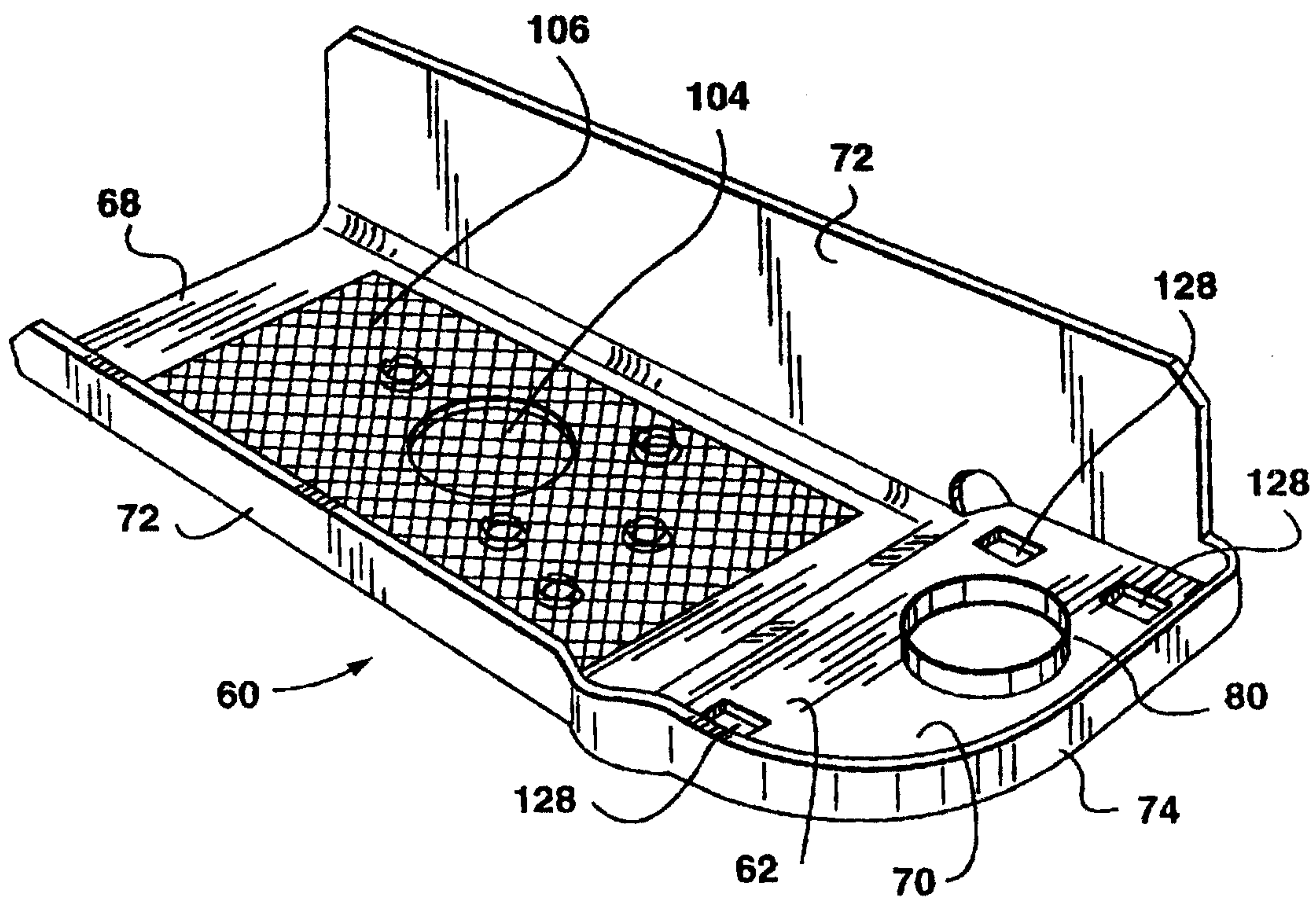
15. The door for a refrigerator appliance of claim 14 wherein the slotted aperture in the bracket is sized larger than the extension of the second fastener to permit lateral movement of the epaulet cover relative to the reinforcing corner bracket as the epaulet cover is secured over the at least one exposed edge.

16. The door for a refrigerator appliance of claim 12 wherein the second fastener comprises an extension having a hook shaped end, and the reinforcing corner bracket includes a corresponding slotted aperture through which the extension of the second fastener passes permitting the hook shaped surface to engage a rear side of the reinforcing corner bracket.

17. The door for a refrigerator appliance of claim 16 wherein the slotted aperture in the bracket is sized larger than the extension of the second fastener to permit lateral movement of the epaulet cover relative to the reinforcing corner bracket as the epaulet cover is secured over the at least one exposed edge.

**FIG. 1**

**FIG. 2****FIG. 3**

**FIG. 4**

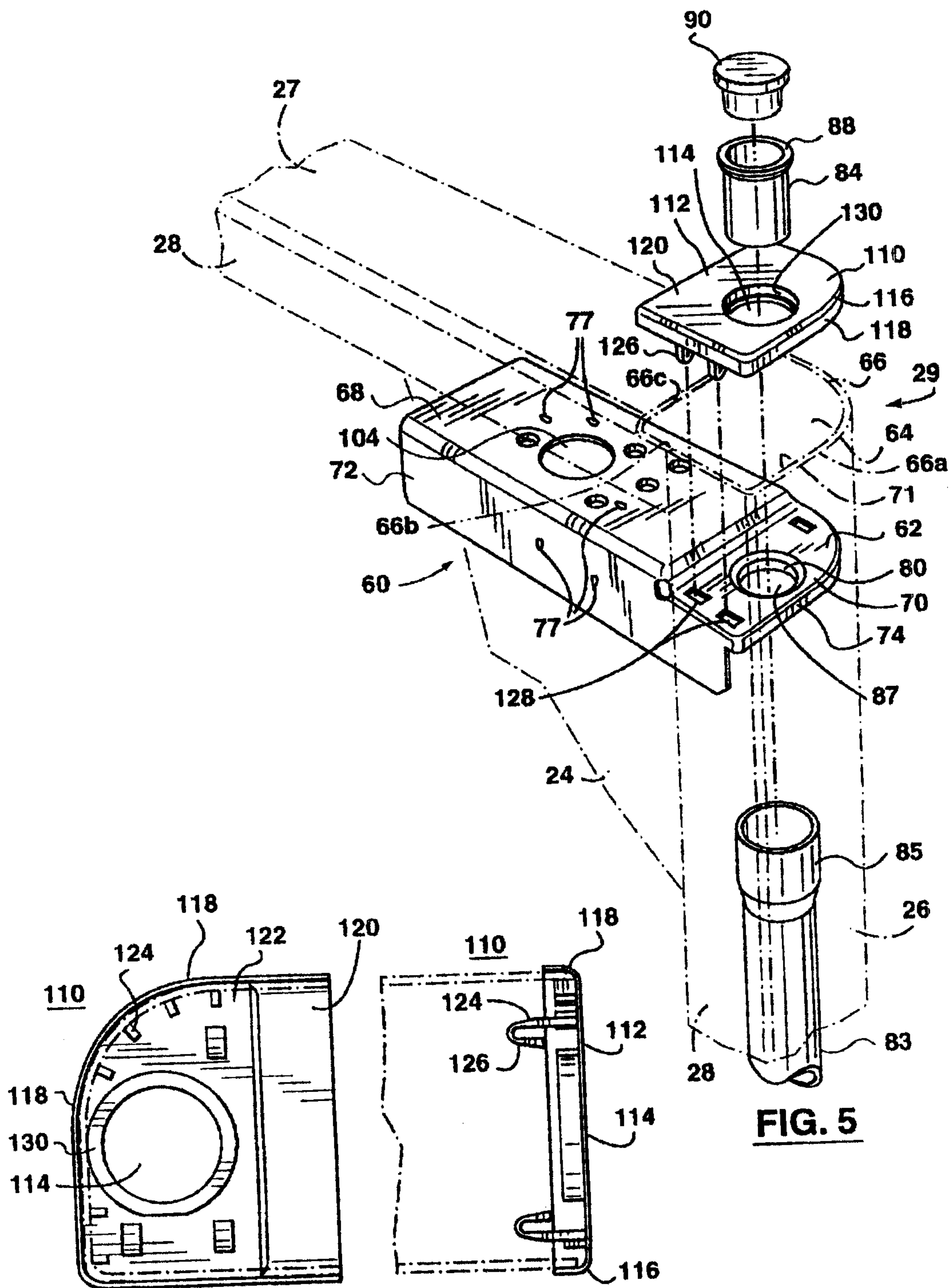


FIG. 6

FIG. 6A

FIG. 5

