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(54) **IMPROVEMENTS IN OR RELATING TO CUPBOARD CARCASSES.**

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Description

This invention relates to cupboard carcasses and is particularly, although not exclusively applicable to cupboard carcasses formed from one piece plastics mouldings.

AT-310,378 discloses a cupboard carcass formed from a number of individually moulded plastics components. The carcass components have peripheral flanges which abut one another and are held together by clips to hold the carcass components assembled together.

This invention provides a cupboard carcass comprising a moulded plastics open fronted enclosure having a plurality of integral external flanges lying in spaced planes extending normally to the open front of the enclosure through or adjacent one or more of which the enclosure may be split to provide a number of carcass modules from which larger carcasses can be assembled supplemented by modules from other carcasses or smaller carcasses from a reduced number of modules with the flange portions of adjacent modules forming a joint between the modules; wherein the carcass is a one piece plastics moulding.

In one embodiment of the invention the flanges may extend in vertical planes along at least the top/bottom walls of the enclosure to enable the carcass to be extended/reduced in the horizontal direction.

In a further embodiment of the invention the flanges may extend in horizontal planes along at least the side walls of the enclosure to enable the carcass to be extended/reduced in the vertical direction.

In yet a further embodiment the enclosure may have two sets of encircling flanges one extending in horizontal planes and the other in vertical planes whereby the carcass can be extended/reduced either vertically or horizontally respectively.

Preferably the parallel planes in which the external flanges are formed are equi-spaced from one another.

In the case where vertical flanges are provided, the flanges may be spaced apart equi-distantly between the side walls of the enclosure.

In the case where horizontal flanges are provided, the enclosure may be formed with integral internal ribs on the inner faces of the enclosure opposite the locations where said external flanges are formed to provide shelf supports within the enclosure.

The following is a description of a specific embodiment of the invention, reference being made to the accompanying drawings in which:

Figure 1 is a front elevation view of a cupboard carcass adapted to be severable into individual modules to permit a range of sizes of carcasses

to be assembled;

Figure 2 is a section on the line II-II on Figure 1; Figure 3 is a section on the line III-III on Figure 1;

Figures 4, 5 and 6 are scrap sections showing the assembly of a number of modules to form an enlarged carcass; and

Figures 7 and 8 illustrate a modified construction.

Referring firstly to Figures 1 to 3 of the drawings, there is shown a moulded plastics cupboard carcass indicated generally at 10 and of rectangular box form having an open top 11, a bottom wall 12, side walls 13, 14, a back wall 15 and an open front 16. The open front of the moulded plastics carcass is formed with an integral external return in the form of an L section flange 17 to stiffen the opening to the carcass.

The moulded plastics carcass is formed with a plurality of integral external flanges 18 extending in vertical planes along the bottom walls and optionally the back wall of the carcass from the top opening 12 to the bottom of the front opening 16. The flanges lie in vertical planes extending normal to the plane containing the front opening 16 to the carcass with the planes spaced equi-distant from one another and from the side walls 13, 14 of the carcass. The carcass may be split in one or more planes extending along the centre-lines of the flanges to form a plurality of end/intermediate carcass modules each with a flange portion encircling the or each line of split as described below.

The carcass is also formed with a plurality of integral external flanges 20 extending around the side/back walls of the carcass and optionally across the back wall. The flanges 20 lie in horizontal planes extending normal to the front opening and to the planes containing the flanges 18. The flanges 20 are spaced apart equidistantly from one another and from the bottom wall of the carcass over the greater part of the height of the carcass with the spacing increased for the uppermost flange 21a. Again the carcass may be split in one or more planes through the flanges 20 to create bottom/intermediate carcass modules.

The carcass is also formed with internal ribs 21, 22 opposite at least the lower of the external flanges 20 to provide integral shelf supports with the carcass.

As indicated above, the carcass may be split in one or more planes through the encircling flanges 18 encircling the top/back/bottom walls of the carcass or through the flanges 20 to form a plurality of carcass modules. Figures 4 and 5 illustrate the assembly of side wall modules 30 and intermediate modules 31 to form a laterally extended carcass. The modules are split along the centre lines of one or more of the flanges 18 to form a flange portion

35 on a side wall module and 36 on the intermediate module. A plurality of carcass modules is assembled as illustrated in Figures 4 to 6 and the abutting flange portions 35, 36 are secured together by a suitable adhesive, welding or other fastening means to create a laterally enlarged carcass.

By way of example, the standard carcass module illustrated in Figures 1 and 2 may be 900mm wide with flanges 18 encircling the carcass at 300mm centres. On splitting the carcass into three equal portions, side wall modules and an intermediate module each of 300mm is formed and the resulting modules can be used to create wider carcasses with two or more intermediate modules or a narrow carcass with no intermediate module.

Similarly, the carcass may be split through one or more of the flanges 20 encircling the side/back walls of the carcass to enable the carcass to be split in horizontal planes to form separate modules to which a further intermediate module or modules may be added to create a taller carcass or from which an intermediate module/modules can be omitted to reduce the carcass height.

It will be appreciated that many modifications may be made to the above described embodiments without departing from the scope of the invention. For example, the carcasses may be split immediately adjacent the flanges rather than centrally through the flanges and larger or smaller carcasses are then assembled from the resulting flanged portions, the remainder being scrapped.

Figures 7 and 8 show a further construction in which the encircling flanges 18 are of deep hollow section rib form to provide extended mating surfaces between ribs to be joined with the hollow between the ribs providing a space for a key of adhesive to bond the ribs together.

Claims

1. A cupboard carcass (10) comprising a moulded plastics open fronted enclosure having a plurality of integral external flanges (18) lying in spaced planes extending normally to the open front (16) of the enclosure through or adjacent one or more of which the enclosure may be split to provide a number of carcass modules from which larger carcasses can be assembled supplemented by modules from other carcasses or smaller carcasses from a reduced number of modules with the flange portions of adjacent modules forming a joint between the modules: characterised in that the carcass is a one piece plastics moulding.
2. A cupboard carcass as claimed in claim 1, adapted to be split through the centre lines of

the flanges.

3. A cupboard carcass as claimed in claim 2, wherein the flanges are of hollow section rib form to create extended abutment faces when split for mating with corresponding ribs of adjacent carcass portions.
4. A cupboard carcass as claimed in claim 1, wherein the carcass is adapted to be split immediately adjacent to the flanges.
5. A cupboard carcass as claimed in any of claims 1 to 4, wherein the flanges extend in vertical planes along at least the bottom wall of the enclosure to enable the carcass to be extended/reduced in the horizontal direction.
6. A cupboard carcass as claimed in claim 5, wherein the flanges also extend down the back wall of the enclosure.
7. A cupboard carcass as claimed in any of Claims 1 to 4, wherein the flanges extend in horizontal planes along the side walls of the enclosure to enable the carcass to be extended/reduced in the vertical direction.
8. A cupboard carcass as claimed in Claim 7, wherein the flanges also extend across the back wall of the enclosure.
9. A cupboard carcass as claimed in any of Claims 1 to 8, wherein the enclosure has two sets of flanges one extending in horizontal planes and the other in vertical planes whereby the carcass can be extended/reduced either vertically or horizontally respectively.
10. A cupboard carcass as claimed in any of Claims 1 to 9, wherein the parallel planes in which the external flanges (18, 20) are formed are equi-spaced from one another.
11. A cupboard carcass as claimed in Claim 10, and in the case where vertical flanges are provided, wherein the flanges formed are spaced apart equi-distantly between the side walls (13, 14) of the enclosure.
12. A cupboard carcass as claimed in any of the preceding claims and in the case where horizontal flanges are provided, wherein the enclosure is formed with integral internal ribs (21, 22) on the inner faces of the enclosure opposite the locations where said external flanges are formed to provide shelf supports within the enclosure.

Patentansprüche

1. Schrankkorpus (10), mit einem an der Vorderseite offenen Gehäuse aus Formkunststoff, das eine Vielzahl von beabstandeten integralen äußeren Flanschen (18, 20) aufweist, wobei die Flansche jeweils entsprechend der Flächennormalen den Gehäuseseiten verlaufen, wobei weiterhin durch oder angrenzend an einen oder mehrere Flansche das Gehäuse unterteilbar ist, um eine Reihe von Korpusmodulen zu erhalten, aus denen größere Korpusse, die durch Module von anderen Korpusen ergänzt sind, oder kleinere Korpusse aus einer verringerten Zahl von Modulen zusammenbaubar sind, wobei die Flanschbereiche benachbarter Module eine Verbindung oder Verbindungsfläche zwischen den Modulen bilden, dadurch gekennzeichnet, daß der Korpus ein einteiliges Kunststoff-Formteil ist. 5 10 15 20
2. Schrankkorpus nach Anspruch 1, gekennzeichnet durch Teilbarkeit entlang der Mittellinien der Flansche. 25
3. Schrankkorpus nach Anspruch 2, dadurch gekennzeichnet, daß die Flansche Hohlprofilrippenform zur Bildung verlängerter Widerlagerflächen aufweisen, um die geteilten Rippen mit entsprechenden Rippen von benachbarten Korpusbereichen paarweise zusammenfügen zu können. 30
4. Schrankkorpus nach Anspruch 1, dadurch gekennzeichnet, daß der Korpus unmittelbar angrenzend an die Flansche teilbar ist. 35
5. Schrankkorpus nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß die Flansche in vertikalen Ebenen entlang wenigstens der Bodenwand des Gehäuses verlaufen, um den Korpus in der Horizontalrichtung zu verlängern oder zu verkürzen. 40
6. Schrankkorpus nach Anspruch 5, dadurch gekennzeichnet, daß die Flansche zusätzlich entlang der Rückwand des Gehäuses nach unten verlaufen. 45
7. Schrankkorpus nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß die Flansche in horizontalen Ebenen entlang den Seitenwänden des Gehäuses verlaufen, um den Korpus in der Vertikalrichtung zu verlängern oder zu verkürzen. 50 55
8. Schrankkorpus nach Anspruch 7, dadurch gekennzeichnet, daß die Flansche zusätzlich über

die Rückwand des Gehäuses verlaufen.

9. Schrankkorpus nach einem der Ansprüche 1 bis 8, dadurch gekennzeichnet, daß das Gehäuse zwei Gruppen von Flanschen hat, von denen die eine in horizontalen Ebenen und die andere in vertikalen Ebenen verläuft, so daß der Korpus entweder vertikal oder horizontal verlängert oder verkürzt werden kann.
10. Schrankkorpus nach einem der Ansprüche 1 bis 9, dadurch gekennzeichnet, daß die parallelen Ebenen, in denen die äußeren Flansche (18, 20) geformt sind, voneinander gleichbeabstandet sind.
11. Schrankkorpus nach Anspruch 10, dadurch gekennzeichnet, daß im Fall vorhandener vertikaler Flansche diese zwischen den Seitenwänden (13, 14) des Gehäuses gleichbeabstandet voneinander angeordnet sind.
12. Schrankkorpus nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß im Fall vorhandener horizontaler Flansche das Gehäuse mit integralen inneren Rippen (21, 22) an den Innenflächen des Gehäuses entgegengesetzt zu den Stellen versehen ist, an denen die äußeren Flansche geformt sind, um Regalauflagen innerhalb des Gehäuses zu bilden.

Revendications

1. Corps d'armoire (10) comprenant un boîtier ouvert sur le devant en plastique moulé comportant une pluralité de rebords externes d'un seul tenant (18), situés dans des plans espacés s'étendant perpendiculairement à l'avant ouvert (16) du boîtier, auxdits un ou plusieurs rebords ou en des emplacements adjacents le boîtier pouvant être fragmenté pour obtenir un certain nombre de modules de corps à partir desquels des corps plus grands peuvent être assemblés, complétés par des modules d'autres corps ou de plus petits corps provenant d'un nombre réduit de modules avec les portions des rebords des modules adjacents formant une articulation entre les modules : caractérisé en ce que le corps est un moulage en plastique d'une seule pièce.
2. Corps d'armoire selon la revendication 1, adapté à être fragmenté aux lignes médianes des rebords.
3. Corps d'armoire selon la revendication 2, dans lequel les rebords ont la forme d'une nervure à

section creuse pour créer des faces de butée étendues lors de la fragmentation destinées à épouser des nervures correspondantes de portions de corps adjacentes.

tenir des supports de tablettes au sein du boîtier.

4. Corps d'armoire selon la revendication 1, dans lequel le corps est adapté à être fragmenté en des emplacements immédiatement adjacents aux rebords.

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5. Corps d'armoire selon l'une quelconque des revendications 1 à 4, dans lequel les rebords s'étendent dans des plans verticaux le long d'au moins la paroi inférieure du boîtier pour permettre au corps d'être agrandi/réduit dans la direction horizontale.

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6. Corps d'armoire selon la revendication 5, dans lequel les rebords s'étendent également le long de la paroi arrière du boîtier.

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7. Corps d'armoire selon l'une quelconque des revendications 1 à 4, dans lequel les rebords s'étendent dans des plans horizontaux le long des parois latérales du boîtier pour permettre au corps d'être agrandi/réduit dans la direction verticale.

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8. Corps d'armoire selon la revendication 7, dans lequel les rebords s'étendent également en travers de la paroi arrière du boîtier.

25
9. Corps d'armoire selon l'une quelconque des revendications 1 à 8, dans lequel le boîtier comporte deux jeux de rebord, l'un s'étendant dans des plans horizontaux et l'autre dans des plans verticaux de sorte que le corps puisse être agrandi/réduit, verticalement ou horizontalement, respectivement.

30
10. Corps d'armoire selon l'une quelconque des revendications 1 à 9, dans lequel les plans parallèles dans lesquels les rebords externes (18, 20) sont formés sont équidistants.

35
11. Corps d'armoire selon la revendication 10, et dans le cas où des rebords verticaux sont prévus, dans lequel les rebords formés sont équidistants entre les parois latérales (13, 14) du boîtier.

40
12. Corps d'armoire selon l'une quelconque des revendications précédentes, et dans le cas où des rebords horizontaux sont prévus, dans lequel le boîtier est doté de nervures internes d'un seul tenant (21, 22) sur les faces internes du boîtier en face des emplacements auxquels lesdits rebords externes sont formés pour ob-

45

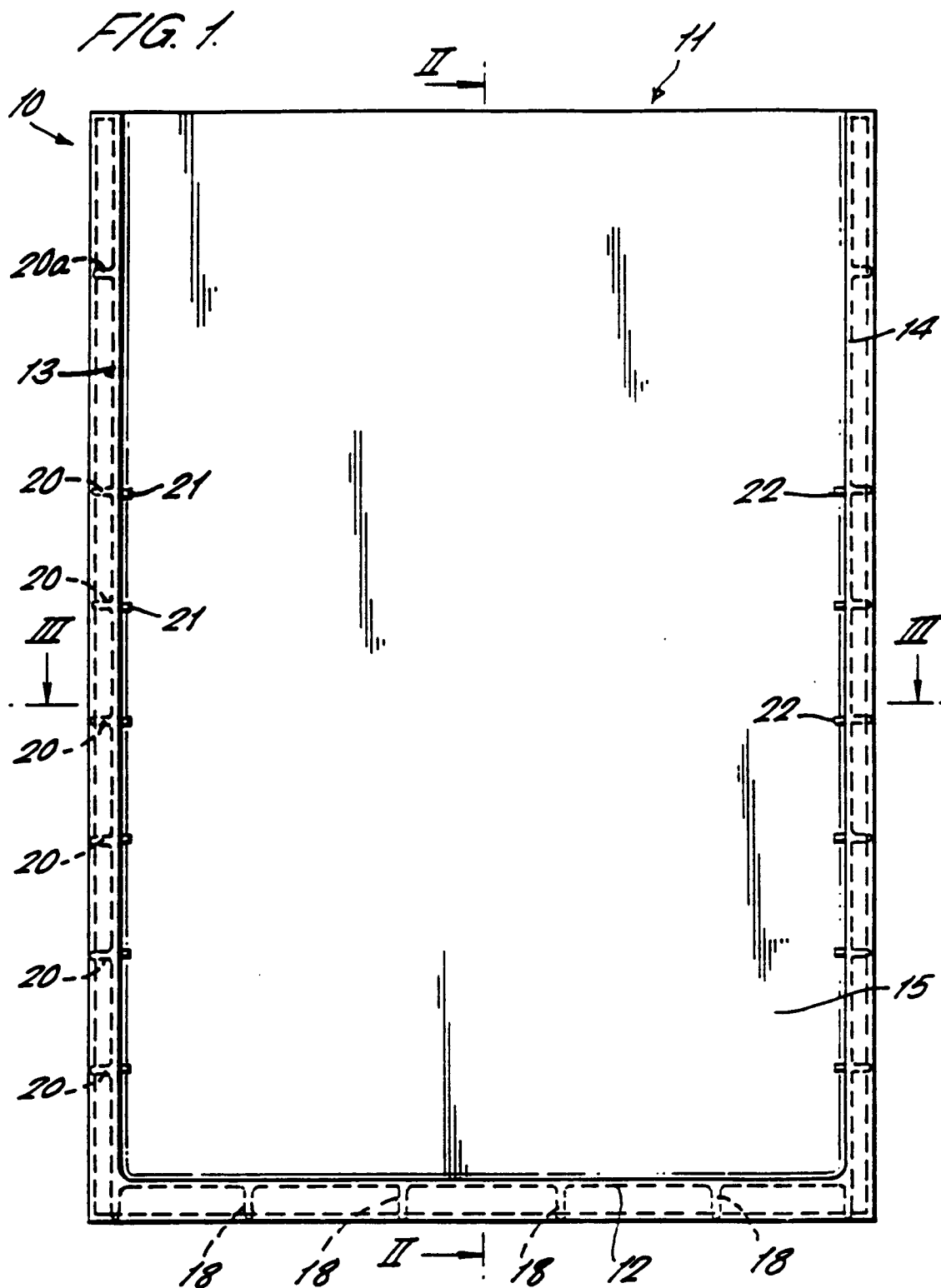


FIG. 2.

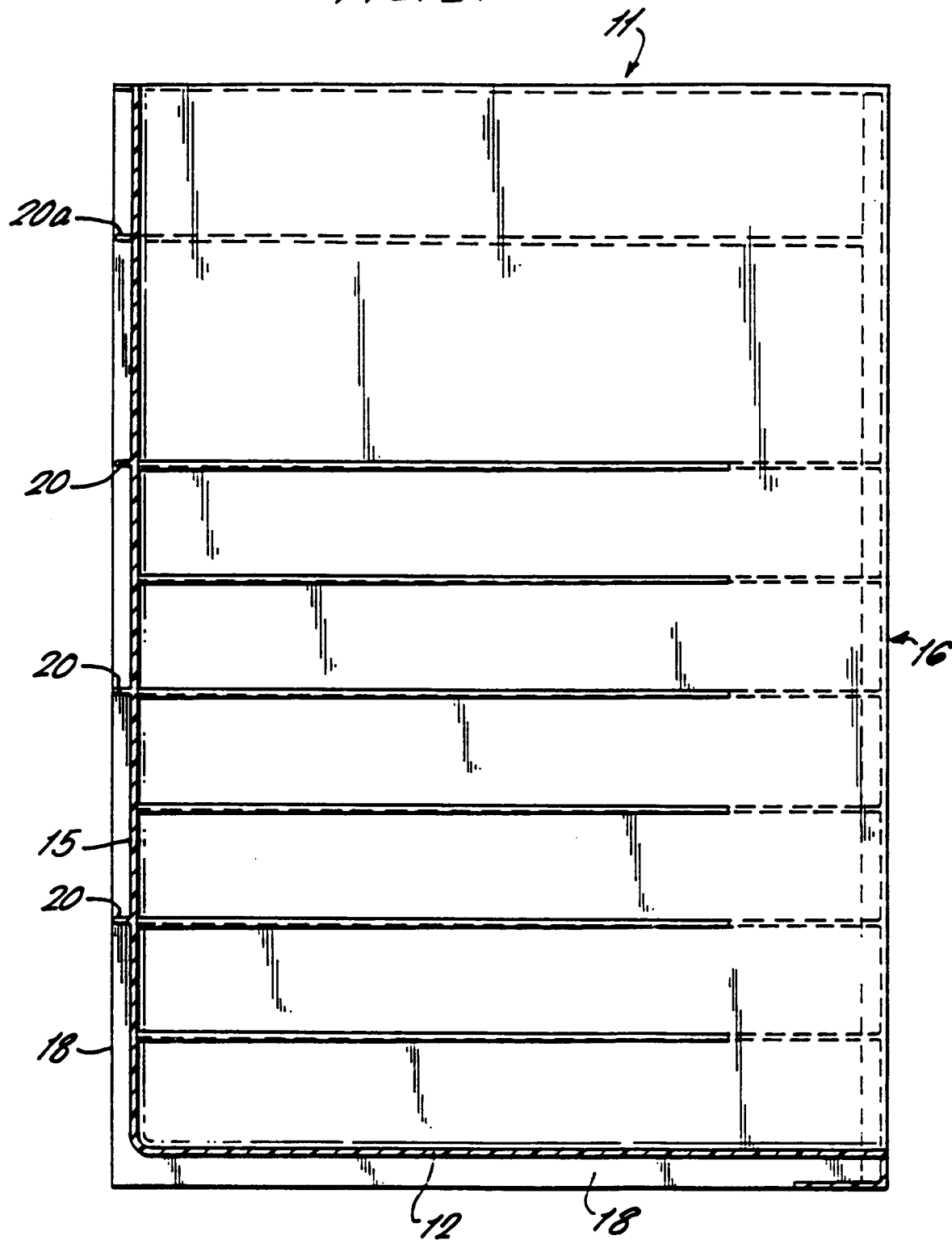
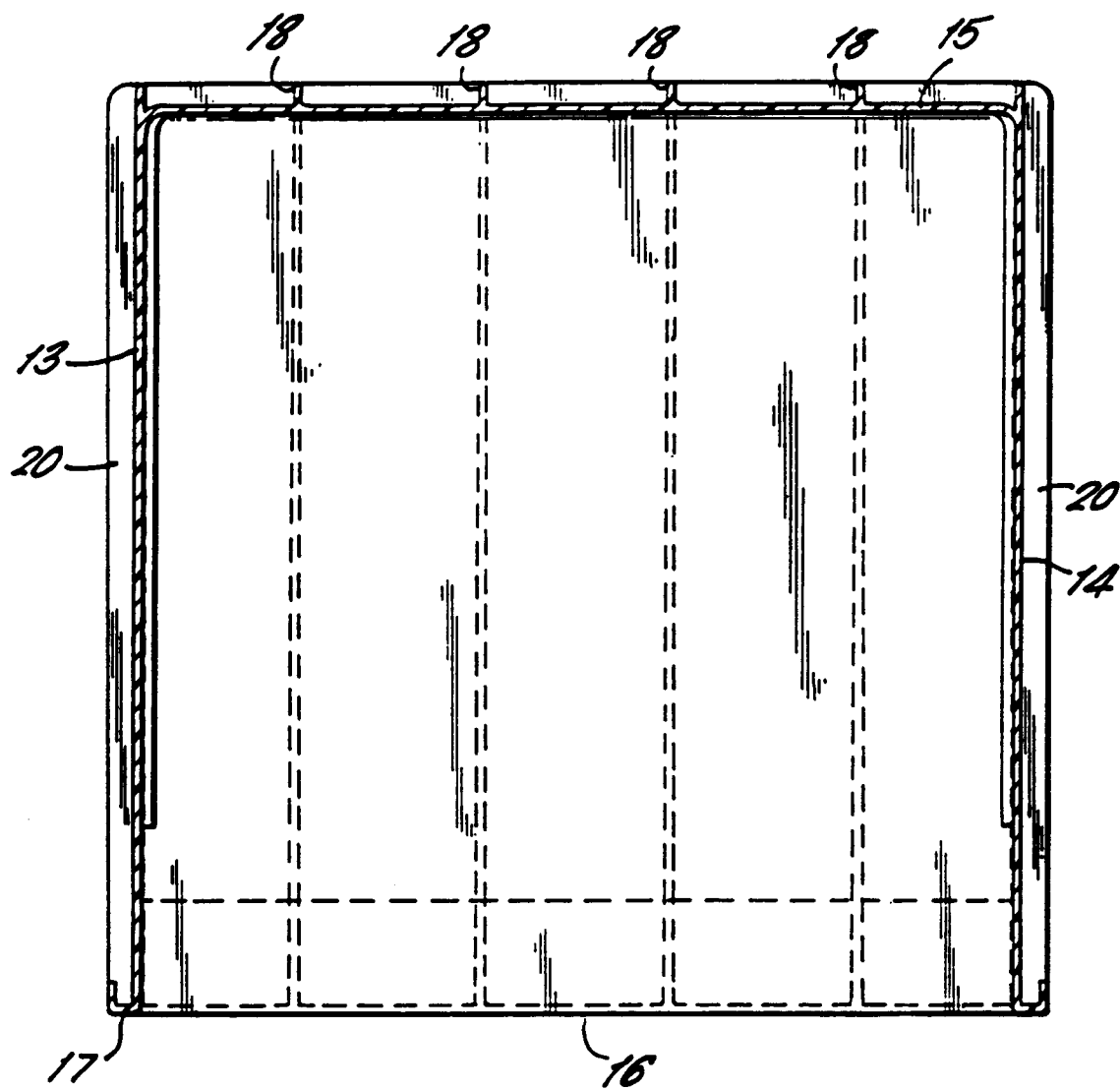


FIG. 3.



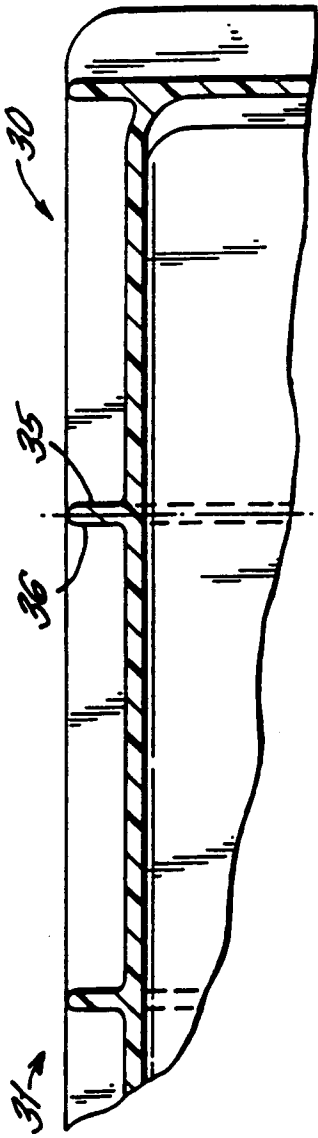


FIG. 4.

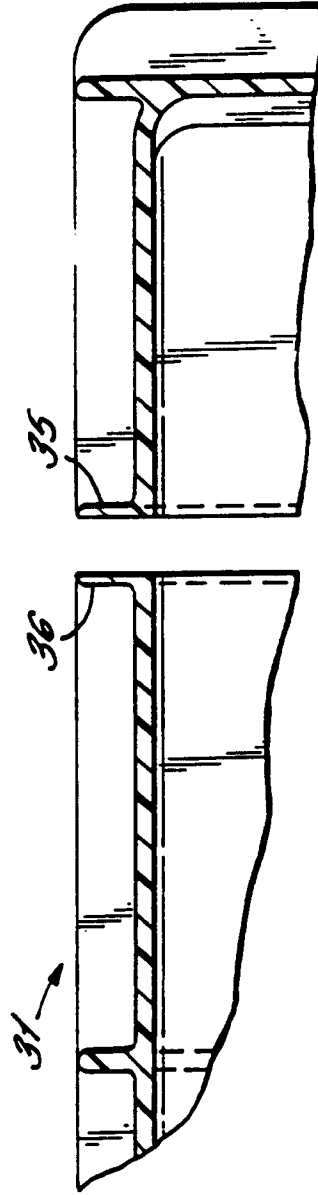


FIG. 5.

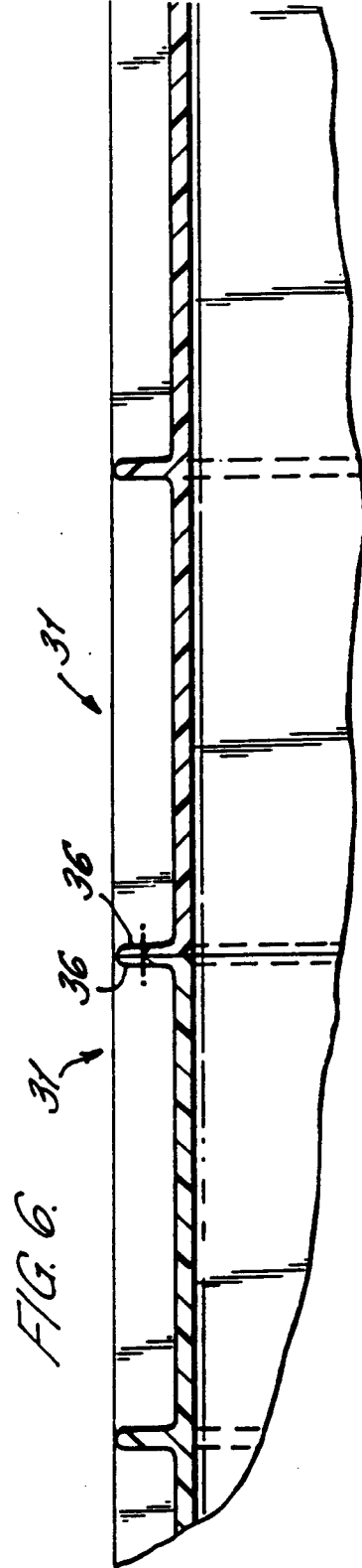


FIG. 6.

