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(54) **Collapsible display for retail outlet**

(57) A collapsible display for a retail outlet is disclosed. The display has a body portion (2) and one or more shelves (50, 100) mounted to the body portion (2) adjacent edge portions of the shelves. The display has a first condition in which the body portion and the or each shelf are folded substantially flat, and a second condition in which the or each shelf (50, 100) defines a product supporting surface (58, 60, 108, 110). One or more of these product supporting surfaces is supported adjacent the edge portions and at one or more locations between the edge portions.

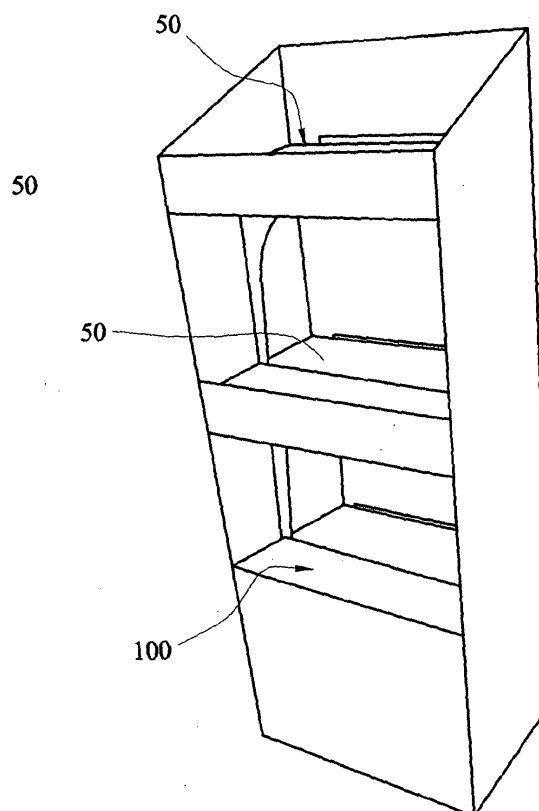


FIG. 5

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Description

[0001] The present invention relates to collapsible displays for retail outlets, and relates particularly, but not exclusively, to collapsible displays for supporting relatively heavy food items such as bottles or cans of drink or toiletries.

[0002] Collapsible displays are used in retail outlets such as supermarkets for the purpose of locating products in an eye catching promotional display in locations other than on the permanent supermarket shelves, for example at the end of aisles. Such displays are often supplied to the retail outlet in flat-packed form together with the product being displayed, and generally carry printed promotional information relating to the product. Such promotions also tend to only run for a limited period. As a result, it is important that the display can be mounted to its product supporting state as quickly as possible by personnel at the retail outlet.

[0003] Collapsible displays are known which can be unfolded to their product supporting state relatively easily and quickly, but such products generally suffer from the drawback that they have insufficient strength to support heavier food products such as bottles or cans of drink.

[0004] Preferred embodiments of the present invention seek to overcome the above disadvantage of the prior art.

[0005] According to the present invention, there is provided a collapsible display for a retail outlet, the display comprising:-

a body portion; and

at least one shelf adapted to be mounted to said body portion adjacent a plurality of respective edge portions of said shelf;

wherein the display has a first condition in which the body portion and the or each said shelf are folded substantially flat, and a second condition in which the or each said shelf defines a product supporting surface, and at least one said product supporting surface is supported adjacent said respective edge portions and at at least one location between said edge portions.

[0006] By providing at least one shelf which is foldable substantially flat in a first condition and which is supported adjacent edge portions thereof and at at least one location between said edge portions, this provides the advantage of combining ease of unfolding of the display to its product supporting condition with strength of the display, thus making the display suitable for use in displaying heavier products such as bottles or cans of liquid or toiletries.

[0007] At least one said shelf may comprise at least one respective supporting rib at a respective said location between said edge portions.

[0008] At least one said supporting rib may be supported in said second condition by a base of said body portion.

[0009] This provides the advantage of combining strength of the display with correct location of the shelf, relative to the body portion, to be supported by the base.

[0010] At least one said supporting rib may be adapted to rest on at least one further said shelf in said second condition.

[0011] In a preferred embodiment, at least one said shelf has at least one respective aperture for engaging a respective supporting rib of a further said shelf in said second condition.

[0012] This provides the advantage that the or each said aperture assists in correctly locating the corresponding supporting rib, and therefore the corresponding shelves, relative to each other and to the body portion. This enhances rigidity of the display in use.

[0013] A preferred embodiment of the invention will now be described, by way of example only and not in any limitative sense, with reference to the accompanying drawings, in which:-

Figure 1 shows an unfolded body portion of a collapsible display embodying the present invention;

Figure 2 shows an unfolded first shelf for use with the body portion at Figure 1; and

Figure 3 shows an unfolded second shelf for use with the body portion of Figure 1 and shelf of Figure 2.

[0014] Referring to Figure 1, a body portion 2 of a collapsible display for supporting relatively heavy products such as bottles or cans of drink or bottles of toiletry products is cut from a single sheet of cardboard material and has a front surface 4, a rear surface 6 and side surfaces 8, 10. Apertures 12 are cut in front surface 4, and flaps 13 and fold lines 14 are provided, the purpose of which will be described in greater detail below. A base flap 16 having a tab 18 extends from front surface 4 and is separated from front surface 4 by fold line 20, and tab 18 is separated from base flap 16 by fold line 22. Long slots 24 and short slots 26 are cut in rear surface 6, and a base flap 28 extends from rear surface 6 and is separated therefrom by fold line 30. Similarly, a tab 32 is separated from base flap 28 by fold line 34. A side flap 36 is also separated from rear surface 4 by fold line 38.

[0015] Referring now to Figure 2, a first shelf 50 is formed from a single sheet of cardboard and has a large central aperture 52, a series of small circular apertures 54 and a pair of side notches 56. Product supporting surfaces 58, 60 and supporting ribs 62, 64 are defined by the shelf 50. A flap 66 is separated from surface 58 by fold line 68, and a flap 70 having tab 72 is separated from surface 60 by fold line 74, the tab 72 being separated from flap 70 by fold line 76. A series of fold lines 77, 78, 80, 82 extends from each aperture 54, and the

purpose of these fold lines will be described in greater detail below.

[0016] A second shelf 100 is shown in Figure 3 and is also cut from a single sheet of cardboard. The shelf 100 defines a single supporting rib defined by two panels 102, 104 when folded together and glued such that a slot 106, for receiving the tabs 18, 32 of body portion 2, is arranged at a lower edge of the supporting rib. The shelf 100 also has product supporting surfaces 108, 110 and a flap 112 is separated from surface 108 by fold line 114, a tab 116 being separated from flap 112 by fold line 118, and a flap 120 is separated from surface 110 by fold line 122.

[0017] A flap 124 is arranged adjacent each of a series of circular apertures 126, and fold lines 128, 130, 132 extend from each aperture 126, and have a function will be described in greater detail below.

[0018] The assembly and operation of the display of Figures 1 to 3 will now be described.

[0019] In order to assemble the body portion 2 shown in Figure 1, the body portion 2 is folded to form a box of generally rectangular cross-section, and flap 36 is glued to side surface 8. The flaps 16, 28 are then folded along fold lines 20, 30 respectively, and the tabs 18, 32 folded inwardly of the body portion 2 along fold lines 22, 34 respectively. The tabs 18, 32 are then glued together so that they extend inwardly of the body portion 2.

[0020] The second shelf 100 shown in Figure 3 is then assembled by folding the shelf along fold line 103 between panels 102, 104 and then gluing the panels 102, 104 together such that a supporting rib is defined having fold line 103 and aperture 106 along its edge. The flaps 124 are then folded along fold line 128 and glued to the panel 102 or 104 adjacent the relevant aperture 126. This enables product supporting surface 108, 110 to be folded flat against the corresponding panel 102, 104 respectively by folding along fold lines 128, 130, 132.

[0021] The shelf 100 is then mounted to the lowermost part of body portion 2 by folding the lowermost flap 13 on front face 4 of body portion 2 downwards about the corresponding fold line 14 and then gluing flap 120 to flap 13. Flap 114 and tab 116 are passed through the lowermost long aperture 24 in the rear surface 6 of body portion 2, and the tab 116 is then passed through the lowermost short aperture 26 to locate the shelf 100.

[0022] Subsequently to installation of the second shelf 100, a series of first shelves 50 as shown in Figure 2 are assembled by folding each of the shelves 50 in half along the line of notches 56 and gluing the surfaces 62, 64 forming supporting ribs together. This brings product-supporting surfaces 58, 60 together to form a continuous product-supporting surface foldable along the line at which surfaces 58, 60 meet. By folding along fold lines 77, 78, 80, 82, the region between fold lines 77 and 82 is folded against adjacent product supporting surface 58 or 60 and then glued in position, and the region between fold lines 80 and 82 is folded against the region between fold lines 77 and 82 and glued in posi-

tion. As a result, the surfaces 79 and 60, and 81 and 58 are arranged in planes generally at right angles to each other.

[0023] The shelf 50 is then mounted to body portion 2 in a similar manner to the second shelf 100, i.e. the second lowest flap 13 of body portion 2 is folded downwards about the corresponding fold line 14 and flap 66 is then glued to flap 13. Similarly, the flap 70 is passed through the second lowest long slot 24 in rear surface 6 of body portion 2 and the tab 72 passed through the corresponding short slot 26, in a manner similar to the flap 112 and tab 116 of the shelf 100 of Figure 3. In this way, a plurality of shelves 50 are arranged above the first shelf 100.

[0024] Once assembled, the display has a folded condition in which the front 4 and rear 6 surfaces are brought towards each other by folding the side surfaces 8, 10 outwardly in half along fold lines 9, 11 respectively. At the same time, the product supporting surfaces 58, 60 of shelves 50 and product supporting surfaces 108, 110 of shelf 100 are folded in half so that the display is flat and compact for transport purposes.

[0025] In order to assemble the display, the body portion 2 is folded to define a box of substantially rectangular cross-section, and the product supporting surfaces 58, 60 and 108, 110 are folded outwards to form continuous generally flat surfaces. At the same time, tabs 18, 32 are received in aperture 106 to assist in supporting the supporting rib defined by surfaces 102, 104 of shelf 100 to provide support to the product supporting surfaces 108, 110 at a location between the edges at which the flaps 120, 112 are attached to the body portion 2.

[0026] Similarly, as the shelves 50 are folded outwardly to define substantially flat product supporting surfaces 58, 60, the supporting ribs 62 move downwardly to the received in notches defined by apertures 126 in shelf 100 or notches defined by apertures 54 in a lower shelf 50 to support the product supporting surfaces 58, 60 at a location between the edges at which the shelf 50 is mounted to the body portion 2. This location of the lowermost part of supporting rib 62, 64 in apertures 126 or 54 also assists in correct location of the shelves 50 relative to lower shelves 50 or 100 and relative to the body portion. In this way, the display can be folded and assembled easily, and in its assembled condition provides a strong structure capable of supporting heavier objects such as bottles or cans of drink.

[0027] It will be appreciated by persons skilled in the art that the above embodiment has been described by way of example only, and not in any limitative sense, and that various alterations and modifications are possible without departure from the scope of the invention as defined by the appended claims.

Claims

1. A collapsible display for a retail outlet, the display comprising:-

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a body portion; and

at least one shelf adapted to be mounted to said body portion adjacent a plurality of respective edge portions of said shelf; wherein the display has a first condition in which the body portion and the or each said shelf are folded substantially flat, and a second condition in which the or each said shelf defines a product supporting surface, and at least one said product supporting surface is supported adjacent said respective edge portions and at at least one location between said edge portions.

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2. A display according to claim 1, wherein at least one said shelf comprises at least one respective supporting rib at a respective said location between said edge portions. 20
3. A display according to claim 2, wherein at least one said supporting rib is supported in said second condition by a base of said body portion. 25
4. A display according to claim 2 or 3, wherein at least one said supporting rib is adapted to rest on at least one further said shelf in said second condition. 30
5. A display according to claim 4, wherein at least one said shelf has at least one respective aperture for engaging a respective supporting rib of a further said shelf in said second condition. 35
6. A collapsible display for a retail outlet, the display substantially as hereinbefore described with reference to the accompanying drawings. 40

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KEY

CUT —————

CREASE - - - - -

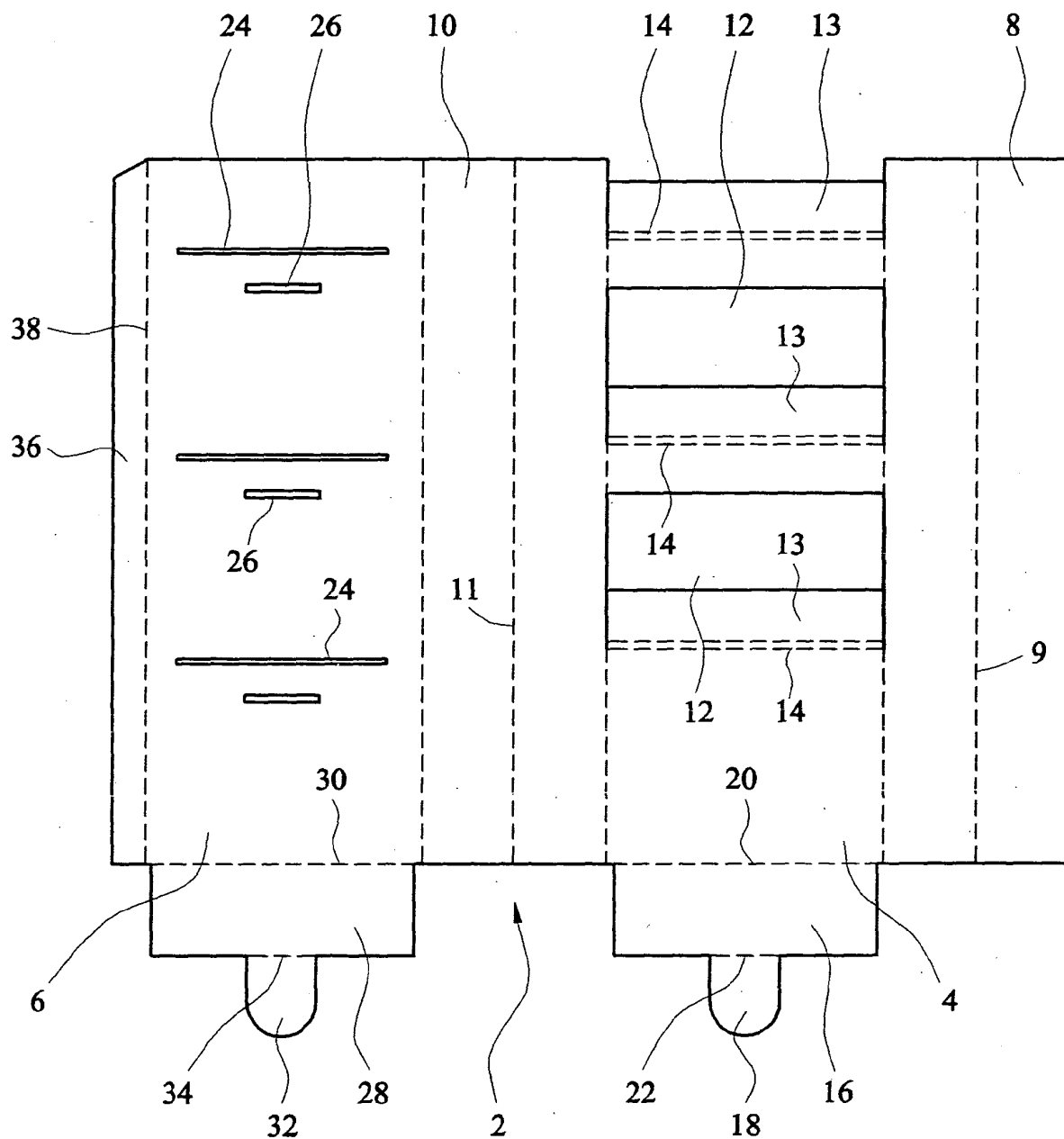


FIG. 1

KEY
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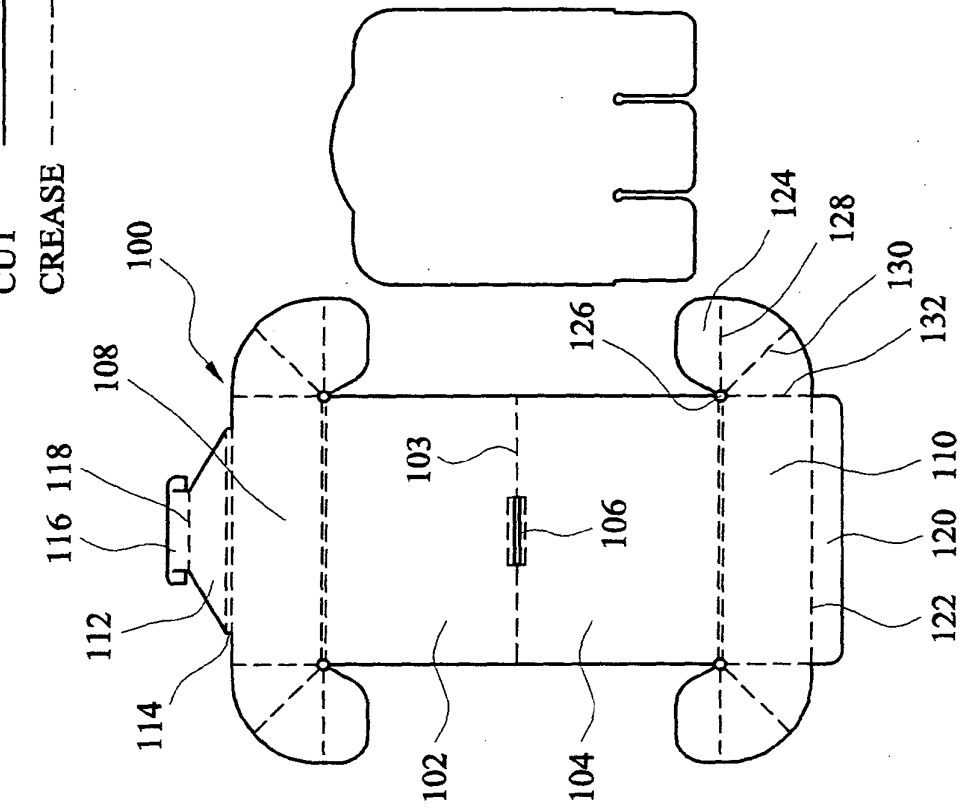


FIG. 2

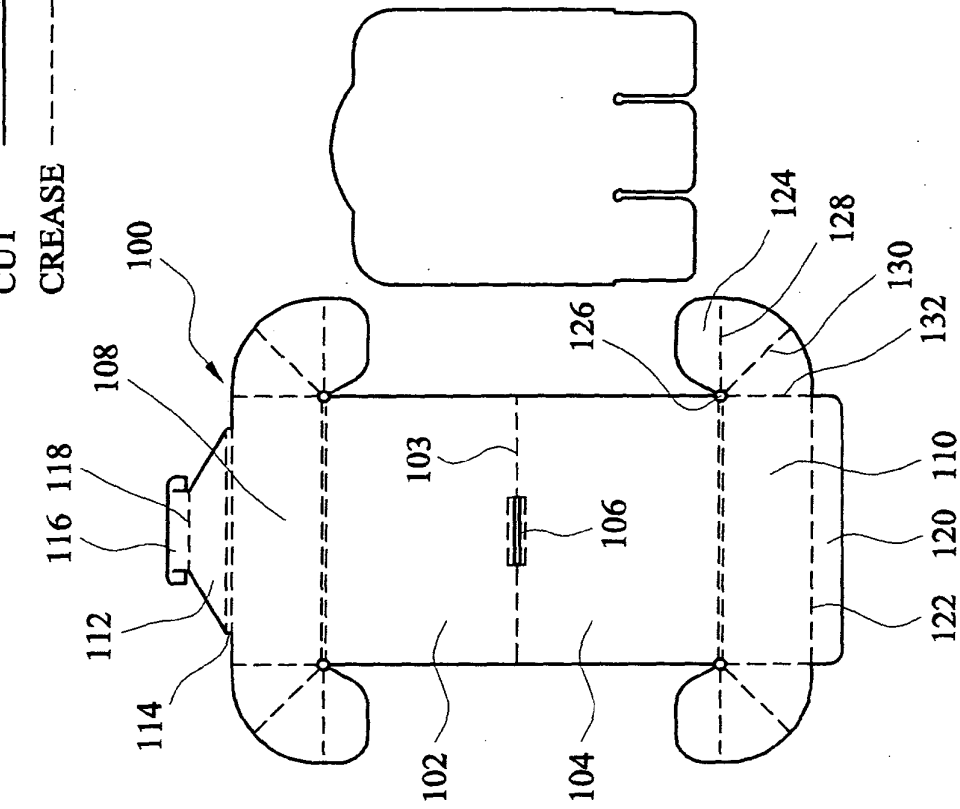


FIG. 3

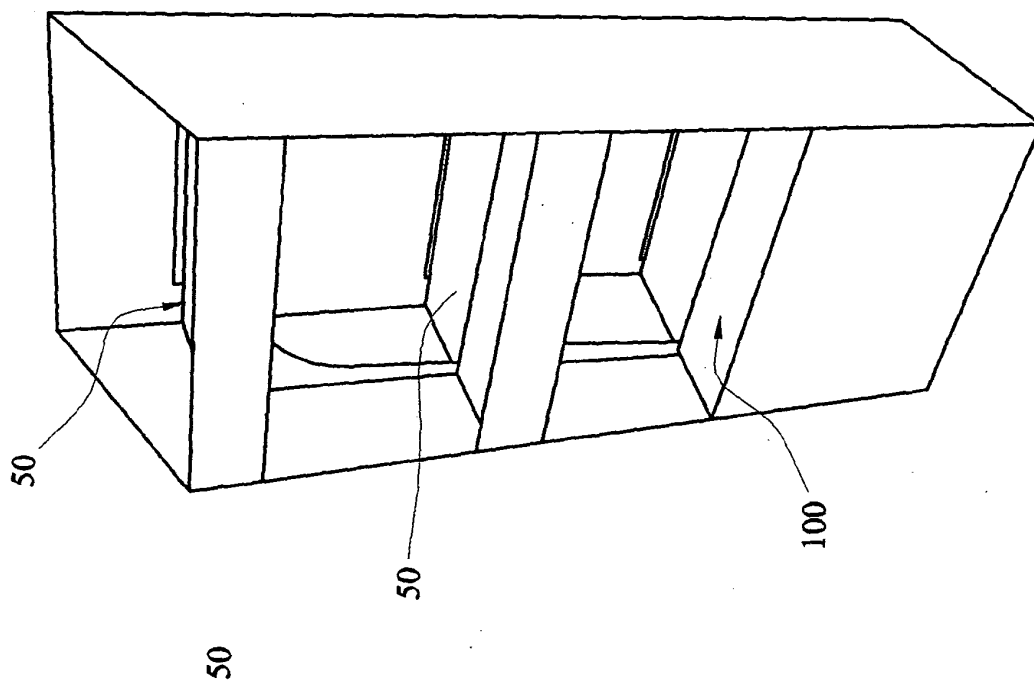


FIG. 5

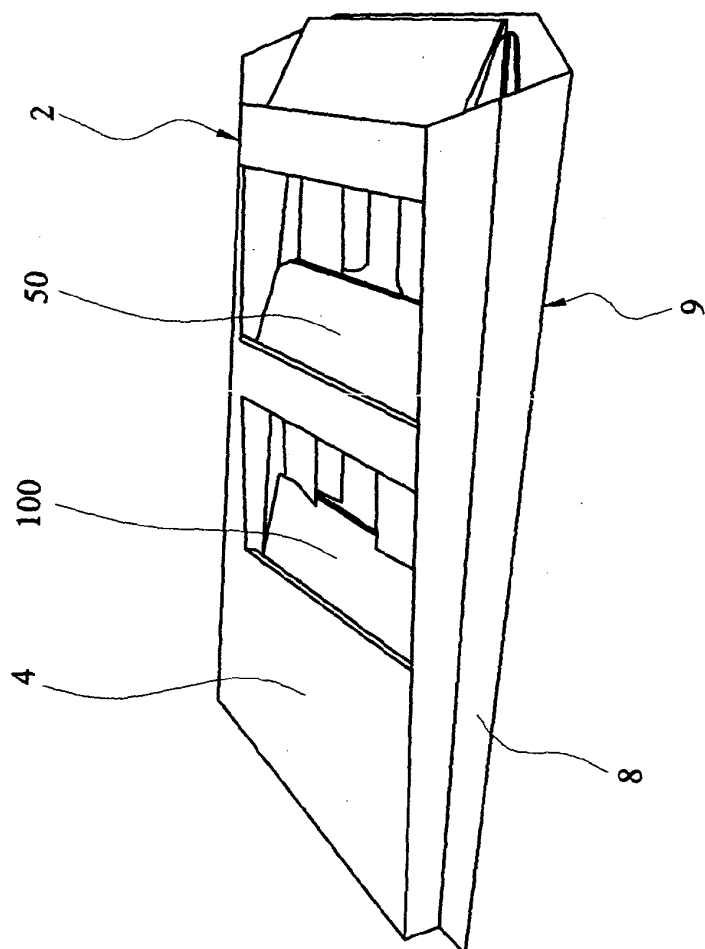


FIG. 4



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EUROPEAN SEARCH REPORT

Application Number
EP 04 25 7086

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 2002/108541 A1 (GRUENEBERG BEVAN E) 15 August 2002 (2002-08-15) * the whole document *	1,2,6	A47F5/11 A47B43/02
X	US 4 949 851 A (SHAFFER ET AL) 21 August 1990 (1990-08-21) * the whole document *	1-3,6	
Y		4,5	
Y	US 5 632 390 A (PODERGOIS ET AL) 27 May 1997 (1997-05-27) * abstract; figure 2 *	4,5	
A	EP 1 099 398 A (WIMO, NAAMLOZE VENNOOTSCHAP) 16 May 2001 (2001-05-16) * the whole document *	1-6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 March 2005	Examiner Pineau, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 04 25 7086

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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16-03-2005

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