



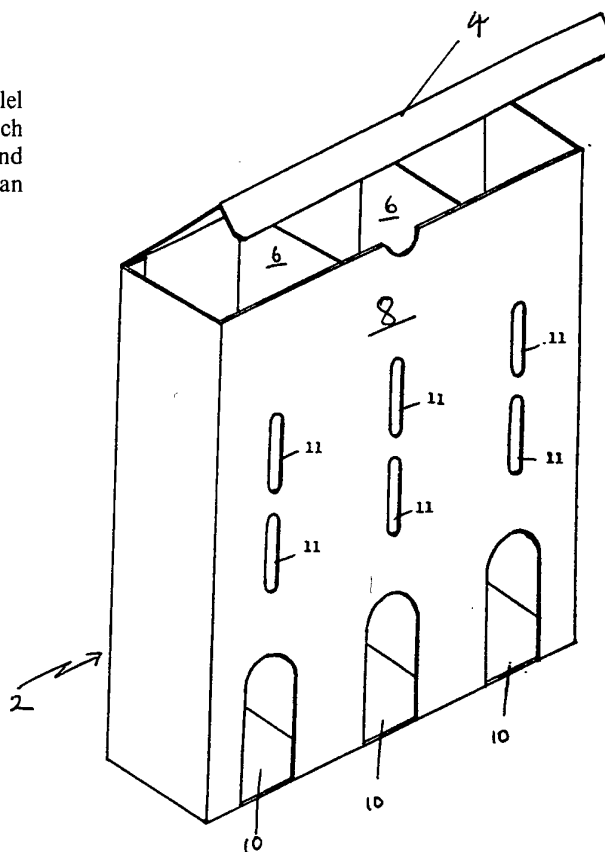
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<p>(51) International Patent Classification ⁵ : A47F 1/08, B65D 85/18 A47F 3/024, B65D 83/00, 83/08 B65D 5/16</p>	<p>A1</p>	<p>(11) International Publication Number: WO 94/06329 (43) International Publication Date: 31 March 1994 (31.03.94)</p>
<p>(21) International Application Number: PCT/AU92/00504 (22) International Filing Date: 23 September 1992 (23.09.92)</p> <p>(71)(72) Applicant and Inventor: TASSONI, Vincent, Anthony [AU/AU]; 136-140 Roden Street, West Melbourne, VIC 3003 (AU).</p> <p>(74) Agent: PHILLIPS ORMONDE & FITZPATRICK; 367 Collins Street, Melbourne, VIC 3000 (AU).</p> <p>(81) Designated States: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KP, KR, LK, LU, MG, MN, MW, NL, NO, PL, RO, RU, SD, SE, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG).</p>		<p>Published <i>With international search report.</i> <i>With amended claims.</i></p>

(54) Title: DISPENSERS FOR PROTECTIVE GLOVES

(57) Abstract

A dispenser for protective gloves comprises three parallel compartments each containing a different size of glove. Each compartment is filled through a filling opening at its upper end and the gloves are withdrawn by insertion of the hand through an opening at the lower end of the compartment.



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DISPENSERS FOR PROTECTIVE GLOVES

10 The present invention relates to a dispenser for protective, medical or other protective gloves and more particularly to the dispenser for dispensing gloves of different size.

 According to the present invention there is provided a dispenser for
15 protective gloves, comprising a container having a plurality of parallel compartments, each compartment having a filling opening at its upper end to permit filling of gloves into the compartment and a dispensing opening at the lower end of the compartment to permit removal of gloves by insertion of the hand into the opening.

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 Embodiments of the invention will now be described by way of example only with reference to the accompanying drawings in which:-

 Figure 1 is a perspective view of a first embodiment of dispenser in
25 accordance with the invention;

 Figure 2 is a perspective view of a wall bracket for mounting the dispenser;

30 Figure 3 is a perspective view of a second embodiment of the dispenser in accordance with the invention; and

Figures 4A and 4B are perspective views of further embodiments of the dispenser.

The dispenser shown in Figure 1 is in the form of a rectangular container 2 having an open upper end which is closable by means of a lid 4. The interior of the container is divided into several compartments by parallel partitions 6 extending vertically between the front and rear walls of the container. In the particular form shown there are three such compartments and each compartment extends vertically along the height of the container 2.

10 The front wall 8 of the container includes dispensing apertures 10 each opening from a respective one of the compartments, the aperture 10 being at the bottom of the associated compartment. In use, each of the compartments is filled with protective gloves (typically made of thin latex) through the upper end of the container, the gloves being supplied in a bulk package which can be

15 opened and its contents tipped into the upper end of the compartment. Each compartment contains gloves of a different size. Removal of the gloves is effected through the aperture 10 at the lower end of the compartment. When the gloves have been tipped into the compartment, portions of the lowermost gloves will tend to project through the dispensing apertures 10 and can thus be

20 readily grasped and removed when required for use. One or more windows 11 are formed in the front wall of each compartment to permit visual inspection of the amount of product in each compartment to facilitate replenishment when required.

25 The dispenser may be fabricated in cardboard or plastics sheet material by folding a suitable blank or may be injection moulded in suitable plastics material.

The dispenser may be mounted on the wall by means of a wall bracket 30 12 shown in Figure 2 in which the dispenser is removably fitted.

The dispenser shown in Figure 3 is generally similar to that shown in

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Figure 2 except that the lower portion of the container including the dispensing apertures 10 is enlarged to provide a deeper base which enables the dispenser to act as a free-standing unit which may be kept on a desk or table. In this embodiment, the enlargement of the base is effected by extending the lower part of the front wall 8 with a portion 8a directed outwardly and downwardly and a further portion extending downwardly 8b. The dispensing apertures 10 are formed in a zone adjacent the junction of the two wall portions in order to permit a hand easily to be inserted into the aperture from above and thereby to facilitate removal of the glove through the dispensing aperture. The bottom of each compartment preferably slopes towards the front in order to cause the contents to move towards the dispensing apertures. If the configuration of the free-standing unit is such that the unit might topple over when stood on a desk, this tendency can be counteracted by making the dispenser of weight such that it will not easily topple over when stood on a desk and this can be achieved by fabricating the dispenser by injection moulding from a suitable plastics, or by fabricating the dispenser from metal sheet, such as stainless steel sheet. The relative depth of the base and height of the dispenser will also influence the toppling characteristics and these dimensions can be such as to minimise the risk of toppling.

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The dispenser of Figure 3 can be fabricated relatively inexpensively by folding cardboard or plastics sheet material. The exterior of the container can be fabricated from a single blank of the sheet material which is shaped, and folded to form all of the external walls, including the front, rear, and side walls, the lid, and the base formed by wall portions 8a, 8b. The individual compartments are each defined by separately formed tubes of rectangular cross-section mounted within the exterior container. Each tube is itself formed from a separate one-piece blank, folded into tubular shape. The bottom edge of the tube is perpendicular to the axis of the tube so that the tube rests on the bottom wall of the exterior container, and at its lower end portion the tube includes an integral ramp formed by a flap, which slopes forwardly and downwardly from a position above the bottom edge of the tube to form the

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sloping bottom of the compartment in order to direct gloves towards the associated aperture 10 in the external container.

In another alternative embodiment as shown in Figure 4A, the
5 dispenser is formed from a group of plastics pipes secured in side-by-side
relation to define respective compartments. The pipes are open at their upper
ends to provide filling apertures and dispensing apertures 10 are provided at
the lower ends of the pipes. Inspection windows 11 are also provided. In a
modified embodiment as shown in Figure 4B the bottom portion of each pipe
10 is forwardly and downwardly directed to define a dispensing portion including
the dispensing aperture.

In each of the embodiments disclosed the dispensing apertures 10 each
have a concave or arched upper edge. This configuration has been found to
15 prevent tearing of the gloves as they are withdrawn.

Dispensers with three compartments have been described by way of
example only. When a particular dispenser is designed for a range of gloves
having more than three sizes, the dispenser will have a separate compartment
20 for each size of glove.

The embodiments have been described by way of example only and
modifications are possible within the scope of the invention.

CLAIMS:-

1. A dispenser for protective gloves, comprising a container having a plurality of parallel compartments, each compartment having a filling opening at its upper end to permit filling of gloves into the compartment and a dispensing opening at the lower end of the compartment to permit removal of gloves by insertion of the hand into the opening.
2. A dispenser according to claim 1, wherein each dispensing opening has an arched upper edge.
3. A dispenser according to claim 1 or claim 2, comprising at least one window in a wall of each compartment to permit visual inspection of the contents within the compartment.
4. A dispenser according to any one of claims 1 to 3 comprising three said compartments, the respective compartments containing a different size of glove.
5. A dispenser according to any one of claims 1 to 4, wherein each compartment comprises a vertical shaft of constant cross-section throughout its length, the axis of the compartment being rectilinear.
6. A dispenser according to any one of claims 1 to 4, wherein each compartment comprises a vertical shaft portion of constant cross-section extending downwardly from the filling opening, the vertical shaft portion leading at its lower end into a forwardly and downwardly inclined shaft portion having the dispensing opening at its lower end, the inclined shaft portion having a bottom which slopes forwardly and downwardly.

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7. A dispenser according to claim 6, wherein a part of the dispensing opening is formed in a wall of the compartment facing the sloping bottom.
8. A dispenser according to claim 5, wherein the dispenser is formed from folded sheet material.
9. A dispenser according to claim 6 or claim 7, wherein the dispenser comprises an outer container formed from folded sheet material, and each compartment comprises a respective tube formed from folded sheet material and housed within the outer container, each said tube having at its lower end portion an inclined ramp which defines the sloping bottom.
10. A dispenser substantially as hereinbefore described with reference to the accompanying drawings.

AMENDED CLAIMS

[received by the International Bureau on 25 May 1993 (25.05.93);
new claims 11-14 added; other claims unchanged (2 pages)]

7. A dispenser according to claim 6, wherein a part of the dispensing opening is formed in a wall of the compartment facing the sloping bottom.

5 8. A dispenser according to claim 5, wherein the dispenser is formed from folded sheet material.

9. A dispenser according to claim 6 or 7, wherein the dispenser comprises an outer container formed from folded
10 sheet material, and each compartment comprises a respective tube formed from folded sheet material and housed within the outer container, each said tube having at its lower end portion an inclined ramp which defines the sloping bottom.

15 10. A dispenser substantially as hereinbefore described with reference to the accompanying drawings.

11. A dispensing system for protective gloves, comprising a dispenser as claimed in any preceding claim and at least one
20 package containing a bulk quantity of protective gloves for dispensing from the dispenser, the package being openable for supplying gloves to one or more of the compartments for subsequent removal therefrom through the dispensing opening.

25 12. A dispensing system as claimed in claim 1, wherein the gloves are arranged within the bulk package for tipping from an opened package through the filling opening into a respective compartment.

30 13. A dispensing system as claimed in claim 11 or 12, wherein the gloves are arranged within the bulk package so that, when supplied to a compartment, portions of the lower most gloves will be presented toward the dispensing opening of the compartment for removal.

14. A dispensing system as claimed in any one of claims 11 to 13, wherein bulk packages containing gloves of different sizes are provided for supplying gloves of different sizes to respective compartments.

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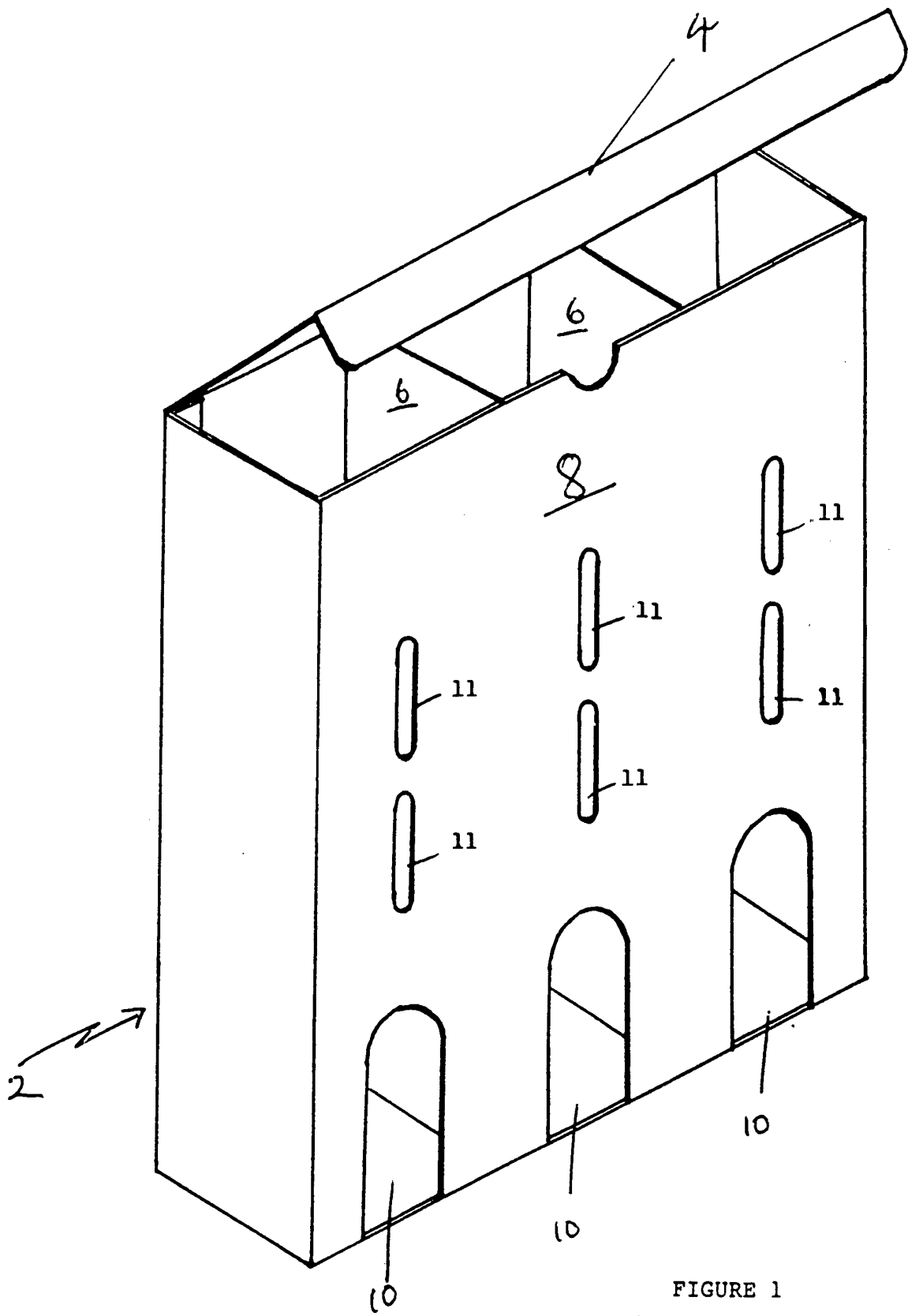


FIGURE 1

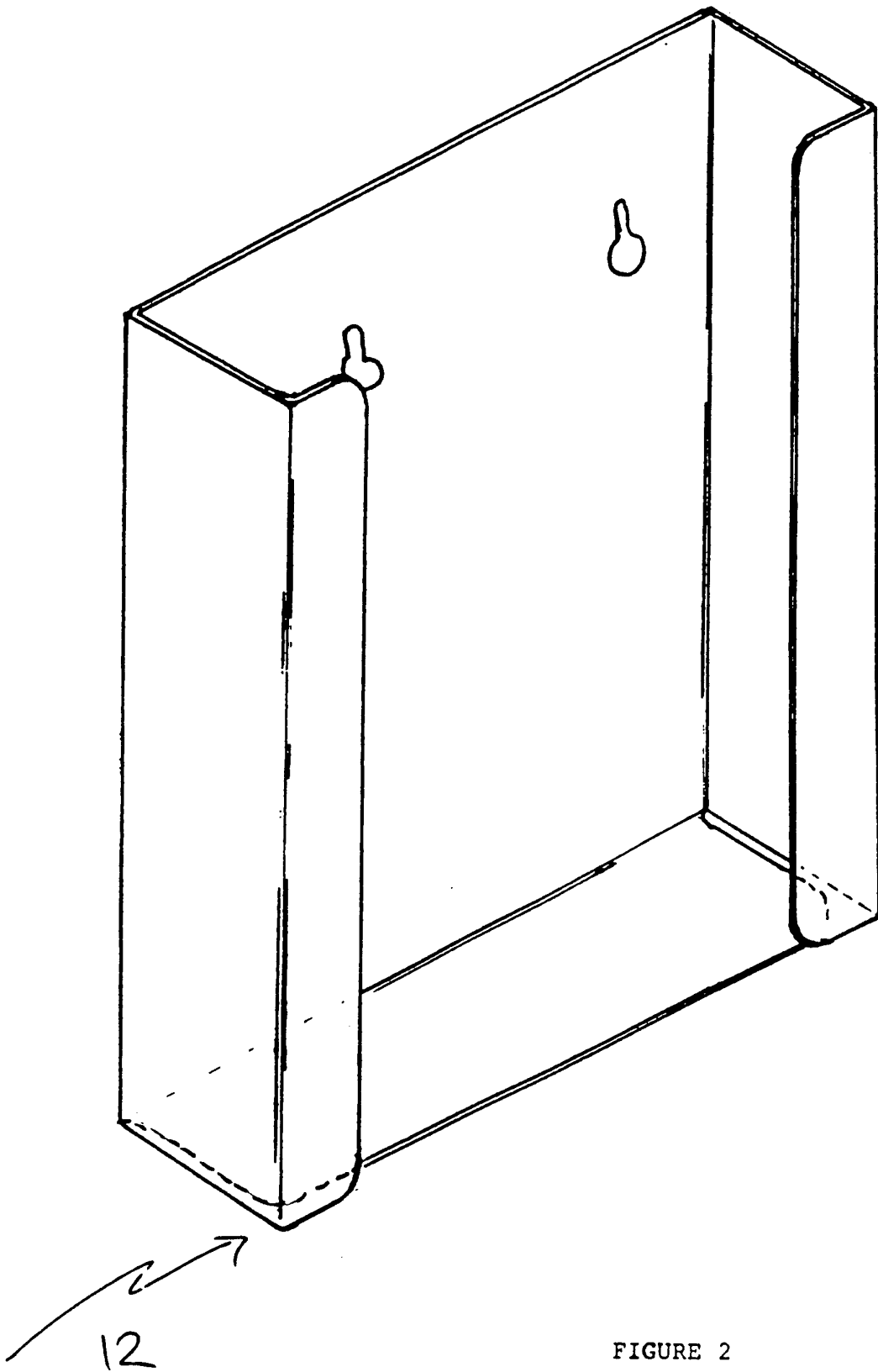


FIGURE 2

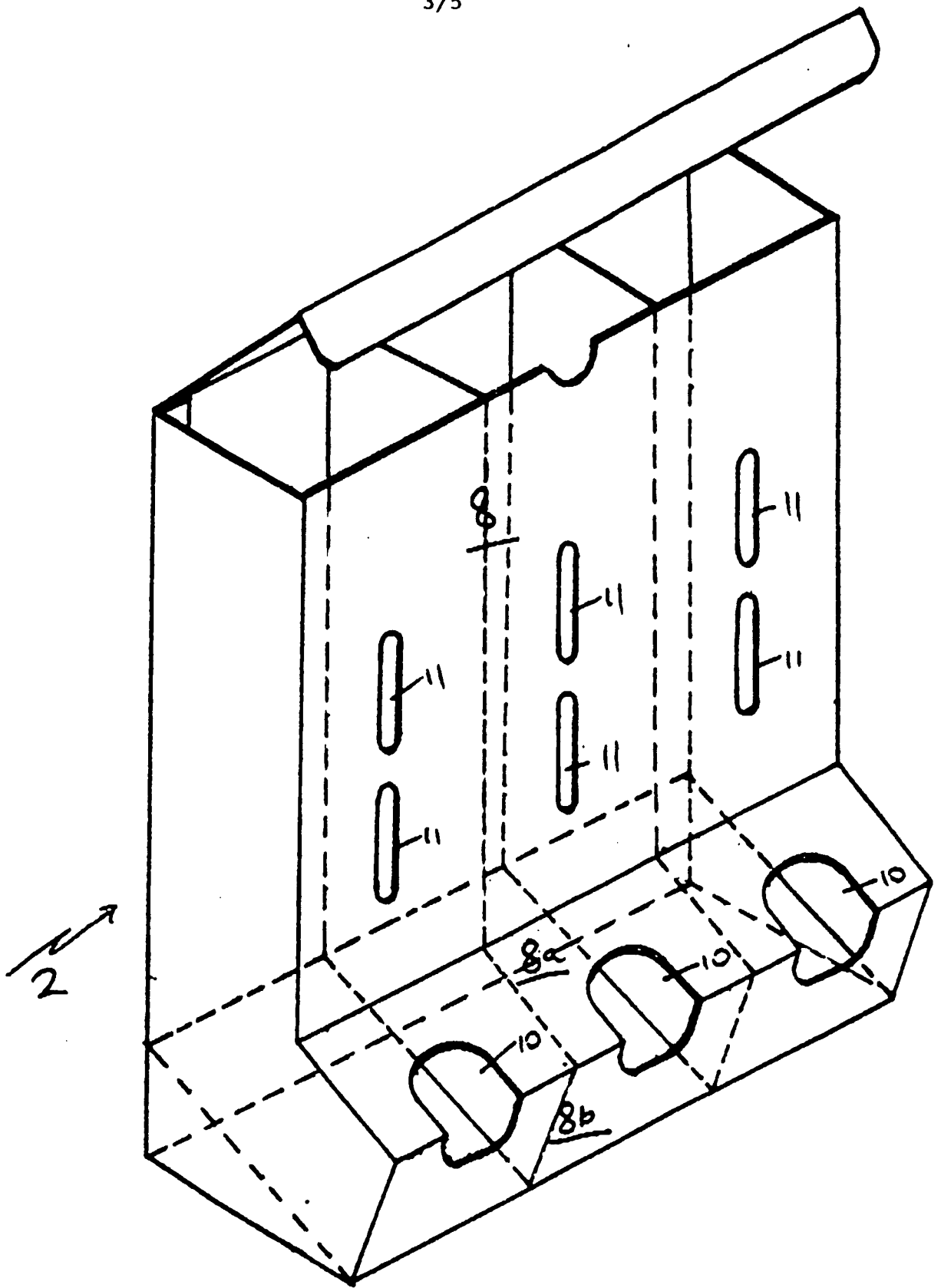


FIGURE 3

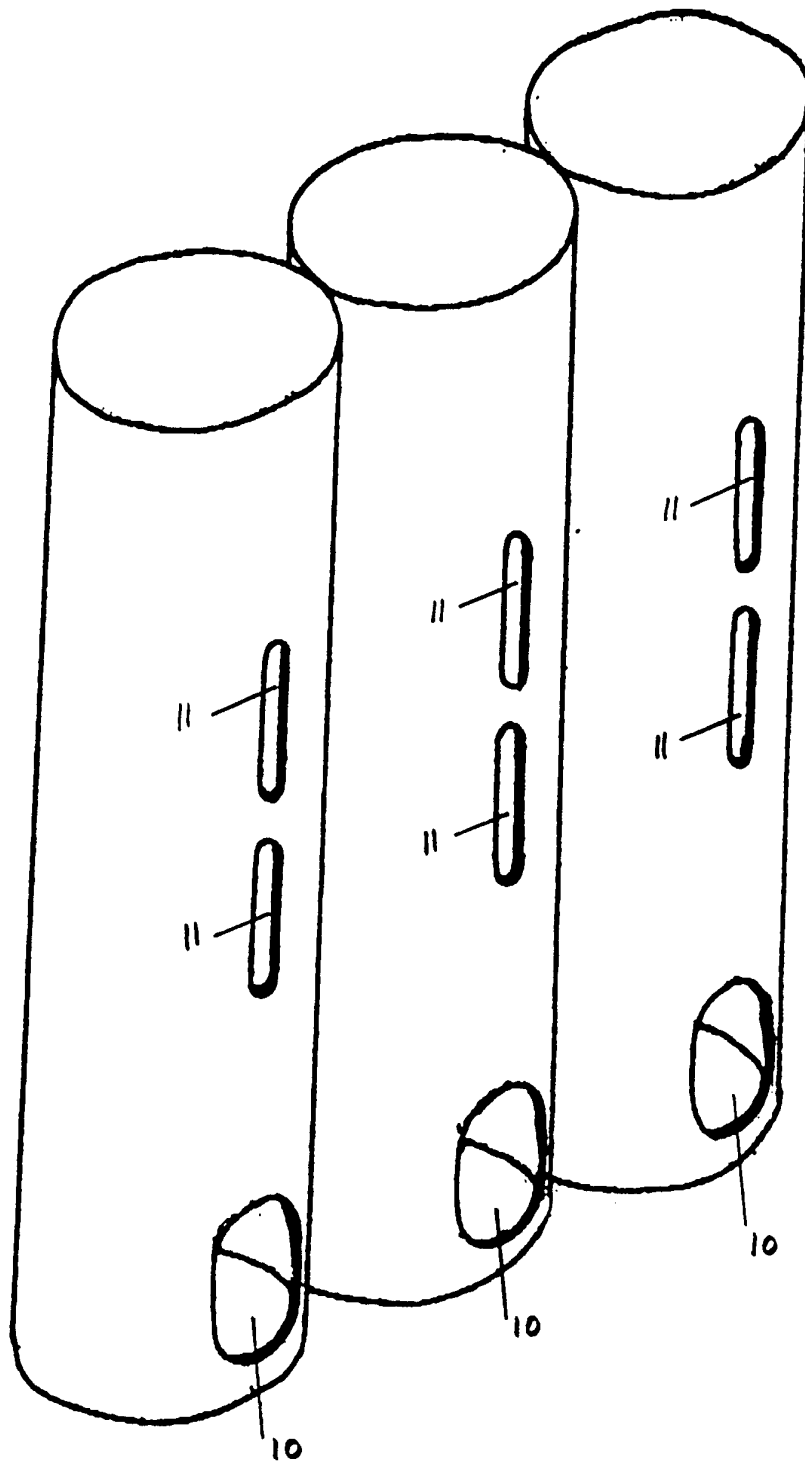


FIGURE 4A

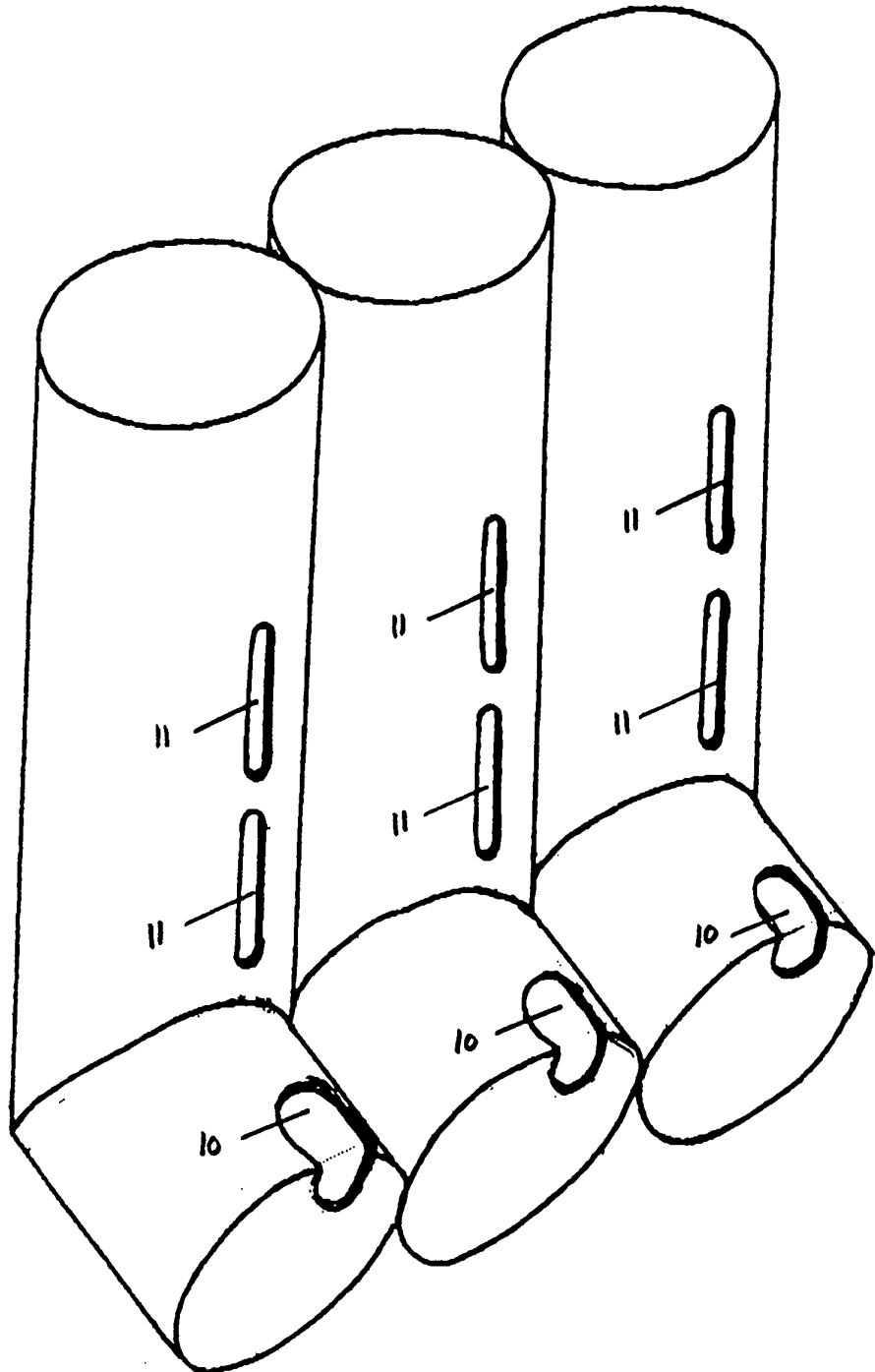



FIGURE 4B

A. CLASSIFICATION OF SUBJECT MATTER Int. Cl. ⁵ A47F 1/08, B65D 85/18, A47F 3/024, B65D 83/00, 83/08, 5/16 According to International Patent Classification (IPC) or to both national classification and IPC.		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC : A47F 1/08, 3/024; B65D 85/18, 83/00, 5/16 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched AU : IPC as above Electronic data base consulted during the international search (name of data base, and where practicable, search terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to Claim No.
X	EP, A, 0305236 (MAOUT, Georges Henri) 1 March 1989 (01.03.89) whole of document, especially fig 5.	1, 4, 5
X	US, A, 4170325 (PAWLOWSKI et al) 9 October 1979 (09.10.79) fig 1	1, 5
Y	column 2 line 31 to column 3 line 30	8, 9
Y	AU, A, 31417/89 (ROTHMANS OF PALL MALL (AUSTRALIA) LTD) 5 October 1989 (05.10.89) page 4, fig 3	1, 3 - 5
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C.		
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Date of the actual completion of the international search 13 November 1992 (13.11.92)		Date of mailing of the international search report 18 NOV 92 (18.11.92)
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate of the relevant passages	Relevant to Claim No.
Y	US, A, 4382526 (STONE) 10 May 1983 (10.05.83) Fig 1 - 5	1, 5, 8, 9
Y	CH, A, 502806 (UNDERBERG GmbH) 31 March 1971 (31.03.71) Fig 1, 2	1, 5 - 7
Y	EP, A, 0195170 (TEMPO - SANYS société dite) 24 September 1986 (24.09.86) Fig 1, page 2 line 9 to page 4 line 31	1, 6
Y	DE, A, 2920127 (KERR GmbH) 27 November 1980 (27.11.80) Fig 1, 2, page 5 line 2 to page 7 line 17	1, 5
Y	US, A, 3450308 (SCHOENEFELD) 17 June 1969 (17.06.69) Fig 1 - 12	8, 9
Y	AU, B, 59430/65 (403602) (RUBBER PRODUCTS DEVELOPMENT PROPRIETARY LIMITED) 23 November 1967 (23.11.67) Page 4, figs 1 - 5	1

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU92/00504

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member					
US	3450308						
US	4170325						
US	4382526						
CH	502806	AT	299487	BE	749746	CH	502806
		ES	158115	FR	2046565	GB	1311751
		LU	60838	NL	7006484		
EP	305236	FR	2619364				
EP	195170	AT	52990	DE	3577835	ES	295970
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