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**U1S S1131 S1146 S1789**

(56) Documents Cited

**GB 2267271 A GB 0380357 A WO 93/22961 A1**

**WO 93/04965 A1 US 4191307 A**

(58) Field of Search

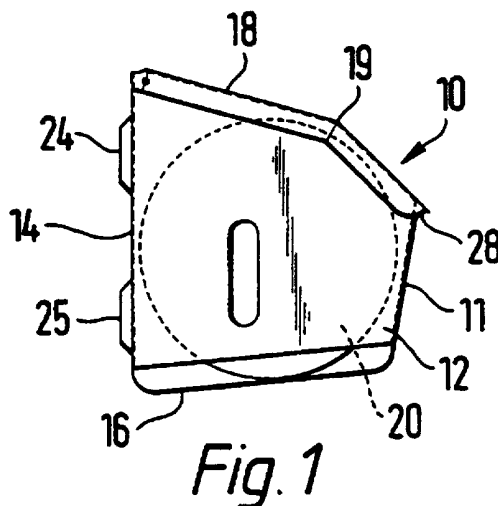
**UK CL (Edition O ) B8M MB10 MB3 MB4 MB6**

**INT CL<sup>6</sup> A47K , B65D , B65H**

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## (54) SHEET ARTICLE DISPENSER

(57) A cabinet 10 for housing sheet articles in a continuous roll form 20 and for dispensing them separately from an outlet thereof has a back 14 which is arranged to be secured to a vertical wall and a bottom 16 which is arranged to be inclined upwardly from said wall. The bottom of the cabinet extends at 72° to 87° and preferably at 84° relative to the wall. The cabinet has a lid 18, with a bend line 19, and side walls 12, 13 with openings for viewing the contents. The cabinet may be used to dispense articles of sheet plastics material such as aprons, bags or gloves.



At least one drawing originally filed was informal and the print reproduced here is taken from a later filed formal copy.

The claims were filed later than the filing date within the period prescribed by Rule 25(1) of the Patents Rules 1995

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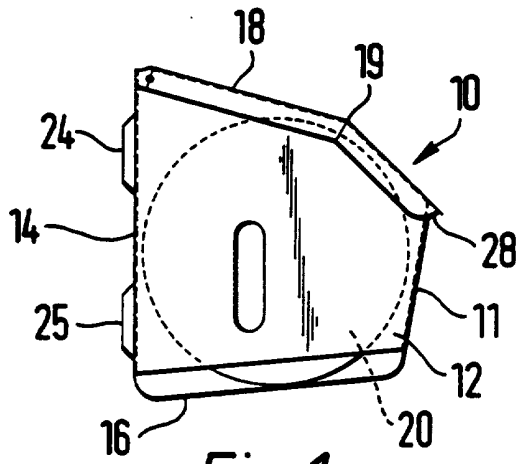


Fig. 1

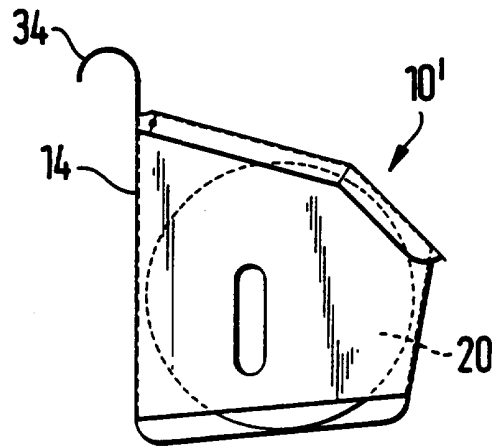


Fig. 4

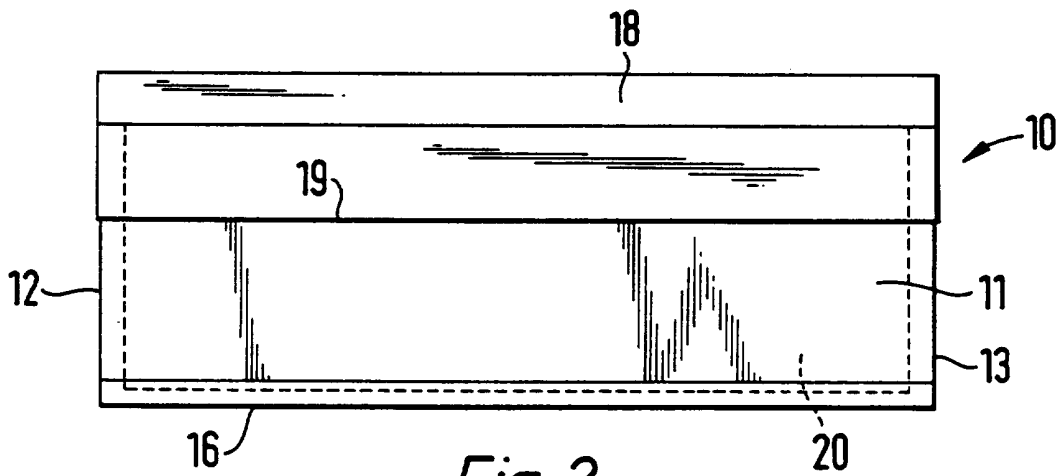


Fig. 2

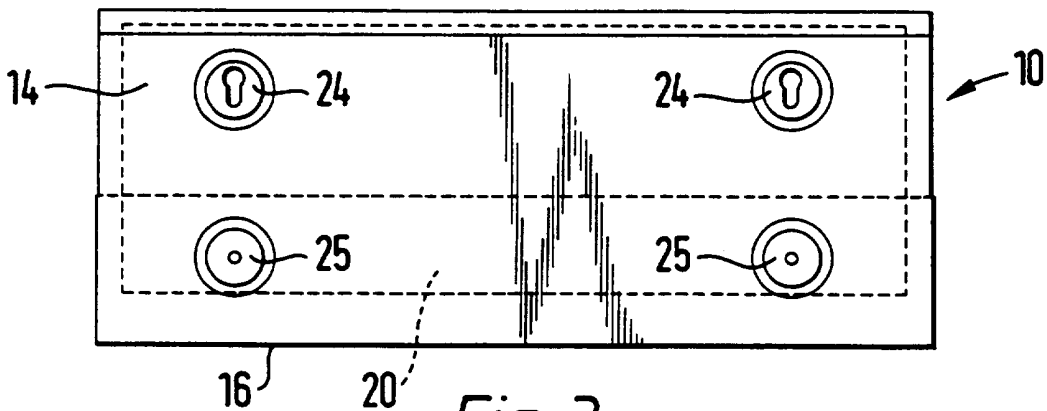


Fig. 3

### **SHEET ARTICLE DISPENSER**

The present invention relates to a dispenser of sheet articles and especially articles of sheet plastic material such as aprons, bags, gloves etc.

At present such articles are conventionally disposed from flat packs and such an arrangement can be inconvenient and unsightly.

The present invention seeks to overcome or reduce this problem.

According to a first aspect of the invention there is provided a cabinet for housing sheet articles in a continuous roll form and for dispensing them separately from an outlet thereof wherein the back of the cabinet is arranged to be secured to a vertical wall and the bottom of the cabinet is arranged to be inclined upwardly from said wall.

Preferably the bottom of the cabinet extends at  $72^{\circ}$  to  $87^{\circ}$  relative to the wall, more preferably at  $83^{\circ}$  to  $85^{\circ}$  thereto, and most preferably at substantially  $84^{\circ}$ .

According to a second aspect of the present invention there is provided a method of dispensing gloves of thin material, e.g. rubber or plastics material, comprising inserting into a dispensing cabinet a continuous roll formed of a plurality of said gloves secured to each other by means of lines of separation and dispensing said gloves from an outlet of the cabinet individually or in pairs.

Preferred embodiments of the present invention will now be described, by way of example only, with reference to the accompanying drawings, of which:

Fig.1 is a side view of a cabinet in accordance with a first embodiment of the present invention;

Figs.2 and 3 are front and rear views respectively of the cabinet of Fig.1; and

Fig.3 is a side view of a modified cabinet.

Referring now to the drawings, a cabinet 10 comprises front 11, side 12,13, rear 14 and bottom 16 walls of sheet metal material. Pivotally secured to the top of rear wall 14 is a lid 18, also conveniently of sheet metal material. Lid 18 is bent about a line 19 about two thirds of the way along its width. This serves to enable the cabinet 10 to house a roll 20 without waste of space.

The rear wall 14 incorporates dimple formations 24 for attaching to a vertical building wall therebehind, and further dimple formations 25 for cushioning the cabinet and for ensuring that the cabinet is mounted substantially vertical in use.

Roll 20 is preferably of plastics sheet material formed into a plurality of articles secured to each other by lines of perforation or other weakening. The articles may be plastic bags, aprons, gloves etc.

The side walls 12,13 incorporate elongate openings 42 to enable the size of the roll to be viewed without opening the cabinet. If necessary the cabinet can be refilled by opening lid 18.

In use a roll 20 is inserted in dispenser cabinet 10 with a short free end projecting from a slot formed between the front edge of lid 18 and a top lip 28 of front wall 11. The material of the roll passes over the lip 28 before separation of the next item. The lip 28 smoothes the flow of material and prevents snagging of apertured parts etc of the articles as they are dispensed. The lip also provides a stiffening edge to provide sufficient resistance to allow snatch ripping to separate an item from the roll. In the absence of the roll material, the front edge

of the lid 18 makes contact with lip 28, so that, when the roll material is present, the edges of the slot formed provide a local smoothing and braking action to facilitate satisfactory dispensing.

It has been found that to ensure proper and even dispensing of the roll, the angle of bottom wall 16 should be at an angle of  $3^{\circ}$  to  $18^{\circ}$  to the horizontal preferably  $5^{\circ}$  to  $7^{\circ}$  and most preferably substantially  $6^{\circ}$ . In this way the roll is maintained at the ideal position as it becomes smaller with use and jamming is prevented.

The dispenser 10 may be used in various applications, e.g. medical, food handling, and in filling stations.

Various modifications can be made to the above described embodiment. For example the cabinet 10 may be wholly or partly of plastic material if desired, lid 18 may have a central pivot along line 19. Alternatively a fixed top wall may be provided and the whole or part of the front wall 11 may pivot open to permit a fresh roll 20 to be installed.

In a modified cabinet 10', Fig.4, the rear wall 14 has hooks 34 at its ends to enable the cabinet to be hung on a suitable support. Such a cabinet is especially suitable for use in dispensing gloves on filling station forecourts to prevent customer's hands coming into contact with fuel.

CLAIMS

1. A cabinet for housing sheet articles in a continuous roll form and for dispensing them separately from an outlet thereof, wherein the back of the cabinet is arranged to be secured to a vertical wall and the bottom of the cabinet is arranged to be inclined upwardly from said wall.
2. A cabinet according to claim 1, wherein the bottom of the cabinet extends at  $72^{\circ}$  to  $87^{\circ}$  relative to the wall.
3. A cabinet according to claim 2, wherein the bottom of the cabinet extends at  $83^{\circ}$  to  $85^{\circ}$  relative to the wall.
4. A cabinet according to any preceding claim, comprising a lid pivotally secured to the back of the cabinet, the lid being bent about a line parallel to the vertical wall.
5. A cabinet according to claim 4, wherein the line is substantially two thirds of the way from the back to the front of the cabinet.
6. A cabinet according to claim 4 or 5, wherein the front of the cabinet has a top lip adjacent to the front edge of the lip.
7. A cabinet according to any preceding claim, comprising side walls with openings therein for receiving the sheet articles in continuous roll form.
8. A cabinet substantially as herein described with reference to Figs 1 to 3 or Fig 4 of the accompanying drawings.

9. A method of dispensing gloves of thin material comprising inserting into a dispensing cabinet a continuous roll formed of a plurality of said gloves secured to each other by means of lines of separation and dispensing said gloves from an outlet of the cabinet individually or in pairs.
10. A method according to claim 9, wherein the gloves are of rubber or plastics material.
11. A method of dispensing gloves of thin material employing a cabinet according to any of claims 1 to 8.

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**Patents Act 1977**  
**Examiner's report to the Comptroller under Section 17**  
**(The Search report)**

Application number  
GB 9424502.4

**Relevant Technical Fields**

- (i) UK Cl (Ed.O)      B8M (MB3, MB4, MB6, MB10)  
(ii) Int Cl (Ed.6)      B65H, A47K, B69D

Search Examiner  
M DAVEY

Date of completion of Search  
8 FEBRUARY 1996

**Databases (see below)**

(i) UK Patent Office collections of GB, EP, WO and US patent specifications.

Documents considered relevant following a search in respect of Claims :-  
1 TO 8

(ii) ONLINE: WPI

**Categories of documents**

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|--|---|
| <p><b>X:</b> Document indicating lack of novelty or of inventive step.</p> <p><b>Y:</b> Document indicating lack of inventive step if combined with one or more other documents of the same category.</p> <p><b>A:</b> Document indicating technological background and/or state of the art.</p> | <p><b>P:</b> Document published on or after the declared priority date but before the filing date of the present application.</p> <p><b>E:</b> Patent document published on or after, but with priority date earlier than, the filing date of the present application.</p> <p><b>&amp;:</b> Member of the same patent family; corresponding document.</p> |
|--|---|

Category	Identity of document and relevant passages	Relevant to claim(s)
X	GB 2267271 A (FORT HOWARD CORP) see bottom wall 16 in Figure 2 in particular	1, 2
X	GB 380357 (JOHNSON & JOHNSON) see bottom 7 in Figure 3 in particular	1, 2
X	WO 93/22961 A1 (FELDMANN) see base 32 in the Figure in particular	1, 2
X	WO 93/04965 A1 (GEORGIA-PACIFIC CORP) see base 50 in Figures 3, 4 in particular	1, 2
X	US 4191307 (LECAIRE) see base 36 extending from rear wall 25 in Figure 3	1, 2

**Databases:** The UK Patent Office database comprises classified collections of GB, EP, WO and US patent specifications as outlined periodically in the Official Journal (Patents). The on-line databases considered for search are also listed periodically in the Official Journal (Patents).