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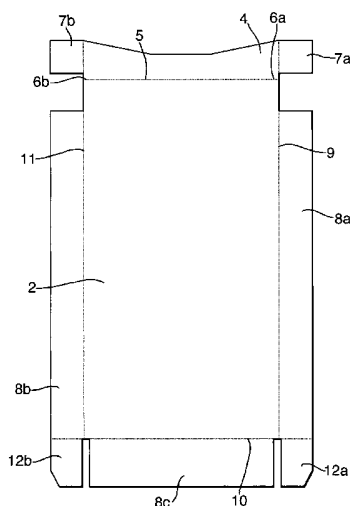
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Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PACKAGING AND DISPLAY BOX



(57) Abstract: A packaging and display box (1). The box (1) has a base (2) with a retaining wall (4) adjacent a section of its perimeter. The wall is for retaining a primary package. The box has a lid (3) which extends between two portions of the base. The lid (3) covers at least a part of the primary package. The lid (3) is attached to the retaining perimeter wall such that removal of the lid from the package causes detachment of the perimeter wall from the base.

PACKAGING AND DISPLAY BOX

The present invention relates to packaging and displaying box.

5

Packaging boxes are extremely commonplace. One of the main purposes of packaging boxes (by which it is intended to refer to secondary packaging boxes) is to accommodate primary packages containing a consumer product.

10 The secondary packaging boxes provided an easy way of holding / protecting multiple primary packages between the point of manufacture and the point of retail to a consumer. The secondary packaging boxes may be used on, for example, a supermarket / shop shelf as a retention /

15 display aid for a product.

Normally the secondary packaging boxes have a simple construction and comprise a sheet of folded card or cardboard. The sheet is assembled into the desired shape (by

20 folding) before being filled with the primary packages.

The boxes typically comprise a base having a peripheral wall and a removable lid. When the lid is removed the peripheral wall is high enough to retain the primary

25 packages and to allow the secondary package to be moved without loss of its contents, yet the peripheral wall is low enough for a consumer to see the primary packages contained in the secondary packaging and to remove them therefrom.

30

Whilst the peripheral wall is a useful retention aid its presence is also disadvantageous, as clearly a portion of the primary package is obscured by the peripheral wall when present in the secondary packaging.

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This can be particularly detrimental as an important part of the primary package can be obscured. The obscured part of the primary package may, for example, comprise an significant warning for a consumer or a beneficial notice such as 'money-off' indication.

To compound this issue there is ever increasing pressure on manufacturers to make their primary packaging ever more appealing / eye catching to a consumer whilst at the same time complying with changing safety legislation. Normally it is not possible to have a 'blank' part of a primary package which can be obscured by a retaining wall.

Additionally secondary packaging may vary from country to country, meaning that for a product sold in more than one jurisdiction the primary package would have to be altered to take into account local variations in the secondary packaging.

Whilst manufacturers are aware that the presence of this peripheral wall is problematic, this issue cannot easily be addressed.

It is an object of the present invention to obviate / mitigate the issues outlined above.

According to the present invention there is provided a packaging and display box, the box having a base with a retaining wall adjacent a section of its perimeter for retaining a primary package and a lid which extends between two portions of the base, the lid covering at least a part of the primary package, wherein the lid is attached to the retaining perimeter wall such that removal of the lid from the package causes detachment of the perimeter wall from the base.

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It has been found that the packaging and display box of the present invention has excellent properties.

5 Firstly as the retaining wall is removed with the removal of the lid, the packaging and display box, in use, allows clear display of the entire surface of a primary package contained therein. Thus no labelling or graphics printed on the surface are obscured by the re-
10 taining wall. This makes a selection of the primary package by a consumer less ambiguous and more safe.

Secondly as the retaining wall is removed in a single operation with the lid there is no need for a second
15 step to remove the retaining wall. This removes the need for a potentially dangerous cutting / tearing operation performed on the perimeter wall. Additionally this removes the potential for damage caused to the primary packaging in such a secondary removal step.

20 Preferably the perimeter wall removed from the base is disposed along an edge of the base which is intended to face a consumer, when the box is placed on, for example, a supermarket shelf. Removal of this wall improves
25 visibility of the primary packaging in the box.

The base preferably has an additional retained perimeter wall extending around the remainder of the perimeter of the base. By remainder it will be clearly understood that the term remainder is intended to refer to
30 the less prominent sides / faces of the displaying box, i.e. those sides / faces which are not intended to be viewed directly by a consumer when the displaying box is placed in a display position. The additional retaining
35 wall is not intended to be removed on removal of the lid;

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it is intended to remain in place and provide a retention function for the box.

Generally the base of the box is formed from a sheet
5 of material such as a sheet of card, thickened paper or cardboard.

Usually the perimeter wall is formed by folding the edge of the sheet inwards.

10

The removable perimeter wall is preferably formed by folding as above. To facilitate removal of the removable perimeter wall the fold between the wall and the base is preferably weakened. Preferred methods of weakening include scoring and cutting along the fold. Most preferably the fold between the base and the removable perimeter wall is cut along the majority of its length for ease of removal. To ensure that the removable perimeter wall adheres to the base before removal a portion of the fold, preferably adjacent the terminii of the fold remains in place.

The removable perimeter wall is attached to the lid. The attachment may be direct, i.e. a portion of the wall may be attached to a portion of the lid. Alternatively the attachment may be indirect, i.e. one or more of the removable perimeter wall and / or the lid has an appendage (e.g. such as a flap) which can be used for attachment. Most preferably the removable perimeter wall has a flap for this purpose. The flap may be adhered to the lid by gluing (with an adhesive) or may be physically bonded to the lid, e.g. by retention of the flap in a receiving aperture of the lid. Most preferably the flap is glued to the lid.

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Generally the flap from the removable peripheral wall extends from an edge of the wall. Most preferably the flap extends from a side edge, so that the flap may be folded about a vertical fold towards the box. Normally the removable peripheral wall comprises two flaps, with one disposed at each side edge.

It is preferred that the lid extends along the length of the box to offer protection for the primary packages in the box. Preferably the lid comprises a sheet of folded material, e.g. card as above. Generally the lid is in the form of a plane with a pair of dependent curtains (formed by folding, running along opposite edges of the plane). The lower edges of the curtains are intended to extend such that they are adjacent to the retained peripheral walls of the box, thus covering the primary packages.

The curtains are preferably attached to the box at / by the flaps of the removable peripheral wall, as described above.

Generally the packaging and displaying box of the present invention is intended to be used to hold primary packages in the form of rectangular boxes. Clearly the boxes may be used to hold a variety of consumer products. One preferred product is a detergent, in the form of, for example, a powder, tablet or soluble capsules.

In use the packaging and displaying box is placed in the desired locus and the lid is gripped and removed in a pulling action. In removing the lid the removable perimeter wall is separated from the base of the box and the contents of the box (the primary packages) become clearly visible.

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The invention will now be described by reference to the following non limiting figures, in which:-

Figures 1a and 1b are plan views of a sheet of material used to form the base and lid of a box of the present invention:

Figures 2 to 4 are perspective views of a partially assembled / fully assembled box of the present invention.

From Figures 1a and 1b can be seen that the box 1 comprises a base section 2 and a hood 3.

The base section 2 is formed from a sheet of material (e.g. cardboard) the base section 2 has a removal retaining wall 4 created by folding about a line 5. Line 5 is then cut along the majority of its length leaving two attachment points 6a and 6b. The retaining wall 4 has two edge flaps 7a and 7b for attachment to the hood 3.

A non-removable retaining wall 8 is created by folding about lines 9, 10 and 11. The individual wall sections 8a, 8b and 8c are retained position by being adjoined through flaps 12a and 12b.

The hood 3 is similarly formed from a sheet of material (e.g. cardboard).

The hood 3 comprises a planar section 13 and two dependent curtains 14a and 14b formed by folding along lines 15a and 15b respectively.

From Figures 2 to 4 it can be seen how the box 1 is assembled. In Figure 2 the hood 3 is offered to the base

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section 2, wherein the base section 2 contains a plurality of primary packages 16.

In Figure 3 the hood 3 is seated on the primary
5 packages 16.

In Figure 4 the removable retaining wall 4 is folded
about line 5, the edge flaps 7a and 7b are folded inwards
and adhered (e.g. by gluing) to the curtains 14a and 14b.
10

When the hood 3 is removed from the base section 2
the removable retaining wall 4 because of its attachment
to the hood 3 is removed simultaneously.

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CLAIMS

1. A packaging and display box, the box having a base with a retaining wall adjacent a section of its perimeter for retaining a primary package and a lid which extends
5 between two portions of the base, the lid covering at least a part of the primary package, wherein the lid is attached to the retaining perimeter wall such that removal of the lid from the package causes detachment of
10 the perimeter wall from the base.

2. A box according to claim 1, wherein the perimeter wall removed from the base is disposed along an edge of the base which is intended to face a consumer, when the box
15 is placed on, for example, a supermarket shelf.

3. A box according to claim 1 or 2, wherein the base has an additional retained perimeter wall extending around the remainder of the perimeter of the base.
20

4. A box according to claim 1, 2 or 3, wherein the base of the box is formed from a sheet of material such as a sheet of card, thickened paper or cardboard.

25 5. A box according to claim 4, wherein the perimeter wall is formed by folding the edge of the sheet inwards.

6. A box according to claim 5, wherein the fold between the removable perimeter wall and the base is weakened.
30

7. A box according to claim 6, wherein the weakening is by scoring and / or cutting along the fold.

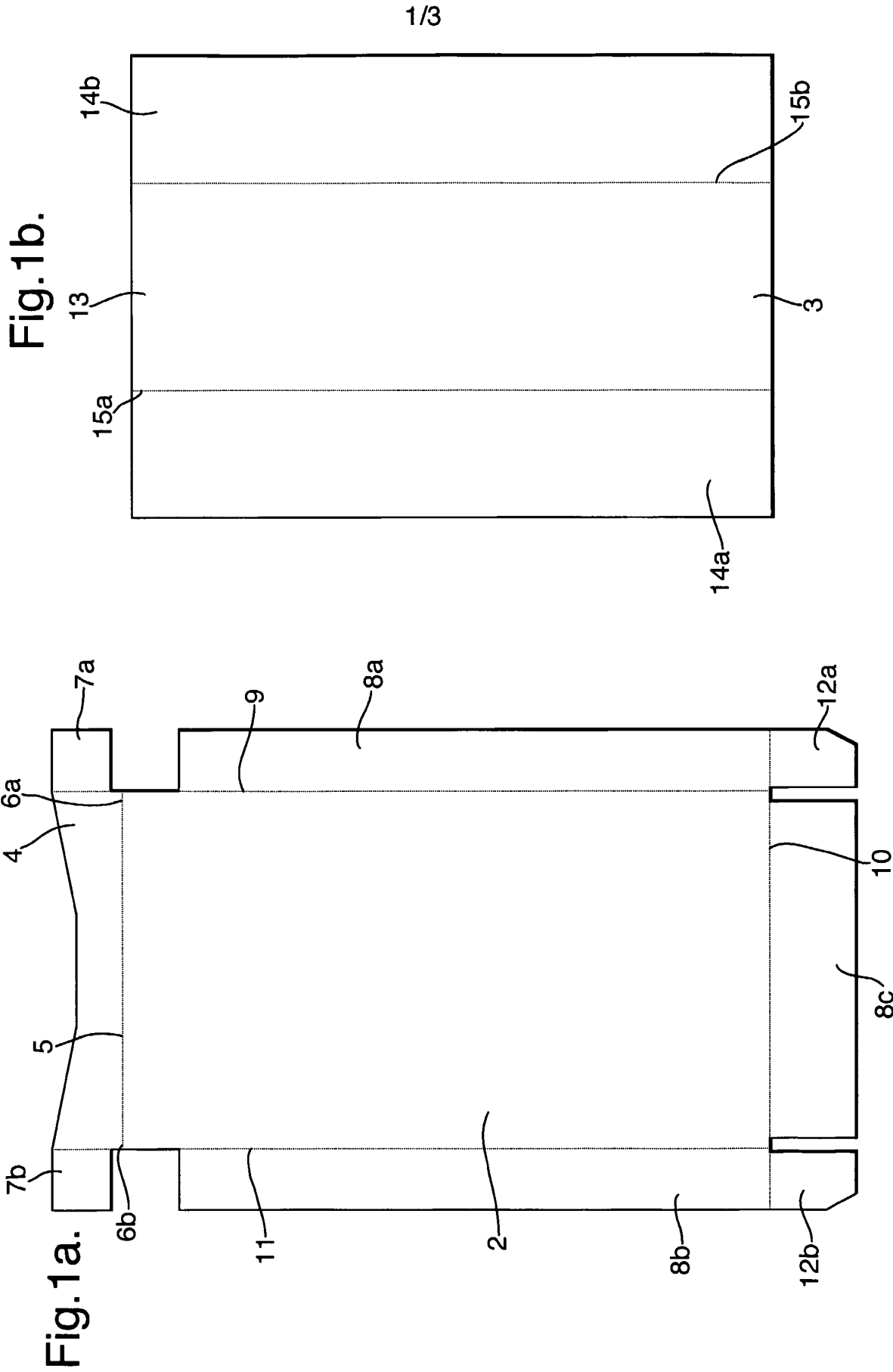
8. A box according to any one of the proceeding claims, wherein the removable perimeter wall is attached to the
35 lid by a flap extending from the wall.

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9. A box according to claim 8, wherein the flap is glued to the lid.

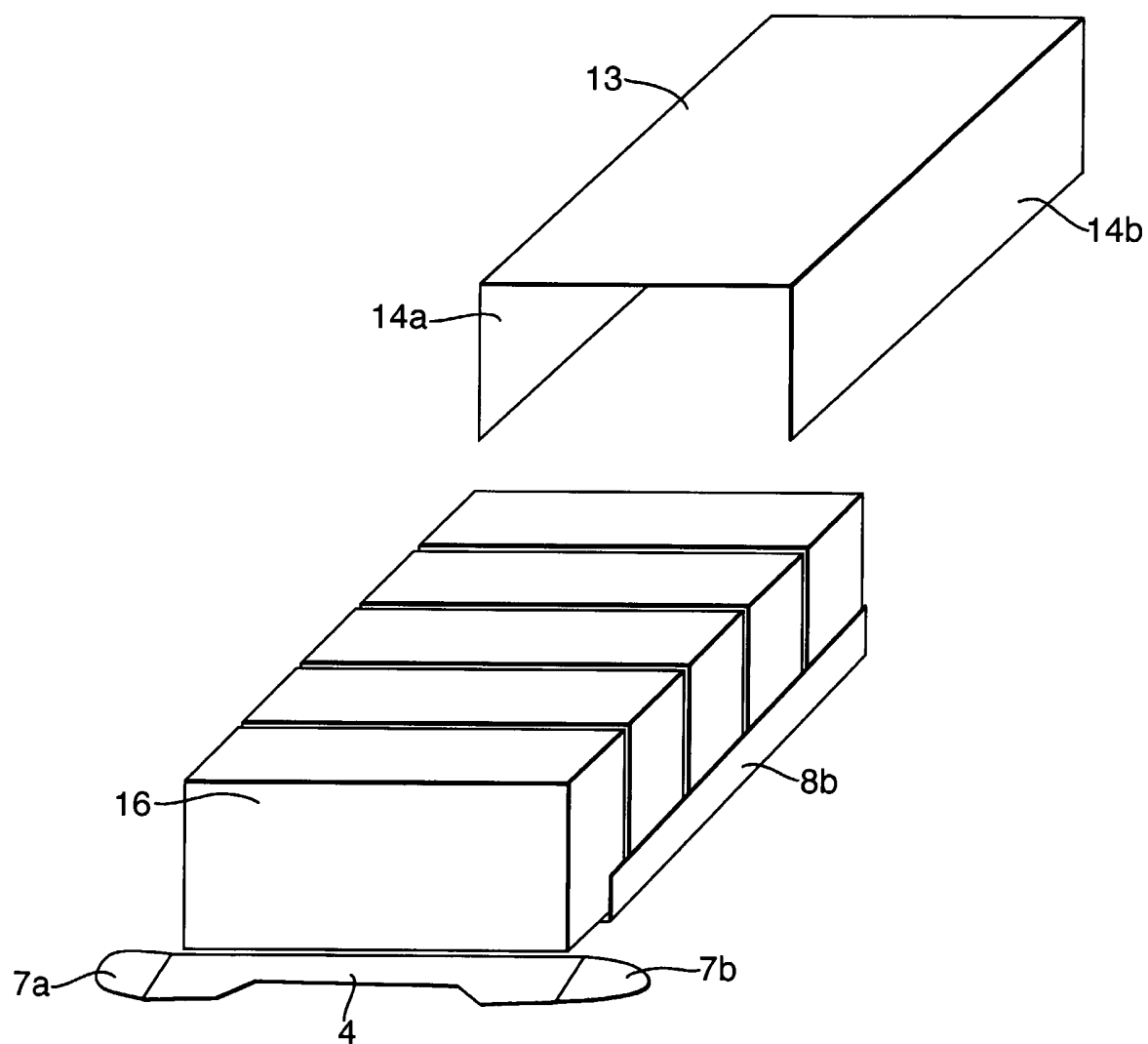
5 10. A box according to any one of the proceeding claims, wherein the box is intended to be used to hold primary packages in the form of rectangular boxes.

10 11. A box as hereinbefore described and further with reference to Figures 1 to 4.



2/3

Fig.2.



3/3

Fig.3.

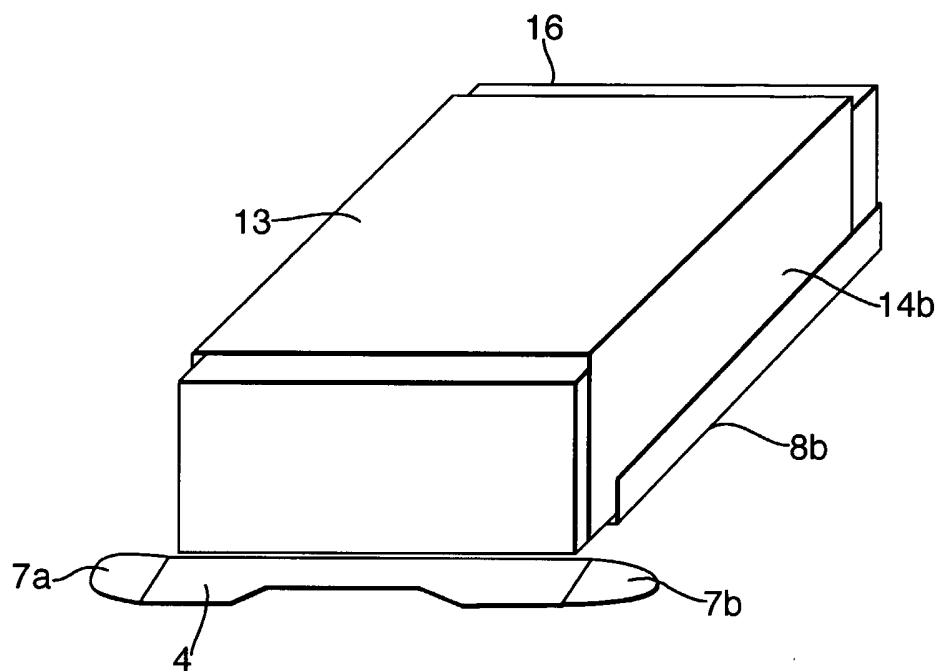
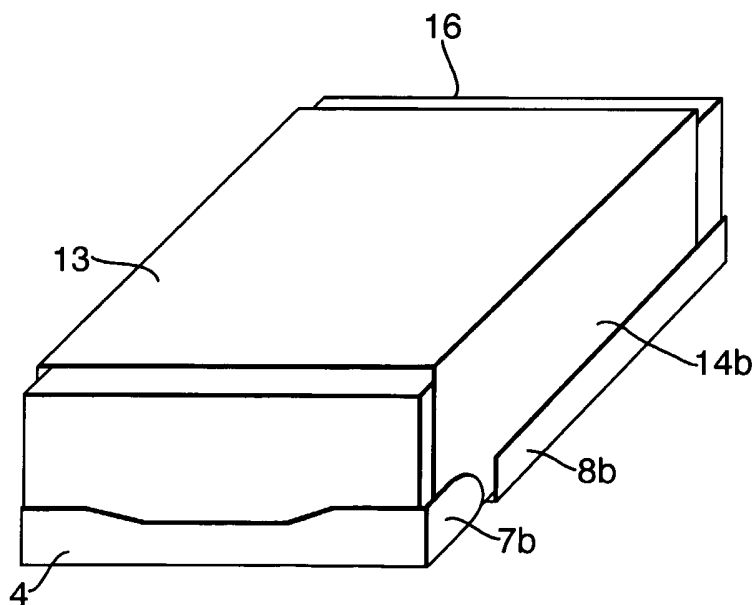


Fig.4.



INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/004013

A. CLASSIFICATION OF SUBJECT MATTER
B65D5/54 B65D5/32

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)
B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 555 982 A (KUHN ET AL) 17 September 1996 (1996-09-17) column 4, line 60 - column 5, line 39; figure 2 -----	1-10
A	US 5 443 205 A (ROBOTHAM ET AL) 22 August 1995 (1995-08-22) column 2, line 22 - column 3, line 8; figures 1,5 -----	1-10



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

21 December 2005

Date of mailing of the international search report

29/12/2005

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 11

Subject-matter of claim 11 not in accordance with PCT.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2005/004013

Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 11
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB2005/004013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5555982	A	17-09-1996	NONE
US 5443205	A	22-08-1995	AU 682598 B2 09-10-1997
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		WO 9525667 A1	28-09-1995