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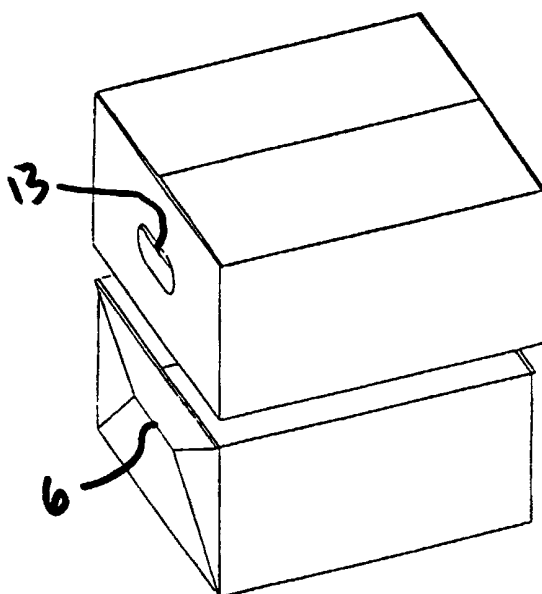
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- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CONTAINER/SURROUND ASSEMBLIES



(57) Abstract: A packaging assembly which includes a container (6) (flap closeable or otherwise) having a substantially rectangular base and upstanding walls and a bottomless surround (13) for the upstanding walls (optionally flap closeable at least in part at the top thereof), wherein two opposed walls of said container have a feature (6) to enable the uplifting of the container and the surround allows the uplifting of the surround together with the container by reliance upon the feature on each of said two opposed walls.

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## CONTAINER/SURROUND ASSEMBLIES

### THE CURRENT INVENTION

The present invention relates to article or produce carrying assemblies,  
5 components thereof and related methods of use thereof. Many forms of container are known for carrying produce. The present invention relates to a container of a kind capable of being erected from a blank of a planar material (eg corrugated board or a paper board) or from multiple blank pieces of such a material.

New Zealand patent specification 230735 the full content of which is hereby  
10 included relates to an assembly of such a container in conjunction with a cover having side and end walls of a trapezium configuration whereby hand holds provided by flaps to be expressed from the plane of the blank from which the cover is formed allow an uplifting with hand holds of the covered container. The present invention relates to similar such structures but having an advantage there over.

15

### SUMMARY OF THE INVENTION

It is therefore an object of the present invention to provide an assembly which will provide an alternative to any such system.

In a first aspect the invention consists in **an assembly** comprising or including;  
20 a container (flap closeable or otherwise) having a substantially rectangular base and upstanding walls, and

a surround for the upstanding walls (optionally flap closeable at least in part),  
**wherein** two opposed walls of said container have a feature (other than a hand engageable opening) to enable by direct or indirect support thereof the uplifting of the  
25 container,

**and wherein** said surround provides an opening for each said feature to enable such uplifting together with said surround.

Preferably said surround includes flaps to overlie (at least in part) said container.

Preferably said surround is of a planar materials and each said opening of said  
30 surround is provided by a flap movable out of the plane of such material.

Preferably each said flap is engageable under its proximate said feature.

Preferably said container is formed from a planar material.

Preferably said planar material provides said features, each such feature being a downwardly directed edge or fold-line of a flap extension of the wall panel hinged from the base, the extension being held downwardly over said wall panel by blank provided web connection(s) to each of the flanking wall panels.

Preferably said planar material of said container is a paperboard including laminate. Preferably it is a laminate having a corrugated core.

Preferably said planar material of said surround is of a paperboard laminate.

Preferably said surround is bottomless and has closeable flap(s) extending from said flanking wall(s) (preferably two flaps) and said wall panels (preferably two flaps).

Preferably said container has closeable flap(s) extending from said flanking wall(s) (preferably two flaps).

Preferably said surround is slightly longer and wider respectively than the corresponding exterior dimensions of said container.

In a further aspect of the present invention consists in **an assembly** comprising or including;

a container having at least a substantially a rectangular base and upstanding walls and

a surround for the upstanding walls which does not underlie the base of the container yet which optionally includes one or more flaps capable of overlying part of said container irrespective of whether or not said container itself includes any flap closure aspect,

wherein two opposed walls of said container have a flap extension thereof downwardly directed from a fold line from the wall to define with a downwardly directed edge or fold line a feature capable of being engaged directly or indirectly to uplift at least in part the container. Preferably the downwardly directed edge or fold line is held in association with the proximate wall panel by blank provided web connection(s) to each of the flanking wall panels of those wall panels having said feature.

Preferably said assembly is an assembly as previously defined.

In still a further aspect the present invention consists in a **container formed**

**from a blank** suitable for use in an assembly as previously defined, said container having as each said feature a downwardly directed edge or fold-line of an extension of the wall panel hinged from the blank base, the extension being held downwardly over said proximate wall panel by any one or more of

- 5           (i)     the surround,
- (ii)    an under tucking of an extension beyond said extension fold-line, and
- (iii)   blank provided web connection to each of the flanking wall panels.

In still a further aspect the present invention consists in **a container** substantially as herein described with reference to any one or more of the accompanying drawings.

10           In yet a further aspect the present invention consists in **a surround** for an assembly as previously defined. Preferably said surround is substantially as herein described with reference to any one or more of the accompanying drawings.

In still a further aspect the present invention consists in **the use of an assembly** in accordance with the present invention to transport or pack or to package articles or  
15   produce.

To those skilled in the art to which the invention relates, many changes in construction and widely differing embodiments and applications of the invention will suggest themselves without departing from the scope of the invention as defined in the appended claims. The disclosures and the descriptions herein are purely illustrative and  
20   are not intended to be in any sense limiting.

## BRIEF DESCRIPTION OF THE DRAWINGS

**Figure 1** shows an isometric view of a preferred container in accordance with the present invention showing the feature A to enable uplifting of an end of the  
25   container,

**Figure 2** is an isometric view of one form of surround for association over the container of Figure 1, the surround having flap provided openings to enable into engagement of the flap under the feature A and to enable the uplifting of the surround and the container together,

30           **Figure 3** shows the surround of Figure 2 being lowered over the container of Figure 1,

**Figure 4** shows the arrangement after the lowering of **Figure 3**, the flaps of the surround being shown in an open condition for convenience (they can of course be adhesively fastened),

and **Figures 5** through **11** show in sequence the folding of the container,

5 (Figure 5 showing the blank cutout of said container, Figure 6 showing the folding of the walls into an upstanding position, Figure 7 showing the web connections folded to provide the side wall panels of the container, and Figures 8-11 shows the flap extension of said of said container being folded under the web connections to provide said feature), and

10 **Figure 12** shows the blank cutout of said surround.

## DETAILED DESCRIPTION OF THE INVENTION

The preferred container is that shown in **Figures 1** and **5** through **11**. It is preferably formed from a blank of for example, a laminate of a waterproofing plastics material (optionally metallised) and an appropriate paperboard. The paperboard can be  
15 a dense card or a laminate of kraft paper and/or other paperboard materials, eg; a corrugated medium or the like.

The present invention envisages however an arrangement whereby a surround formed, for example, from a blank of an appropriate paperboard as shown in **Figure 12**,  
20 can be used to confer an addition to the peripheral wall strength of the assembled container (see **Figure 4**) whilst allowing the uplifting of the container in such a form.

As can be seen from **Figure 5** a preferred single piece blank comprises a base 1 which is preferably rectangular, wall panels 2, flanging walls or wall panels 3, closeable flaps 4 from the flanking walls 3, and outward extension 5 to be folded on a fold-line  
25 6 to provide the downwardly directed feature "A" shown in **Figure 1** and to be held in position by the further extension 7 being tied upwardly under the flap 5.

The webs 8 and 9 in each instance are not broken from the wall panels 2 and 3.

The surround itself is preferably formed from the blank shown in **Figure 12** (ie; adhered by flap 10. Die cut in panels 12 is a flap providing opening for each end. For  
30 convenience the flap is shown out of the plane in **Figure 12**. This flap 13 is adapted in the condition as shown in **Figure 4** to underlie and engage the downwardly directed

edge 6 so as to associate the two components together or at least assist in the uplifting of the weight carrying container under the cover of the surround which preferably is provided with the 4 closure flaps depicted in the drawings.

Persons skilled in the art will appreciate how the arrangement as described provides an advantage over the aligned hand hold arrangements of aforementioned New Zealand Patent Specification 230735. At the very least there is provided a better degree of water tightness for the inner container. This is particularly useful where, for example, fish or the like is being carried in what is to be preferably a waterproof crate or tray type environment optionally containing ice and preferably with multiple closures, eg; the flaps of the container itself preferably in turn overlaid by the cover.

The nature of the surround is such as to provide greater strength than would otherwise be the case with the choice of material in the construction of the crate or container component of the assembly.

Each or one of each component of the assembly can be die cut from an appropriate paperboard or the equivalent. If desired a laminate thereof can be used, eg; a paperboard card or laminate (whether or not corrugated insofar as any core is concerned) and optionally coated on at least one side with a plastics film (eg; aluminium micronised polyester). Suitable materials include those disclosed in New Zealand Patent Specification Nos. 314427 and 222022/222909/223447/224406.

Outward wall bulge is resisted by the surround and with the preferred use of, for example, a plastic web laminated on to the paperboard, the base of the container or crate is sufficiently strong to support any load carried therein, stacking strength being enhanced by the ability of the base to conform to an underlying assembly in a stack and of course the combined wall strength of both the container and the surround.

**WHAT IS CLAIMED IS:**

1.     **An assembly** comprising or including;  
a container (flap closeable or otherwise) having a substantially rectangular base and upstanding walls, and  
5         a surround for the upstanding walls,  
       **wherein** two opposed walls of said container have a feature (other than a hand engageable opening) to enable by direct or indirect support thereof the uplifting of the container,  
       **and wherein** said surround provides an opening for each said feature to enable  
10    such uplifting together with said surround.
2.     An assembly of claim 1 wherein said surround is flap closeable at least in part.
3.     An assembly of claim 1 or 2 wherein said surround includes flaps to overlie (at least in part) said container.
4.     An assembly of any one of the preceding claims wherein said surround is of a  
15    planar materials and each said opening of said surround is provided by a flap movable out of the plane of such material.
5.     An assembly of claim 4 wherein each said flap is engageable under its proximate said feature.
6.     An assembly of any one of the preceding claims wherein said container is formed  
20    from a planar material.
7.     An assembly of claim 6 wherein said planar material provides said features of said container, each such feature being a downwardly directed edge or fold-line of a flap extension of the wall panel hinged from the base, the extension being held downwardly over said wall panel by blank provided web connection(s) to each of the flanking wall  
25    panels.
8.     An assembly of claim 6 or 7 wherein said planar material of said container is a paperboard including laminate.
9.     An assembly of any one of the preceding claims wherein said surround is of a paperboard laminate.
- 30    10.   An assembly of claim 9 wherein said surround is bottomless and has closeable flap(s) extending from said flanking wall(s) and said wall panels.

11. An assembly of claim 10 wherein each wall of said surround has a closeable flap.
12. An assembly of any one of the preceding claims wherein said container has closeable flap(s) extending from said flanking wall(s).
- 5 13. An assembly of any one of the preceding claims wherein said surround is slightly longer and wider respectively than the corresponding exterior dimensions of said container.
14. **An assembly** comprising or including;  
a container having at least a substantially a rectangular base and upstanding walls  
10 and  
a surround for the upstanding walls which does not underlie the base of the container yet which optionally includes one or more flaps capable of overlying part of said container irrespective of whether or not said container itself includes any flap closure aspect,
- 15 wherein two opposed walls of said container have a flap extension thereof downwardly directed from a fold line from the wall to define with a downwardly directed edge or fold line a feature capable of being engaged directly or indirectly to uplift at least in part the container.
15. An assembly of claim 14 wherein the downwardly directed edge or fold line is  
20 held in association with the proximate wall panel by blank provided web connection(s) to each of the flanking wall panels of those wall panels having said feature.
16. **A container formed from a blank** suitable for use in an assembly as claimed in any one of claims 1 to 15 wherein said container having as each said feature a downwardly directed edge or fold-line of an extension of the wall panel hinged from the  
25 blank base, the extension being held downwardly over said proximate wall panel by any one or more of
- (i) the surround,
  - (ii) an under tucking of an extension beyond said extension fold-line, and
  - (iii) blank provided web connection to each of the flanking wall panels.
- 30 17. **A container** substantially as hereinbefore described with reference to any one or more of the accompanying drawings.

18.    **A surround** for an assembly of any one of claims 1 to 15 wherein said surround is substantially as hereinbefore described with reference to any one or more of the accompanying drawings.
19.    An assembly substantially as hereinbefore described with reference to the  
5 accompanying drawings.
20.    **The use of an assembly** in accordance with any one of claims 1 to 15 and 19 to transport or pack or to package articles or produce.

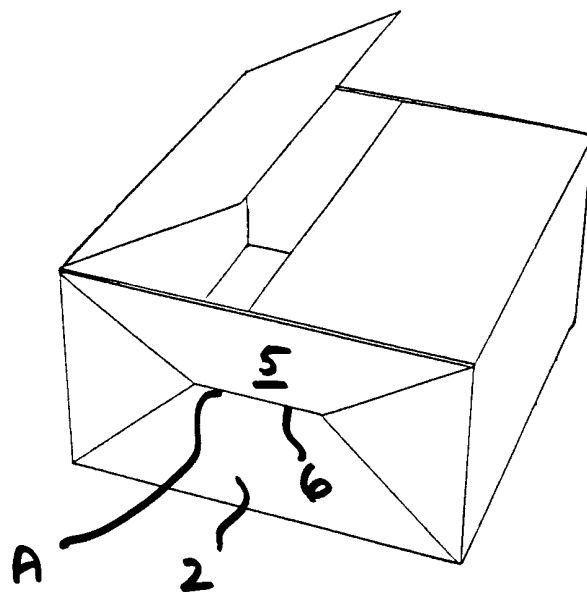


FIGURE 1

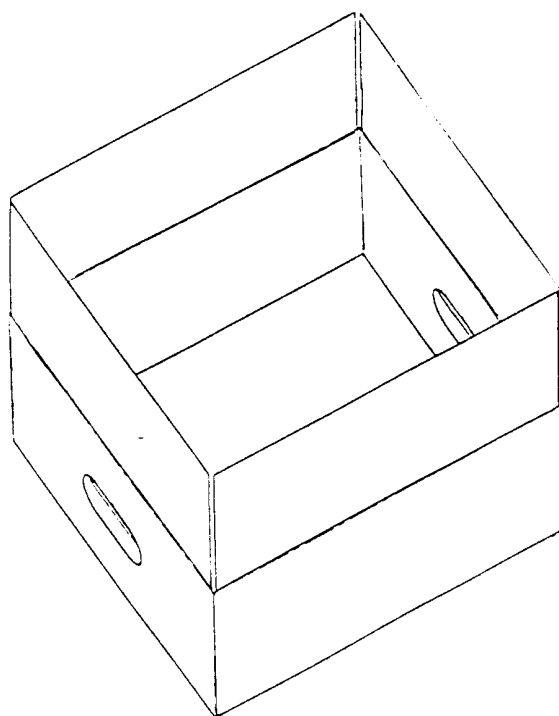


FIGURE 2

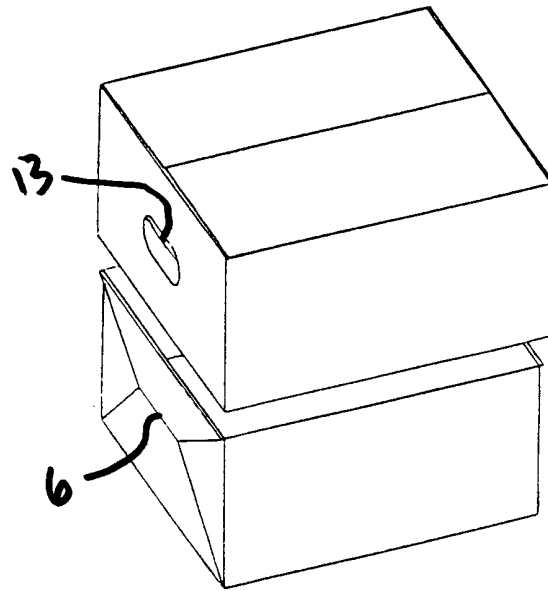


FIGURE 3

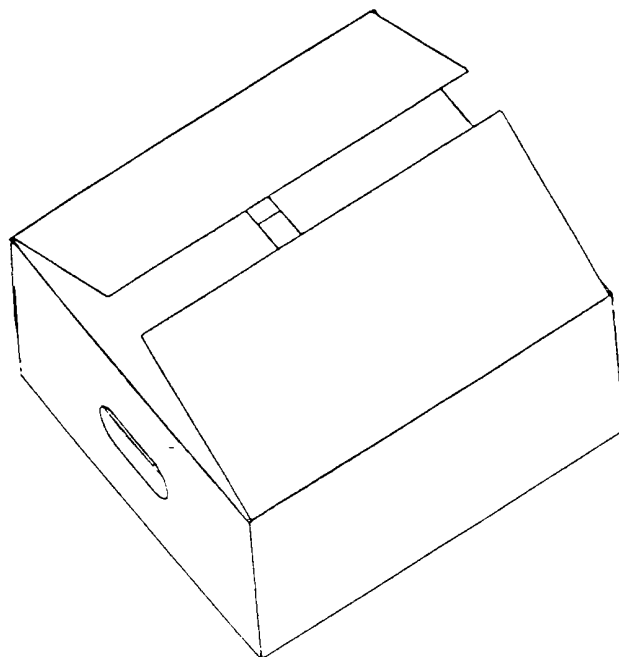


FIGURE 4

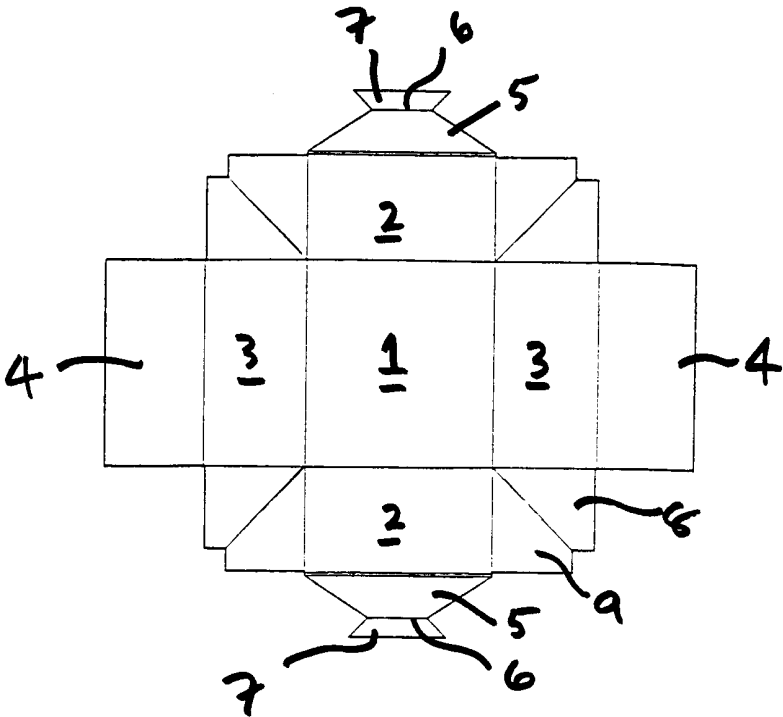


FIGURE 5

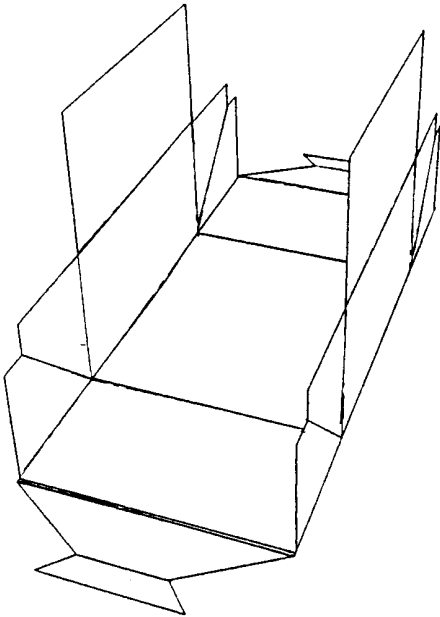


FIGURE 6

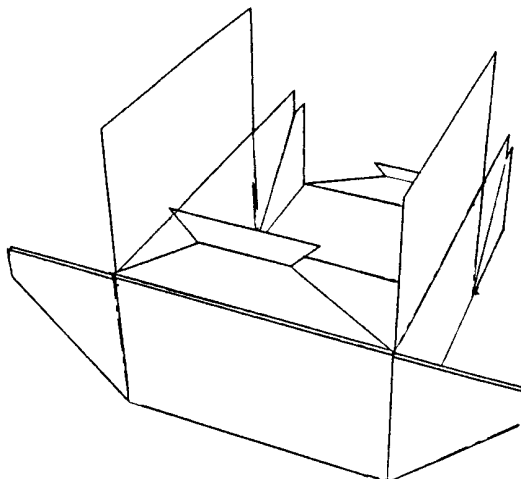


FIGURE 7

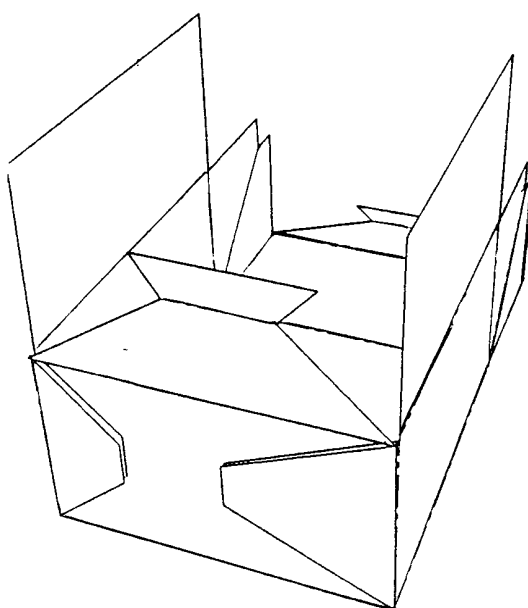


FIGURE 8

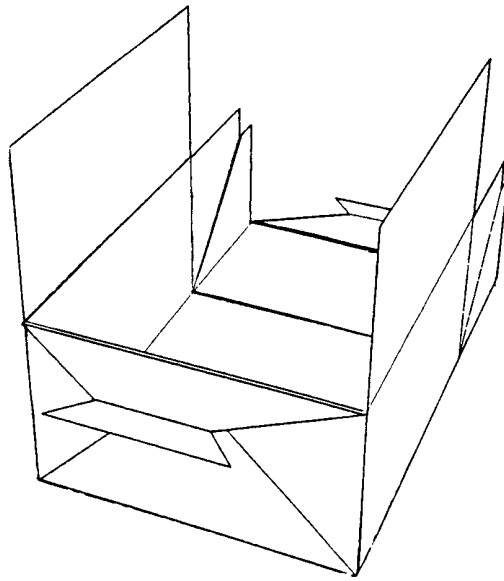


FIGURE 9

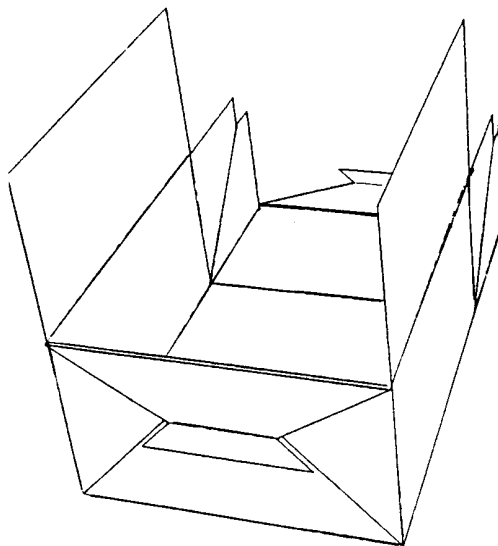


FIGURE 10

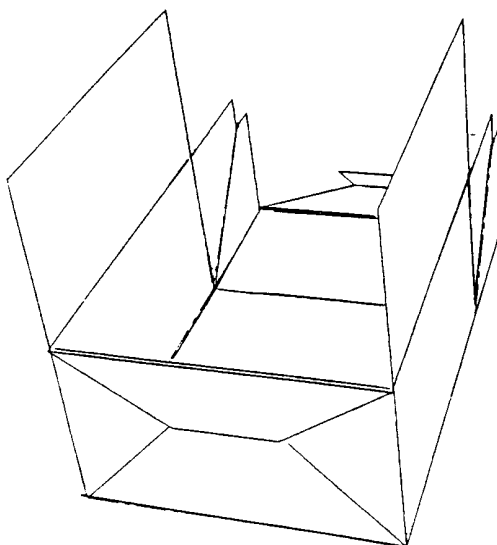


FIGURE 11

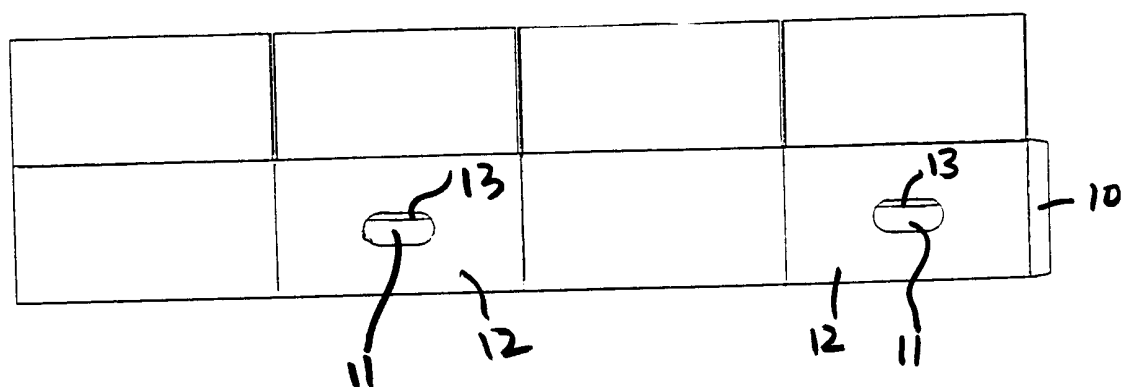


FIGURE 12

# INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/NZ00/00081**

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
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| Int. Cl. <sup>7</sup> : B65D 5/46, 5/62, 85/50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| According to International Patent Classification (IPC) or to both national classification and IPC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| <b>B. FIELDS SEARCHED</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| Minimum documentation searched (classification system followed by classification symbols)<br>B65D 5/-, 6/-, 25/-, 43/-, 77/04, 85/-                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| 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 practicable, search terms used)<br>DWPI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| Category*                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                               | Relevant to claim No.                                                           |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| A<br>X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | GB 2220193 A (NAMPAK PRODUCTS LTD) 4 January 1990<br>Whole document<br>Figure 1                                                                                                                                                                  | 1 to 17, 19, 20<br>18                                                           |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | EP 571711 A (BEIERSDORF AG) 1 December 1993<br>Whole document                                                                                                                                                                                    | 1 to 20                                                                         |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| A<br>X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | US 4869424 A (WOOD) 26 September 1989<br>Whole document<br>Figure 1                                                                                                                                                                              | 1 to 17, 19, 20<br>18                                                           |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| <input type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| <p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent but published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"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)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table> |                                                                                                                                                                                                                                                  |                                                                                 | "A" document defining the general state of the art which is not considered to be of particular relevance | "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 | "E" earlier application or patent but published on or after the international filing date | "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 | "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) | "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 | "O" document referring to an oral disclosure, use, exhibition or other means | "&" document member of the same patent family | "P" document published prior to the international filing date but later than the priority date claimed |  |
| "A" document defining the general state of the art which is not considered to be of particular relevance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | "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                                              |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| "E" earlier application or patent but published on or after the international filing date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | "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                                                                     |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| "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)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | "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 |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| "O" document referring to an oral disclosure, use, exhibition or other means                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | "&" document member of the same patent family                                                                                                                                                                                                    |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| "P" document published prior to the international filing date but later than the priority date claimed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                  |                                                                                 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| Date of the actual completion of the international search<br>22 August 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                  | Date of mailing of the international search report<br>-4 SEP 2000               |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |
| Name and mailing address of the ISA/AU<br>AUSTRALIAN PATENT OFFICE<br>PO BOX 200, WODEN ACT 2606, AUSTRALIA<br>E-mail address: pct@ipaaustralia.gov.au<br>Facsimile No. (02) 6285 3929                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                  | Authorized officer<br><br><b>M.J. O'ROURKE</b><br>Telephone No : (02) 6283 2017 |                                                                                                          |                                                                                                                                                                                                     |                                                                                           |                                                                                                                                                                              |                                                                                                                                                                         |                                                                                                                                                                                                                                                  |                                                                              |                                               |                                                                                                        |  |

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.  
**PCT/NZ00/00081**

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 |    |         |              |
|----------------------------------------|---------|-----|----------------------|----|---------|--------------|
| GB                                     | 2220193 | NIL |                      |    |         |              |
| EP                                     | 571711  | NIL |                      |    |         |              |
| US                                     | 4869424 | AU  | 41780/89             | CA | 1322546 | EP 366315    |
|                                        |         | JP  | 02-139336            | NZ | 230735  |              |
|                                        |         |     |                      |    |         | END OF ANNEX |