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(11) **EP 1 607 344 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
21.12.2005 Bulletin 2005/51

(51) Int Cl.7: **B65D 55/06, B65D 43/16**

(21) Application number: **05252986.4**

(22) Date of filing: **16.05.2005**

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR**
Designated Extension States:
AL BA HR LV MK YU

(30) Priority: **14.06.2004 GB 0413194**

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(54) **Container and lid arrangement**

(57) The invention to which this application relates is a container including a base (4) and a lid (6) for containing an item therein. The container is typically provided in a closed format for retail purposes for purchase and, when it is required to remove at least a portion of the item from the container, the lid is moved to an open position. When the container is in a closed position, part of a label (14), which is in contact with the lid and base passes the lid and body and is positioned over tabs to

be gripped to move the lid and body apart. This therefore means that the lid cannot be opened by moving the same from the base without first tearing the label or removing the label from one of the lid or base. In any case, the provision of the label overlying at least one of the tabs prevents the removal of the lid without altering the condition of the label and hence renders the container tamper-evident.

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Description

[0001] The invention to which this application relates is to a container of the type for holding an item such as, although not exclusively, a foodstuff, such that the container, with the foodstuff can be provided as a retail pack for sale at a retail outlet such as a supermarket or the like.

[0002] Many forms of these containers are known and typically the container includes a base which acts as a tray with a cavity in which the item is held. A lid is provided which covers the opening into the cavity and protects the same. The lid may be hinged to the base or can be a separate item. If required, retaining formations can be formed on the base and/or lid to enable the lid to be retained in the closed position.

[0003] However, a common problem is that removal of the lid from the base is not desired to occur until the container has reached its final destination i.e. once the container and item therein has been purchased. This is in order to prevent the possibility of the item being tampered with.

[0004] One possible way of achieving this is to provide a formation as in integrated part of the container and said part is connected, to the base and/or lid typically via a line of weakening, to allow the part to be broken off or released and access gained to allow the lid to be opened from the base. However this form of tamper evident formation can be expensive to produce, limits the types of plastics which can be used, and can, on occasion, be circumvented.

[0005] The aim of the present invention is to provide a container having a lid and a base and to provide an effective way of allowing the same to have a tamper evident characteristic but without the need for a line of weakening or frangible line to be provided.

[0006] In a first aspect of the invention there is provided a container including a base and a lid, said container provided as a retail pack with an item to be used or consumed contained therein, said lid closing an opening in the base and said base and/or lid include at least one tab to be gripped to remove the lid from the base and wherein prior to first removal of the lid for access to the item, a sheet material is positioned over at least one of said tabs so as to prevent the removal of the lid from the base without altering the condition of the sheet material.

[0007] In one embodiment the at least one tabs is located at a gap in a raised portion along at least part of the periphery of a flange on the body and into which the lid is placed. Preferably the edge profile of at least the base changes adjacent the location of the said gap. Typically the change in edge profile is an indent inwardly.

[0008] In one embodiment, the sheet material is in the form of a label. In one embodiment, the label is attached to both the base and lid and extends between the same. In one embodiment the label includes a band portion and the label is oriented on the container such that the band is located to pass through the gap defined at the

flange of the body.

[0009] Typically the label is attached by adhesive to the body and lid.

[0010] In an alternative embodiment the label need not be attached to the container but instead can be provided with its free ends attached to each other to form a band which passes around the container with a portion of the label passing over at least one of the tabs. When the tabs are located in the said gap, the label is located to pass through the grip and be of sufficient toughness so as not to be lifted from the gap without ripping the same.

[0011] In both embodiments, in order to remove the lid from the base it is necessary for the label to be torn, this is due to the fact that in the embodiment when the label is adhered to the container, the label needs to be torn to allow release of the lid, and in the arrangement where the label is a band, the same is formed sufficiently tightly on the base and lid such that when it is located in the gap it cannot be slid over the raised portions without causing tearing of the label or clearly apparent deformation of the container.

[0012] Thus, in whichever of the embodiments, the container in accordance with the invention is tamper evident as, if the label is torn then it is clear that the same has been tampered with and that access may have been gained to the contents of the container. As a result the container can be discarded.

[0013] Typically, and in whichever embodiment, the shaping of the edge profile of the lid and base flange at the interface between lid and base are such that access can only be gained to grip and lift the lid from the base where there are tab portions and as these tab portions are covered by the sheet material, the only possible way of opening the same is protected.

[0014] Preferably the flange with the raised portion of the base receives the edge of the lid which lies to the inner side wall of the raised portion. This makes it difficult to engage the edge of the lid with the flanges except where the tab(s) is/are provided.

[0015] A container comprising a base, a lid and a label, said container being provided in a first, closed form to contain at least one item therein as a retail pack, and an open position to allow removal of at least a portion of said at least one item and characterised in that in the closed condition, the label passes between the lid and the base and is located to pass through a gap in a raised portion formed on the lid and/or base, such that to remove the lid from the base, the label is required to be manipulated in a tamper evident manner.

[0016] A specific embodiment of the invention is now described with reference to the accompanying drawings wherein;

[0017] Figures 1a-c illustrates a container in a closed condition in accordance with one embodiment of the invention in plan from the top, side elevation and plan from the base respectively.

[0018] Figure 2a-d illustrate the container in the open

condition;

[0019] Figure 3 and 4 illustrate in greater detail the arrangement between the respective edges of the lid and base.

[0020] Referring firstly to Figures 1a-c and Figures 2a-d there is illustrated a container 2 comprising a base 4 and lid 6. In this case the lid is hinged to the base along edge 8 but this need not be the case. The base 4 has a cavity 10 in which an item such as a foodstuff is held, and an opening 12 into the cavity 10. When in the closed position, as shown in Figures 1a-c the lid closes the opening. In this arrangement the container can, for example, form a retail pack and it is desired that the container be in the closed position, and evidently so, until the container is to be opened for use of the item therein.

[0021] Also provided as part of the container is a label 14 which, in this embodiment has body portions 16, 18 attached to the underside and top of the body and lid respectively, typically by glue. A band 20 joins the body portions 16, 18 and passes between the lid and body. In the embodiment shown the label passes along a gap 22 formed in the lid as will be explained with reference to Figures 3 and 4. However, it should be noted that the invention in its broadest sense can be used with a container which does not include a gap formation and still be effective.

[0022] Figures 2a-d show the container 2 in an open position with lid 6 hingedly removed from the body 4 to allow access via opening 12 into the cavity 10. It is also shown in Figure 2a how the band portion 20 of the label 14 has had to be torn 21 to allow the lid to be opened.

[0023] Figures 3 and 4 show the arrangement between the lid and base in more detail at the respective peripheral edges at the location of the gap 22. As shown the lid is designed to fit by "plugging" into the base to form a tight closure and if required a leak resistant seal can be achieved.

[0024] The base is provided with a raised portion 24 around the periphery of the flange 26 and this raised portion matches the edge profile 28 of the lid in shape apart from at the location of the gap 22. Thus the lid sits within the inner edge of the raised portion and so with the exception of the location of the tabs the lid edge cannot be easily grasped to lever the base lid away from the opening. At the gap which in this case is where the tabs are located, part of the edge of the lid sits out beyond an indented portion 25 of the base flange and hence access can easily be gained to the same. Furthermore, as the fit which is achieved between the lid and base is relatively tight, even if access was gained to the lid edge it is still difficult to open the lid other than at the gap 22.

[0025] Thus, in order to open the lid, the indent 29 allows a portion 32 of the lid to be exposed for gripping by the fingers to act as a tab by which the lid can be raised from the base.

[0026] The gap itself is formed by the provision of "flat" areas on the body flange and the lid such that the same

is a gap in the raised portion 24. In addition to the provision of the "tab" the gap also acts as a location for the label band 20 as shown. This prevents the label from slipping with respect to the body or lid and also prevents attempts to open the lid without first tearing the label, as the label cannot be moved over the raised portions due to the "tightness" of the attachment via the gap. To further encourage the tearing of the band a line of weakening 34 can be provided to allow the label to be torn at the preferred location.

[0027] The present container therefore provides a container which can only be opened by gaining access to the tab at the gap and in order to do that the label must be torn, thus providing a container which is tamper evident.

Claims

1. A container including a base and a lid, said container provided as a retail pack with an item to be used or consumed contained therein, said lid closing an opening in the base and said base and/or lid include at least one tab to be gripped to remove the lid from the base and wherein prior to first removal of the lid for access to the item, a sheet material is positioned over at least one of said tabs so as to prevent the removal of the lid from the base without altering the condition of the sheet material.
2. A container according to claim 1 **characterised in that** the base has a raised portion along at least part of the periphery of a flange onto which the lid is placed when in a closed condition.
3. A container according to claim 2 **characterised in that** the tabs are located at a gap in the raised portion.
4. A container according to claim 3 **characterised in that** the edge profile of at least the base changes at the gap to form one of the tabs.
5. A container according to claim 1 **characterised in that** the label is attached to and/or passes around both the base and lid and extends between the same.
6. A container according to claim 5 **characterised in that** the label is orientated on the container such that part of the label is located in a gap defined in the flange of the body.
7. A container according to claim 5 **characterised in that** the label is attached by adhesive to the body and lid.
8. A container according to claim 5 **characterised in**

that the label is provided in the form of a band which passes around the container and a portion of the same passes through the gap in the flange of the base.

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9. A container according to any of claims 5 to 8 **characterised in that** in order to remove the lid from the base it is necessary for the label to be torn or for the label to be removed from one of the base or the lid.

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10. A container according to any of the preceding claims **characterised in that** at the location on the edge profile of the base with the indent, a portion of the lid is exposed and acts as a tab for gripping the lid to remove the same from the base.

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11. A container according to claim 1 **characterised in that** the flange with a raised portion of the base receives the edge of the lid which lies to the inner side wall of the raised portion.

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12. A container comprising a base, a lid and a label, said container being provided in a first, closed form to contain at least one item therein as a retail pack, and an open position to allow removal of at least a portion of said at least one item and **characterised in that** in the closed condition, the label passes between the lid and the base and is located to pass through a gap in a raised portion formed on the lid and/or base, such that to remove the lid from the base, the label is required to be manipulated in a tamper evident manner.

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13. A container according to claim 12 **characterised in that** the manipulation is to tear the label.

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14. A container according to claim 13 wherein the label is adhered to the lid and base.

15. A container according to claim 12 **characterised in that** the label is a band around the container and the raised portion prevents the label from being slid off the container as the band cannot be erected to a required size.

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16. A container as herein described with reference to the accompanying drawings.

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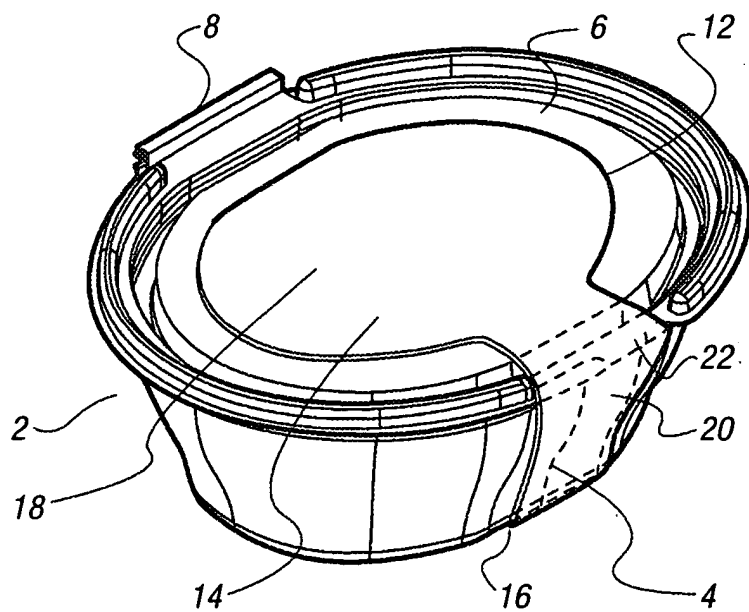


FIG. 1a

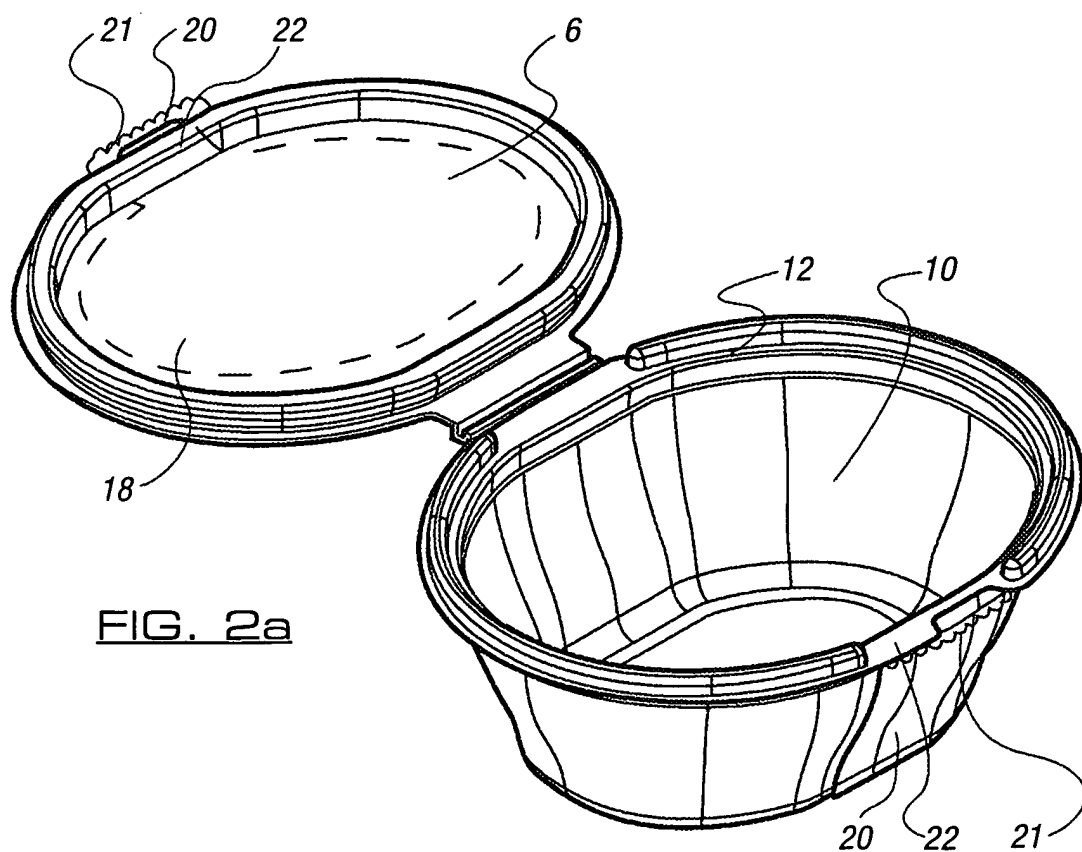


FIG. 2a

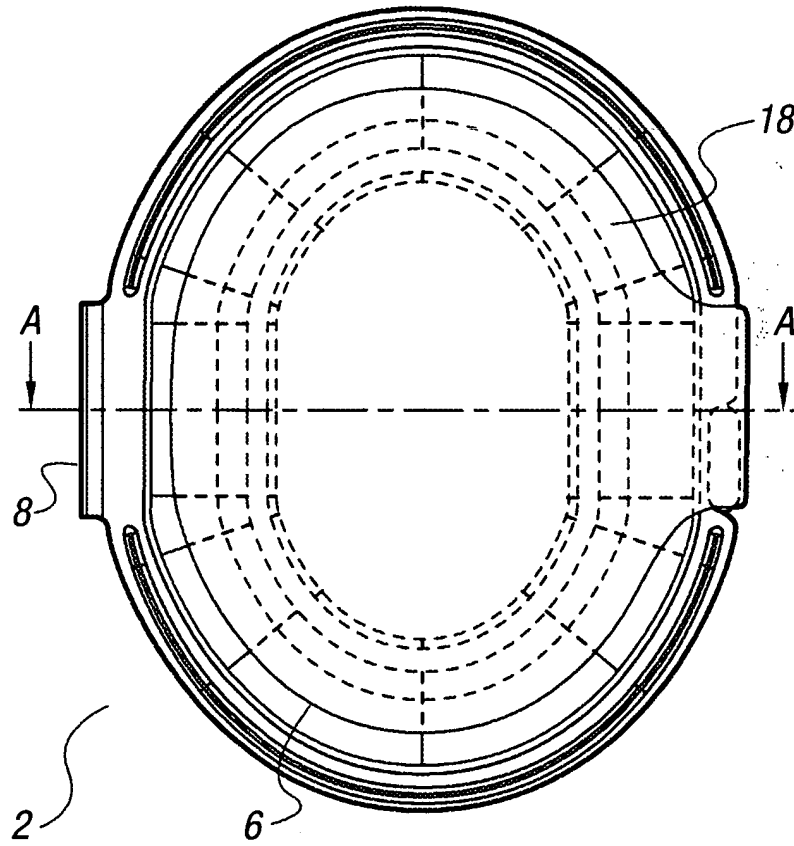


FIG. 1b

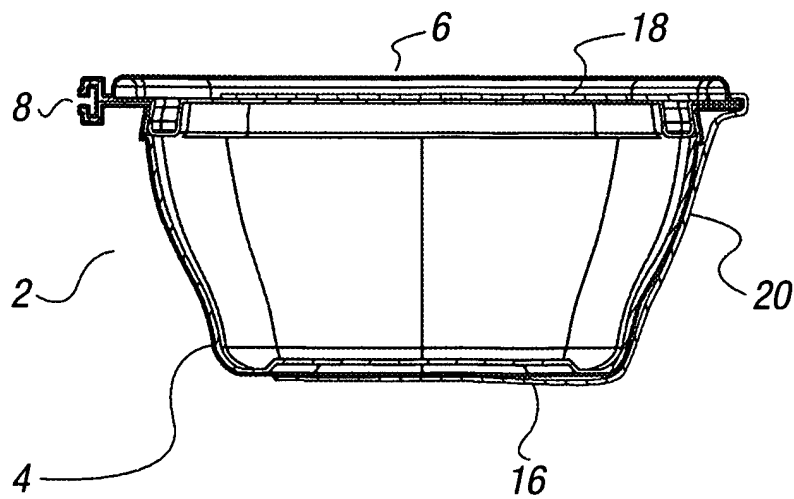


FIG. 1c

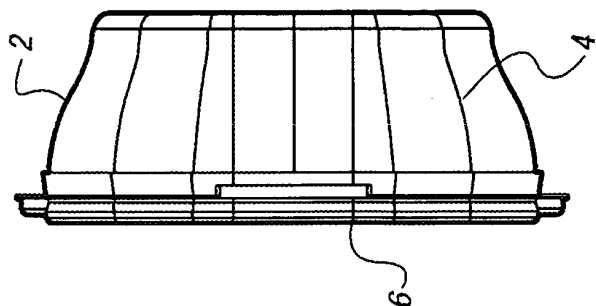


FIG. 2d

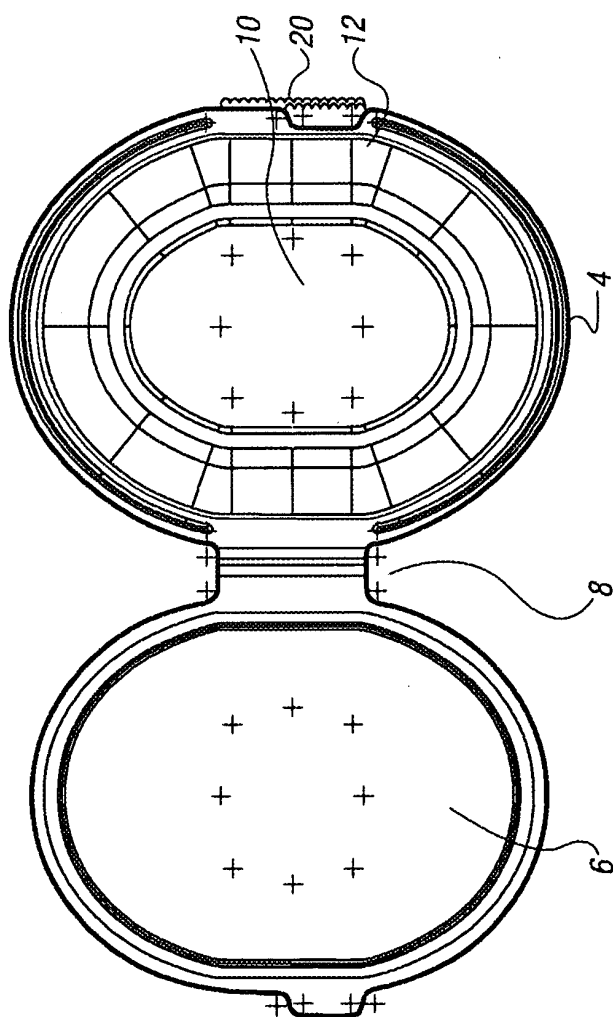


FIG. 2c

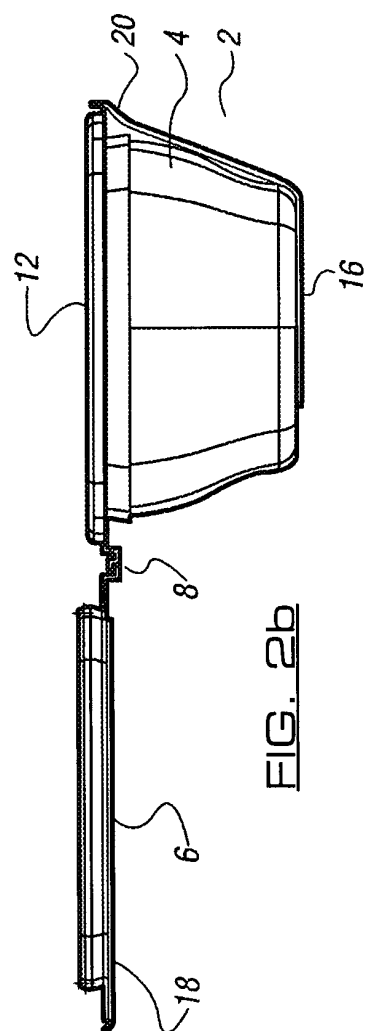


FIG. 2b

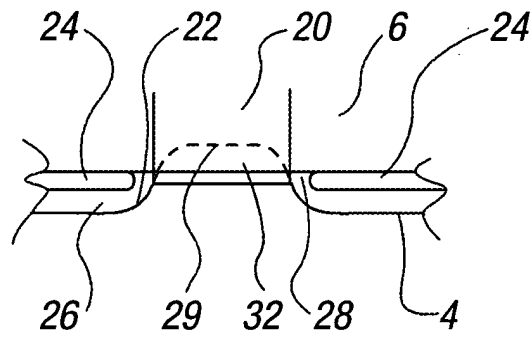


FIG. 3

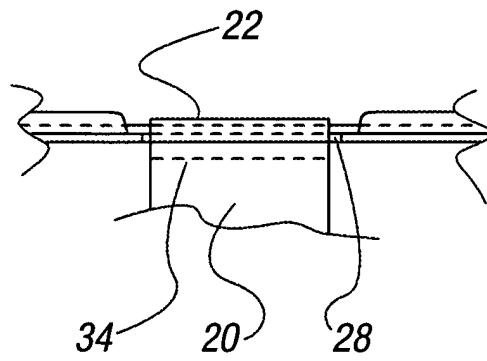


FIG. 4



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PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 05 25 2986 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 6 352 170 B1 (BROWN) 5 March 2002 (2002-03-05) * the whole document *	12-15	B65D55/06 B65D43/16
A	US 3 443 720 A (ROY) 13 May 1969 (1969-05-13) * column 2, line 47 - column 3, line 66; figures 1-3 *	1	
A	DE 296 20 808 U (SCHREINER) 2 April 1998 (1998-04-02)	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65D
INCOMPLETE SEARCH			
The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims. Claims searched completely : Claims searched incompletely : Claims not searched : Reason for the limitation of the search: see sheet C			
Place of search		Date of completion of the search	Examiner
The Hague		4 October 2005	Bridault, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1503 03.82 (P04007)



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**INCOMPLETE SEARCH
SHEET C**

Application Number
EP 05 25 2986

Claim(s) not searched:
16

Reason for the limitation of the search:

Claim 16 does not meet the requirement of Rule 29(6) EPC.



European Patent
Office

Application Number

EP 05 25 2986

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☒ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



European Patent
Office

**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 05 25 2986

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-11

Container with tabs covered by a label

2. claims: 12-15

Container with a label secured in a gap

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 05 25 2986

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

04-10-2005

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6352170	B1	05-03-2002	NONE	
US 3443720	A	13-05-1969	NONE	
DE 29620808	U	02-04-1998	NONE	