

⑫

EUROPEAN PATENT APPLICATION

⑳ Application number: **83870113.4**

⑤① Int. Cl.³: **B 65 D 43/06**

㉔ Date of filing: **25.10.83**

③① Priority: **26.10.82 BE 209337**

⑦① Applicant: **N.V. THOVADEC PLASTICS S.A.,
Meerstraat, 55, B-9120 Destelbergen (BE)**

④③ Date of publication of application: **13.06.84
Bulletin 84/24**

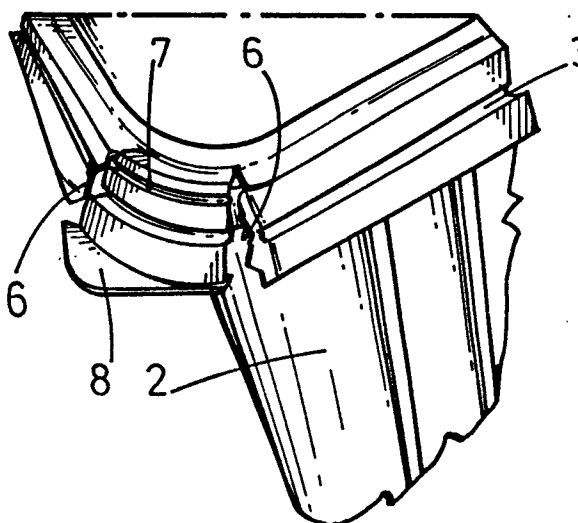
⑦② Inventor: **De Cuyper, Alex, Meerstraat 79,
B-9120 Destelbergen (BE)**

⑧④ Designated Contracting States: **DE FR IT NL**

⑦④ Representative: **Pieraerts, Jacques et al, Bureau Gevers
S.A. rue de Livourne 7, Bte. 1, B-1050 Bruxelles (BE)**

⑤④ Lid.

⑤⑦ There is described a lid with a snap rim which slides over the edge of a box when closing same, in such a way that after slipping the lid with the snap rim thereof over said edge, said lid is completely retained thereby, characterized in that said lid (1) is made tearable in at least one location on the outer edge thereof, in such a way that the tear required for releasing said lid (1) runs through said snap rim (3).



"Lid"

This invention relates to a lid with a snap rim, which slides over the edge of a box when closing same, in such a way that after slipping the lid with the snap rim thereof over said edge, the lid is completely retained by said box edge and can no more be removed from the box without having visible marks of the opening present and remaining on the lid. A lid will be described hereinafter with a snap rim and a box which has a beaded edge on the outer side thereof, in such a way that the closing is obtained on said outer side. The reverse arrangement is also possible, even if in actual practice most boxes, particularly when they are intended for packing foodware such as notably ice-cream, correspond to the above-defined type.

When now a lid of said type is pressed on a round or rectangular box, the snap rim of said lid lies over the whole length thereof "behind" the box edge. The wording "behind" means that the lid snap rim has to be slid or pushed over the box edge to connect definitively the lid with the box. The application of the lid to the box occurs without effort as the material the box and the lid (mainly the lid) are made of, is flexible.

With the usual packages, the content of the box is easily reachable, as the lid in the usual design is easy to remove from the box without leaving any trace. This is mostly the work of children when
5 the box does contain ice-cream or similar. Falsifying or adding foreign materials is also possible without the removing of the lid from the box leaving traces afterwards of such fraudulent action.

The invention has now for object to pro-
10 vide a lid which may be removed and re-used, but whereby however traces of the package having been broken into are and remain clearly visible. The wording "re-using" pertains to a further use of the box and lid by the purchaser or the user.

15 The lid may be removed by acting upon and distorting the lid as well as the box with a knife or similar hard object, but this does leave traces or clues of damage in the generally very light material the lid and box are made of.

20 To obtain such a result according to the invention, the lid is notably at least in one location of the outer edge thereof, made tearable in such a way that the tearing required for removing the lid necessarily runs through said snap rim.

25 Advantageously, the rim of said lid is provided with at least one notch for "initiating" or starting the required tearing and said notch is further extended by a relief change, possibly a weakening line, in the material of the lid rim.

30 In a preferred even if not required embodiment of the invention, a lip projecting from the lid

is provided level with said notch.

A feature of the invention lies in said relief change, possibly said weakening line, not extending further than directly adjacent the torn-
5 through snap rim, so that the lid may still be further used, but not without knowledge of the package defacing.

Other details and features of the invention will stand out from the following description, given by way of non limitative example and with reference
10 to the accompanying drawings, in which :

Figure 1 is a perspective view of a rectangular box closed with a lid according to the invention.

Figure 2 is a cross-section view along line II-II in figure 1.

15 Figure 3 shows on a larger scale as a perspective view, the torn-off corner strip from a lid according to the invention.

The lid 1 which is to be pressed on box 2 and which remains clamped in such position on the box,
20 is provided inwardly with a snap rim 3 which is retained in the closed condition of said box, by a beaded edge 4 of the box upstanding wall 5. It is to be noted that the beaded edge 4 as considered in cross-section, may have any profile whatever, and it may even
25 be a flat edge, and that the invention is in no way bound to the embodiment as shown in figure 2.

A lid with a snap rim 3 closes perfectly efficiently a box with a headed edge 4 or similar, or with a flat edge. It is sufficient thereby that the
30 snap rim 3 when pressing the lid 1 over the free side of the beaded edge 4, in such a way that said lid may no



more be released from the box unless by making use of
a knife or similar hard implement by means of which
the box and lid may be operated upon and pulled away
from one another, but however generally not without
5 leaving traces thereof as the invention is preferably,
but not exclusively, limited to lids and boxes from very thin material.

During storage in deep-freeze counters and similar, it often occurs that children release the lid from the box sufficiently to remove part of the content. This is mostly the case when such boxes contain ice-cream and similar. Traces or clues of the box defacing do not then remain, which is very disadvantageous for the good name both of the product itself and of the shop or supermarket where such products are sold.

To obviate such drawback and to leave a permanent clue of such a break-in of the package, the lid is made tearable in one location at least of the outer wall thereof and such lid cannot be removed without tearing or other damaging. To make tearing easier, a notch 6 is provided in the side edge of the lid in one location at least but preferably in two locations, which notch 6 connects to a relief change 7, in such a way that when pulling a lip 8 which lies between both notches 6, the tear which is "initiated" in 6, propagates in the relief change 7 in the lid. Said relief change may be comprised, but not necessarily, of a weakening line.

As the tear which occurs level with the notch 6 in the material the lid is made of, and which has a tendency to propagate along the relief change or

weakening line 7, crosses the snap rim 3, said rim 3 is cut-through.

Due to the cutting-through of the snap rim, the connection between said snap rim and the beaded edge is broken. The lid comes directly loose from the box at the level of the tear in the snap rim 3, and may be removed without any difficulty. Due to the structure and shape thereof, the lid may be pressed back on the box in spite of such local defacing, but not without leaving a visible clue to the package defacing. This is no problem when the box is being used for further home purposes, but when the package is broken into in the shop or the supermarket, this is a sign for the purchaser that he should reject such product or package.

When the lip 8 is pulled, two tearings may occur level with each one of said notches 6. A single tearing is however enough to cut through the snap rim of the lid, which breaks directly the tightness or at least the relative tightness of the lid relative to the box.

As already stated above, it is possible according to the size of the package, to provide in more than one location for a cutting-through of the snap rim of the lid outer edge and thus a breaking of the connection between lid and box. The locations where notches 6 are provided do not necessarily have to be provided with a lip 8 or similar projection. The location where the tearing occurs may also be shown with other means. The presence of a lip is however an easy and conventional way for gripping the lid rim

and then to lift same whereby the material is torn level with the notches 6 and the relief change or weakening line 7.

5 As already mentioned hereinabove, the lid may thus still be used after tearing a corner portion of the lid, as said lid may still be pressed with the snap rim 3 thereof or the beaded edge 4 of box 2, but without insuring the tightness thereof.

10 It must be understood that the invention is in no way limited to the above embodiments and that many changes may be brought therein without departing from the scope of the invention.

15 For instance, the invention is in no way, bound to the shape or profile of the box as shown in the figures. The invention principle may still be applied to lids which have another snap rim which cooperates with beaded edges or flat edges, which do not necessarily have the cross profile as shown in the exemplary figures.

20

25

30

CLAIMS.

1. Lid with a snap rim which slides over the edge of a box when closing same, in such a way that after slipping the lid with the snap rim thereof over said edge, said lid is completely retained thereby, characterised in that said lid (1) is made tearable in at least one location on the outer edge thereof, in such a way that the tear required for releasing said lid (1) runs through said snap rim (3).

2. Lid as defined in claim 1, characterised in that in the lid edge is provided at least one notch (6) for "initiating" the required tearing, and said notch (6) is further extended by a relief change, possibly a weakening line (7) in the material of the lid edge.

3. Lid as defined in claim 2, characterised in that at the level of said notch (6) is provided a lip (8) projecting from the lid (1).

4. Lid as defined in any one of claims 1-3, characterised in that it is made tearable in one corner thereof at least.

5. Lid as defined in any one of claims 2-4, characterised in that said relief change, possibly said weakening line (7) does not extend further on than directly adjacent the snap rim (3) to be torn, in such a way that said lid may still be used but not however without showing the package defacing.

6. Lid as defined in claim 5, characterised in that when two relief changes (7) are provided, for guiding the tearings caused level with both notches (6), said relief changes run in parallel

relationship with said snap rim (3) past same and form
together a relief change, possibly a weakening line
to limit the size of the material being torn from the
lid.

5

10

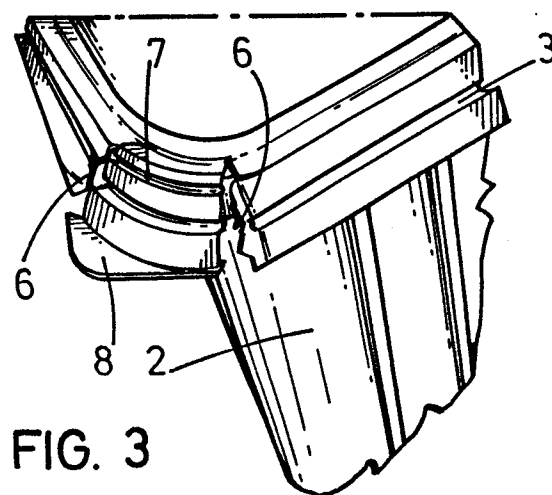
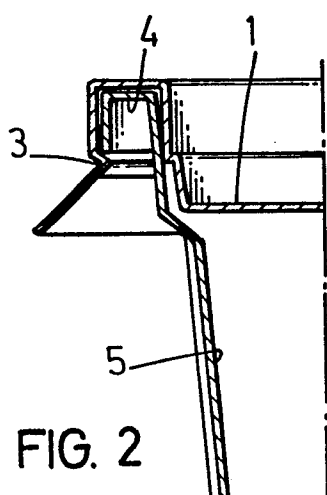
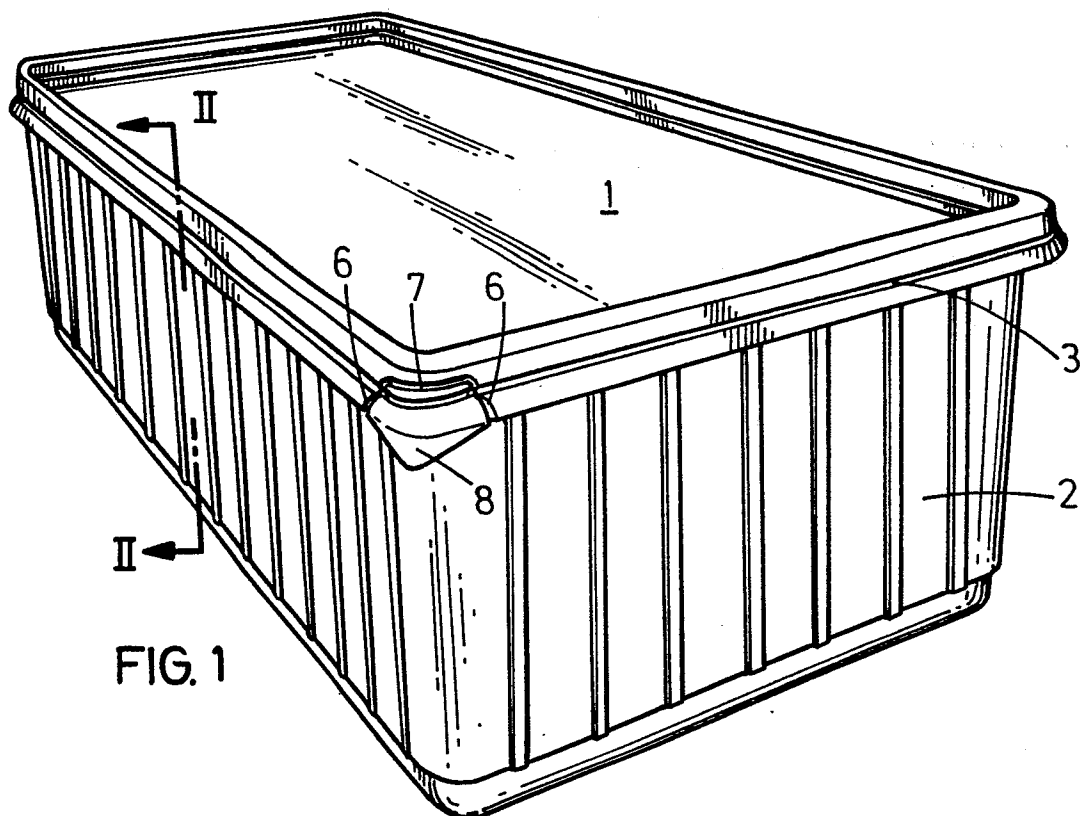
15

20

25

30

0110859





European Patent
Office

EUROPEAN SEARCH REPORT

0110859
Application number

EP 83 87 0113

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. ³)
X	FR-A-2 488 222 (ORIOLE) * Figures 1,2; page 2, lines 14-18 *	1-6	B 65 D 43/06

X	FR-A-2 478 588 (ORIOLE) * Figures 2,3; page 3, lines 35-39 *	1,3-5	
A	---	2	
X	FR-A-2 488 220 (ORIOLE) * Figures 1,6; page 1, lines 31-38 *	1,3,4	
A	---	2	
X	FR-A-2 258 316 (PERROT) * Figure 3; page 3, lines 18-26 *	1,3	TECHNICAL FIELDS SEARCHED (Int. Cl. ³)
			B 65 D
A	---	2	
X	DE-A-2 549 932 (STIEGEN) * Figures 1,4; page 7, lines 4-16 *	1,5	
A	-----	2	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 02-02-1984	Examiner STEEGMAN R.
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			