

(19)



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) Publication number:

**0 663 343 A1**

(12)

**EUROPEAN PATENT APPLICATION**(21) Application number: **95100240.1**(51) Int. Cl.<sup>6</sup>: **B65D 5/66**(22) Date of filing: **10.01.95**(30) Priority: **18.01.94 IT MI940030 U**(43) Date of publication of application:  
**19.07.95 Bulletin 95/29**(84) Designated Contracting States:  
**BE CH DE ES FR GB IT LI NL SE**(71) Applicant: **Goglio, Luigi**  
**Via Frua, 11**  
**I-20144 Milano (IT)**(72) Inventor: **Goglio, Luigi**  
**Via Frua, 11**  
**I-20144 Milano (IT)**(74) Representative: **Petruzzello, Aldo et al**  
**Dr. Ing. A. Racheli & C. srl,**  
**Viale San Michele del Carso, 4**  
**I-20144 Milano (IT)**(54) **Hinged lid attached to a flexible or semi-rigid container for foodstuff products.**

(57) A lid for flexible or semi-rigid containers of foodstuff products in general, and particularly granular or pulverulent products, such as coffee, flours and the like, which is obtainable by subsequently folding and glueing sides and edges of a punched carton panel, having a base (7), a front side (8), two lateral sides (9) and (10), and a back side (11) fixed to the rear wall of the container (1), with the front side (8) forming a 2 to 5 degree negative angle with respect to the vertical plane, so as to ensure sealing of the container by exerting pressure on its front wall.

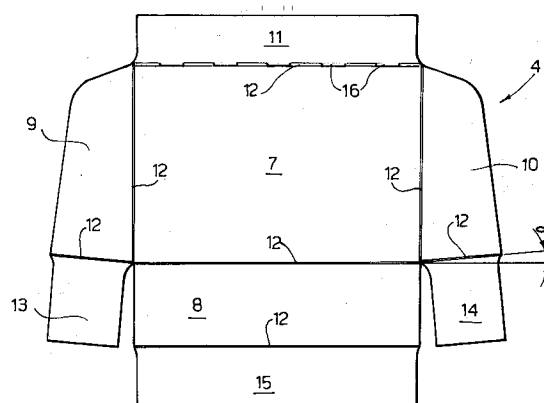


FIG. 1

**EP 0 663 343 A1**

The present invention refers to a lid for flexible or semi-rigid containers for foodstuff products in general, and particularly granular or pulverulent products, such as coffee, flours and the like.

Remaining in the field of coffee, as it is known, various types of coffee packages exist, some of which preserve their original shape after being opened and can therefore be utilized until their contents have been completely taken out.

For example, European patent application No. 92110197.8 filed on 17 June 1992, in the name of Goglio Luigi, describes a semi-rigid-type container made of flexible material, which can be utilized for partial contents removal, until contents have been completely taken out.

The aim of the present invention is to supply a cover-lid for such types of containers, which is extremely inexpensive, easy to assemble and user-friendly, and which can ensure container covering while giving the feeling that the container itself is satisfactorily sealed.

This lid according to the present invention, which can be applied to parallelepiped-shaped containers, consists of a rectangular base with four outer sides embracing the upper edge of the container. The lid's front side is fixed to the two lateral sides, while the back side is free and is fastened, by glueing or other means, to the uppermost part of the container's back wall.

The lid according to the present invention can be economically produced in cardboard or multi-layer material, and has an approximately 3 to 4 degree negative angle to the vertical, so that its lower edge exerts a pressure on the front wall of the container, thus ensuring closure of the same, while producing a snap-shut sound enabling the user to perceive that closure has indeed taken place.

Further features of this invention will be clearer from the following detailed description, which is purely illustrative, and therefore outlines only one of the invention's possible embodiments shown in the appended drawings, wherein:

figure 1 is a plan view of a punched-carton surface capable of forming, once appropriately folded, the lid according to the invention;

figure 2 is an axonometric view of the lid according to the invention, applied to a container and shown in a partially opened position;

figure 3 is a side view of a container with the lid applied in closed position;

figure 4 illustrates the container during use, with the lid uplifted;

figure 5 is a cross-section of the lid applied to the container.

With reference to said figures, 1 generally indicates a container for foodstuff products, such as granular or pulverulent products, especially coffee,

of a semi-rigid type, like the one described in the aforementioned European patent application No. 92110197.8.

The container 1 has a parallelepiped shape, with a wide upper opening 3 (fig. 4), sealed by a peelable diaphragm 2 (fig. 2), which is removed at the opening of the container and the container can be closed by means of the lid according to the invention, herein referenced as a whole by reference numeral 4.

As visible in fig. 4, opening 3 determines a perimetral frame 5 in the upper wall of container 1, beneath which is situated a stiffening frame 6, which can be of plastic material.

The lid 4 according to the present invention is obtained by starting from a cardboard, or multi-layer material, pre-punched, as shown in fig. 1. It has a rectangular center surface 7, which makes up the lid base, and four sides 8, 9, 10, 11, which respectively make up the front side, the lateral sides and the back side of the lid, which therefore takes on a box-like shape.

Appropriate creasings 12 between the various sides and the central surface 7 are foreseen, which simplify folding said sides in their pre-set positions. Further creasings, also indicated by the reference numeral 12, are foreseen in correspondence with other fold lines, as will be detailed further on.

More precisely, front-lid edge 8 of the lid is attached to the two side edges 9, 10 by means of corresponding inner turned-up flaps 13, 14, supported by the latter. In addition, front edge 8 in turn foresees a flap 15, which folds inwardly, above flaps 13, 14, so as to further stiffen front edge 8 of the lid, which, together with the vertical plane, will form a negative angle, as will be explained further on.

Rear edge 11, on the other hand, remains free and is attached to the rear wall of the container 1, e.g. by means of an adhesive, so that the corresponding creasing 12 is flush with the upper edge of the container, thus functioning as a lid-hinge. To enhance the hinge effect, slits 16 are punched along the creasing which join rear edge 11 to the central base panel 7 of the lid.

In order to increase the sealing effect of the lid on the container, while being closed (figures 3 and 5), thus preventing it from accidentally opening, front side 8 of the lid is slightly inclined inwards and downwards. That is, it has a negative angle  $\alpha$  from 2 to 5 degrees, preferably from 3 to 4 degrees with respect to the vertical plane, so that its lower flap exerts pressure on the container's front wall.

This pressure causes a slight rotation of flap 15, folded inside flout edge 8, so as to engage its upper edge against the stiffening frame 6 (fig. 5) of the container, making for a snap-like sealing.

In this way, once the peel-off sealing strip 2 has been removed from the container 1, the latter can be closed again by lowering lid 4.

## Claims

1. A lid for flexible or semi-rigid containers (1) for foodstuff products in general, and particularly granular or pulverulent products, such as coffee, flours and the like, having a box-like shape, with a base (7), a front side (8), two lateral sides (9, 10) and a back side (11) attached to the rear wall of the container (1), characterized in that said rear side (11) is joined only to the lid base (7) by means of a fold line (12) functioning as a hinge for the lid itself, and in that said front side (8) forms a negative angle ( $\alpha$ ) to the vertical plane of the container's front wall (1). 5  
10  
15
2. A lid according to claim 1, characterized in that said angle ( $\alpha$ ) is comprised between 2 and 5 degrees, preferably 3 - 4 degrees. 20
3. A lid according to claim 1 or 2, characterized in that said fold line (12) acting as a lid hinge (4), contains slits (16) to enhance the hinge effect. 25
4. A lid according to any one of the previous claims, characterized in that it is obtained through a fold sequence from a pre-punched carton surface having a rectangular central surface (7), designed to constitute the lid base (4) and sides (8-11), in turn designed to make up said lid's outer edges, joined to the central surface (7) by means of corresponding creasings (12), making them easier to fold. 30  
35
5. A lid according to any one of the previous claims, characterized in that said front side (8) is fixed to the two lateral sides (9) and (10) by means of up-turned inner flaps (13) and (14) provided thereon. 40  
45
6. A lid according to claim 5, characterized in that said front side (8) contains an up-turned flap (15) which folds inward upon said flaps (13, 14), supported by sides (9, 10). 50
7. A lid according to any one of the previous claims, characterized in that the lower flap of its front side (8) exerts pressure on the front wall of the container when being closed. 55
8. A lid according to claims 6 or 7, characterized in that the upper edge of flap (15), folded inside the flout edge (8) of the lid, rests - when

being closed - against a stiffening frame (6) situated inside the upper wall of the container, wherein there is an opening (3), providing a snap-tight sensation.

9. A container for foodtuff products, particularly granular or pulverulent products, such as coffee and the like, fitted with a lid according to any one of the previous claims.

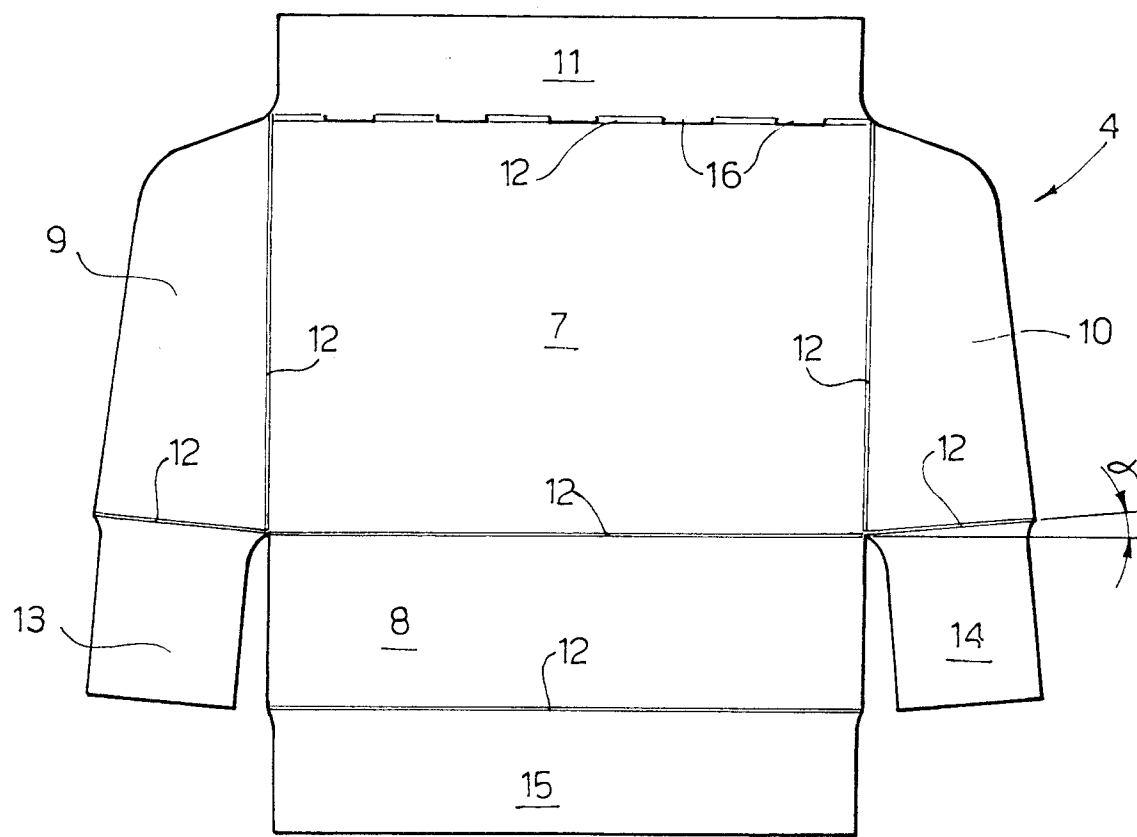


FIG. 1

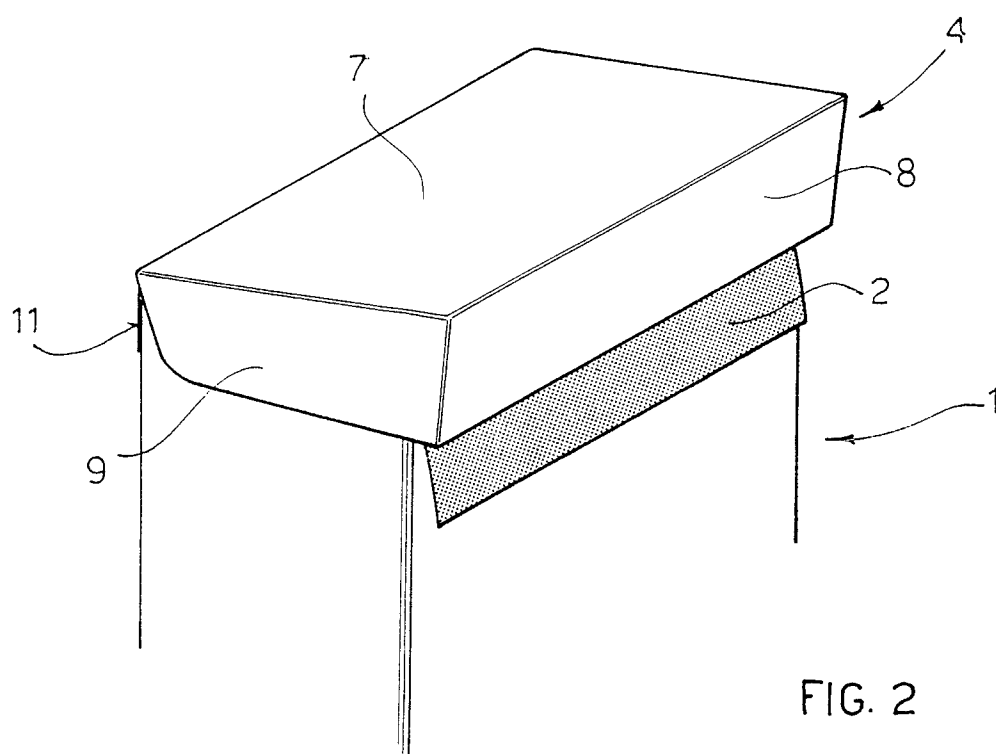


FIG. 2

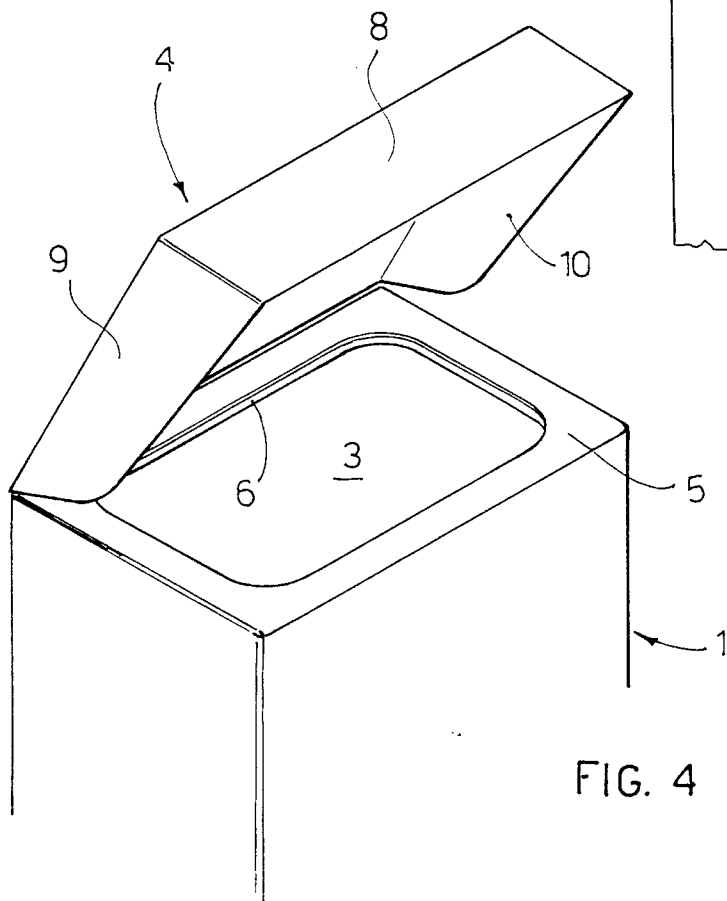
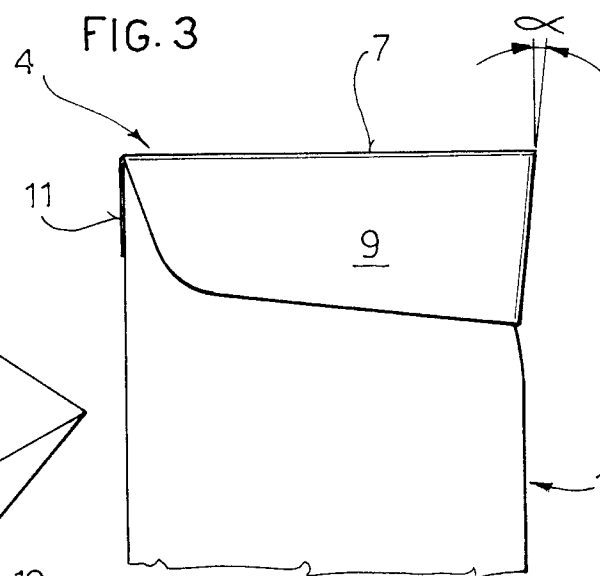
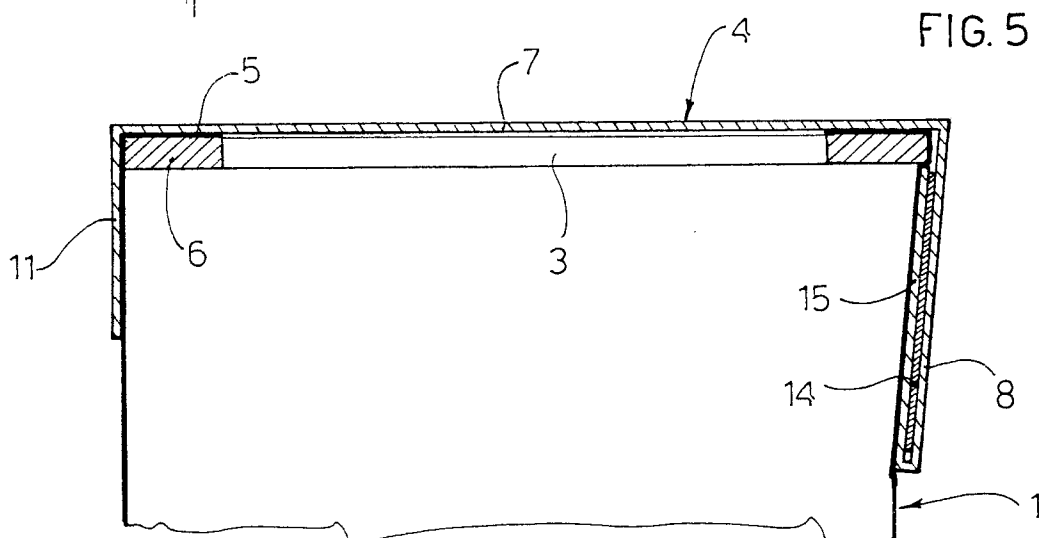


FIG. 4





European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number  
EP 95 10 0240

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.6)
Y	US-A-4 869 424 (WOOD) * column 3, line 29 - line 44; figures * ---	1-5,7,9	B65D5/66
Y	US-A-4 762 272 (HERRIN) * figure 1 * ---	1-5,7,9	
A	US-A-3 326 447 (WILLIAMSON) * column 4, line 48 - paragraph 57; figures 8,10 * ---	6,8	
A	GB-A-1 036 734 (FIELD, SONS & CO) * figures * ---	1,2	
A	FR-A-1 339 159 (MULCEY) * figure 6 * -----	1,2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 24 April 1995	Examiner SERRANO GALARRAGA, J
<b>CATEGORY OF CITED DOCUMENTS</b> 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			