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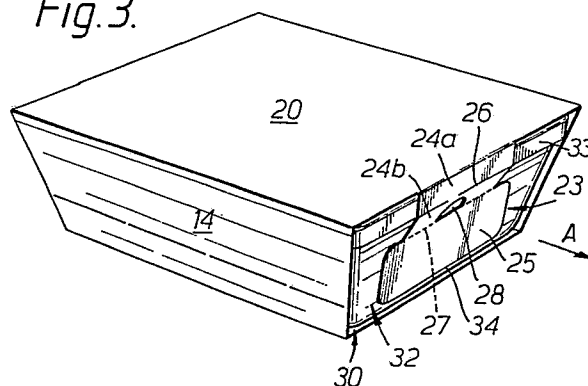
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54 A carton.

57) A carton for holding a container of ice-cream or white or yellow-fats such as margarine or butter comprises an open ended sleeve. Identical end flaps (23) are provided at each end of the sleeve and are foldable over the ends of the sleeve so as to be secured to a container (32) therein. The flaps (23) inhibit removal of the container (32) from the carton and the part (25) of the flap (23) which is secured to the container (32) is detachable from the remainder (24) of the flap (23) by tearing along a line of weakness (27). Thus, a container (32) cannot be removed from the carton without tearing of the flap (23) which provides visible evidence of tampering.

Fig. 3.



Description

A CARTON

The invention relates to a carton and is particularly, but not exclusively, concerned with a carton for holding a container of ice cream or white or yellow fats such as margarine or butter.

The contents of a container may be tampered with by removal of the container from the carton. Clearly it is desirable that containers which have been tampered with by one person but not bought should not then be bought by another person.

According to one aspect of the invention there is provided a carton for receiving an article, the carton defining an opening for removal of the article from the carton, characterised in that the carton includes a portion which is movable into a position so as to extend at least partially across the opening and which is securable in that position to inhibit removal of the article from the carton, the portion or a part thereof being detachable to enable removal of the article.

Detachment of the portion, (which is preferably a flap) or part thereof will be visible on simple inspection of the carton to provide evidence of tampering.

Preferably the portion is securable in the said position by being secured to the article, so that if the flap is found not to be secured to the article or broken this also provides evidence of tampering.

According to another aspect of the invention there is provided a carton for receiving an article, the carton defining an opening for removal of the article from the carton, characterised in that the carton includes a portion which is movable so as to extend at least partially across the opening and which is securable to the article when the article is positioned within the carton so as to inhibit removal of the article from the carton.

Preferably in this case the portion (which again may be a flap) or part thereof is detachable to enable removal of the article.

In either case the carton is preferably formed from a blank having a plurality of panels.

Preferably the portion only extends partially across the opening in use so that the contents of the carton are visible which simplifies checking and enables less material to be used in manufacture of the carton.

The said portion may be securable to the article by an adhesive material. The material may be applied prior to sealing and may be of the hot melt or cold adhesive type. Preferably the material is of the heat sealable type. Preferably the portion carries the adhesive material, but the material may alternatively or additionally be applied to the article.

The portion may comprise first and second sections separated by a line of weakness, one section being detachable from the other at the line of weakness to enable removal of the article. The first section may be secured to the remainder of the carton through a fold line and the second section may be securable to the article.

The first section may be formed with a fold line,

e.g., parallel with a fold line through which it is secured to the panel, to enable the first section to fold around a peripheral part of a lid of the article, e.g., around the lid thereof.

An aperture may be included in the portion adjacent the line of weakening to assist in detachment of the second section.

A further line of weakening may be provided on the said portion so as to define therebetween a tear-off strip to enable the said portion to be detached from the remainder.

In a preferred embodiment two said portions are provided, the second portion extending at least partially across a second opening. The second opening is preferably opposite the first said opening. The carton may comprise a sleeve with an opening at each end.

Preferably the said portions extend from opposite edges of a common panel.

The said portions may extend from a panel which, in use, lies adjacent a lid or base of the article.

Preferably said portions are identical.

The carton panels preferably form an upper panel which in use lies immediately adjacent and extends across a wall such as a lid of the article, a lower panel which lies immediately adjacent and extends beneath another wall such as a floor of the container and two side panels which join the upper and lower panels together. Preferably the upper and lower panels are of different size.

According to a third aspect of the invention there is provided a carton according to either of the aforesaid aspects of the invention or any of the foregoing sub-clauses relating thereto having an article therein.

An aperture may be provided in the or each portion.

According to yet another aspect of the invention there is provided a blank of sheet material for use in forming a carton according to the first or second aspect of the invention described herein.

The blank preferably includes a plurality of panels.

The portion may carry an adhesive material which may be of the hot melt or cold adhesive type but preferably is of the heat sealable type.

The portion may comprise first and second sections separated by a line of weakness. The first section may be secured to the remainder of the blank through a fold line and the second section may carry the adhesive material.

The first section may be formed with a fold line therein, e.g., parallel with a fold line through which it is secured to the panel.

A further line of weakness may be provided on the said portion so as to define a tear off strip between the lines of weakness.

An aperture for a fingernail may be included in the portion adjacent either or both lines of weakening.

Two said portions may be provided and may extend from opposite edges of a common panel. The portions are preferably identical.

Preferably the blank is divided into four main panels by fold lines. The blank may comprise two broad panels and two narrower ones alternately arranged. Preferably one of the broad panels is longer than the other. The longer panel preferably mounts the said portion or portions although they may be mounted in any of the panels. The longer panel may be an end panel and the opposite end panel may be connected through a fold line to a securing flap for securing to the longer panel to form the blank into a sleeve.

A fold line is preferably provided in the blank such that when the blank is formed into a sleeve it can be folded flat.

A carton in accordance with the invention will now be described by way of example with reference to the accompanying drawings in which:-

Fig.1 is a plan view of a carton blank in accordance with the invention,

Fig.2 is a perspective view of a carton erected from the blank of Fig.1 shown partly broken away,

Fig.3 is a perspective view of the carton of Fig.2 with a container held therein, and

Fig.4 is a side view of the carton in Fig.3 shown partly broken away.

The blank includes a lower broad panel 10, connected through fold lines 12, 13 to tapered narrow side panels 14, 15. The side panel 14 has a fold line 16 formed therein parallel with fold line 12 and is connected to an edge of flap 17 through a fold line 18. The side flap 15 is connected through a fold line 19 to an upper broad panel 20.

The panel 20 is connected through fold lines 22 to identical end flaps 23. Each end flap comprises a first section 24 and a relatively larger detachable second section 25. The first section 24 is divided into sub-sections 24a, 24b by a fold line 26 and is connected to the detachable section 25 through a weakening line 27 formed by perforations. A semi-circular aperture 28 is formed in the sub-section 24b with its diameter on the perforations 27. A patch of heat-sealable material 29 is secured to the detachable section 25.

In use, the blank is erected to form a carton as shown in Fig.2 with the edge flap 17 glued to the underside of the panel 20, the carton having open ends 30. Normally the carton will be supplied to a user in a flat semi-erected form with the edge flap 17 glued in that way. In the flat form, the panel 14 overlies part of panel 10 and panel 20 overlies the panel 15 and the remaining part of panel 10.

A container 32 filled with product such as white fat, butter or ice cream is inserted in the carton from one end and each flap 23 is then folded downwardly across the adjacent opening 30 so that the sub-section 24a of the flap lies adjacent a peripheral edge of a lid 33 for the container, the sub-section 24b folds inwardly beneath the peripheral edge of the lid about fold line 26 and the detachable flap section 25 lies adjacent an end surface 34 of the container. Heat sealing bars 35 are then applied to the detachable flap sections 25 so as to melt the patches of material 29 against the container surfaces 34. On removal of the heat sealing bars the patches 29 set so as to

leave the detachable flap sections 25 adhered to the container.

To remove the container 30 from the carton, the user inserts a finger nail into one of the apertures 28 and exerts an outward force in the direction of arrow A in Fig.3 against the rear of the detachable flap section 25 to cause the weakening line 26 to tear over its full length. The container 32 can then be withdrawn from the carton with the detached flap section 25 adhered to it.

If desired one end of the carton could be permanently closed with the other end open as at 30 and having a flap 23.

The panel 10 is smaller in length and width than the panel 20 so that the carton tapers towards the panel 10. Such tapering can be varied to suit the shape of the container and, if necessary, the panels 10, 20 could be identical to provide a non-tapering carton.

Although the flaps 23 have been shown on Panel 20, they could be arranged on the panel 10 or on panel 14 or panel 15. More than one flap 23 could be provided at each end of the carton and the flaps 23 at each end could be arranged on just one panel or more than one panel.

The fold line 16 enables the blank to be folded flat and allows side seam gluing of the blank.

Whilst the above description refers to the material 29 being on the detachable sections 25, it could be on the end surfaces 34 of the container or on both the sections 25 and the end surfaces 34.

Whilst specific reference has been made to a heat sealable material 29, it could alternatively be a cold adhesive.

Claims

1. A carton for receiving an article (32), the carton defining an opening for removal of the article (32) from the carton, characterised in that the carton includes a portion (23) arranged to extend at least partially across the opening and which is securable to the article (32) when the article (32) is positioned within the carton so as to inhibit removal of the article (32) from the carton.

2. A carton as claimed in Claim 1, characterised in that the portion (23) or a part (25) thereof is detachable to enable removal of the article (32).

3. A carton for receiving an article (32), the carton defining an opening for removal of the article (32) from the carton, characterised in that the carton includes a portion (23) which is movable into a position so as to extend at least partially across the opening and which is securable in that position to inhibit removal of the article (32) from the carton, the flap (23) or a part (25) thereof being detachable to enable removal of the article (32).

4. A carton as claimed in Claim 3, characterised in that the flap (23) is securable in the position by being secured to the article (32).

5. A carton as claimed in Claim 1, 2, or 4,

characterised in that the portion (23) is securable to the article (32) by a heat sealable adhesive material (29).

6. A carton as claimed in Claim 5, wherein the portion (23) carries the adhesive material (29).

7. A carton as claimed in any preceding Claim, characterised in that the portion (23) comprises first and second sections (24, 25) separated by a line of weakness (27), the second section (25) being detachable from the first (24) at the line of weakness (27) to enable removal of the article (32).

8. A carton as claimed in Claim 7, wherein the first section (24) is formed with a fold line (26) to enable the first section (24) to fold around a peripheral part of a lid (33) of the article (32).

9. A carton as claimed in Claim 7 or Claim 8,

characterised in that an aperture (28) is included in the portion (23) adjacent the line of weakening (27) to assist in detachment of the second section (25) of the portion (23).

10. A carton as claimed in any preceding Claim, characterised in that the carton comprises a sleeve with an opening at each end and two said portions (23) are provided, the second portion (23) extending at least partially across the second opening.

11. A carton according to any preceding Claim characterised in that said portion (23) is in the form of a flap.

12. A blank of sheet material for use in forming a carton as claimed in any preceding Claim

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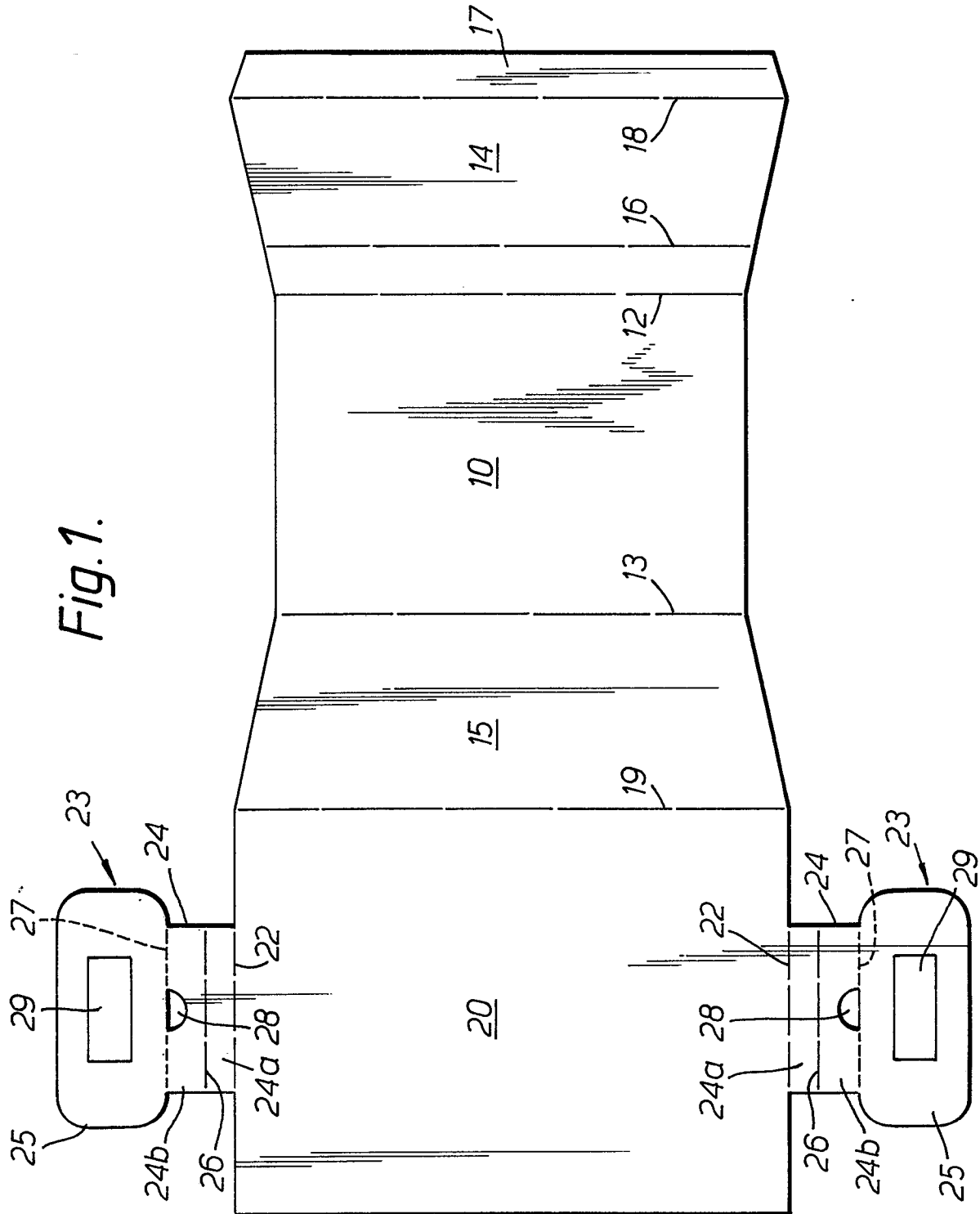
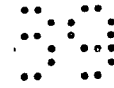
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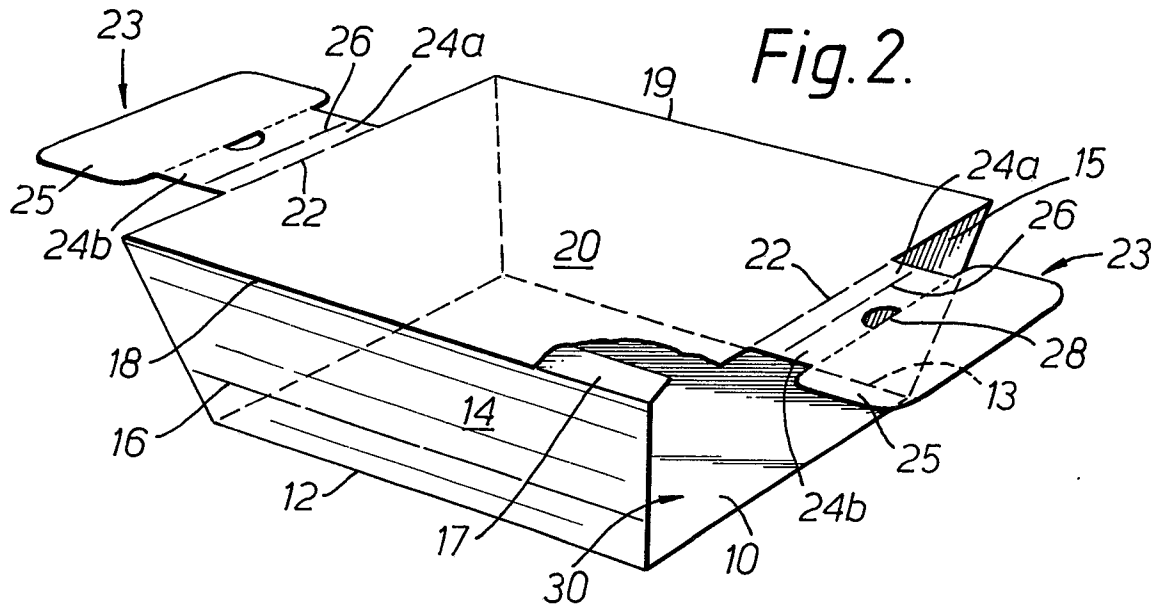
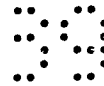


Fig. 3.

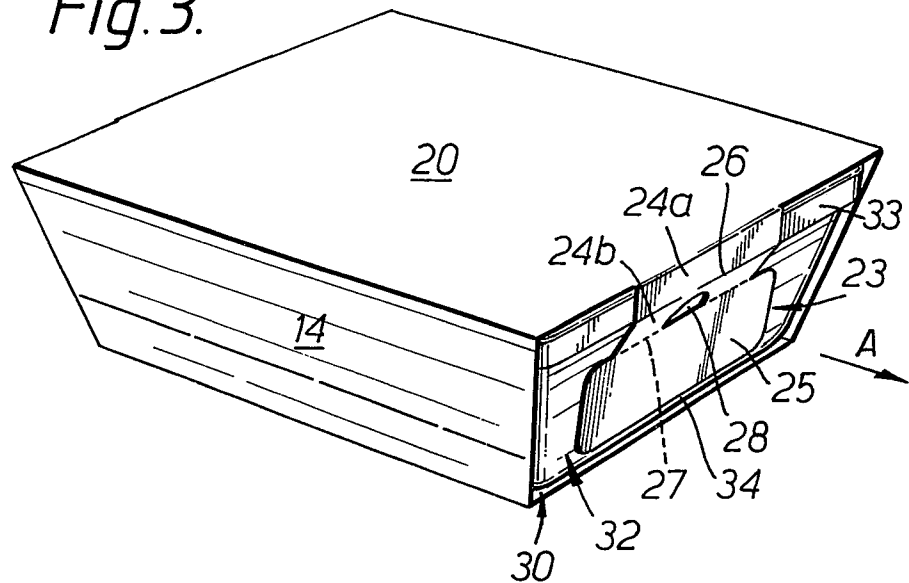
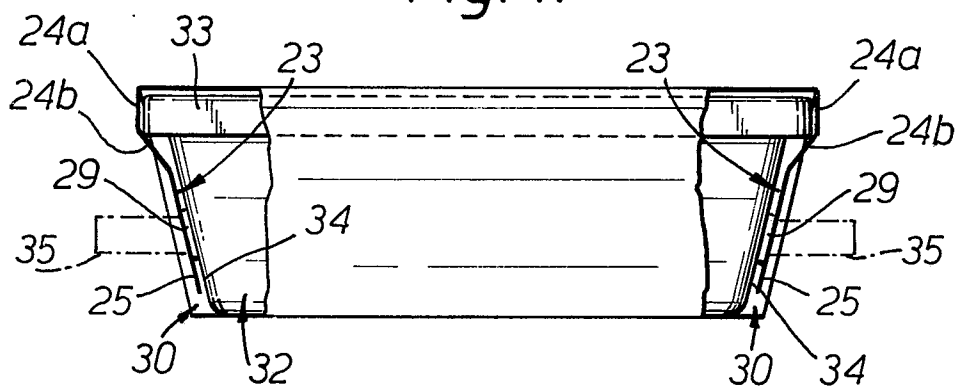


Fig. 4.





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. 4)
A	EP-A-0 024 691 (UNILEVER) * Page 7, lines 1-5; page 8, paragraph 3; figures 1,2,7 * ---	1,3,7, 10-12	B 65 D 75/52
A	US-A-3 604 560 (FARQUHAR) * Column 2, lines 7-18; column 2, line 60 - column 3, line 24; column 4, lines 23-24; figures 1-8 * -----	1-3,7,8 ,10-12	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 65 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 22-05-1989	Examiner VANTOMME M.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			