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(11) **EP 1 067 063 A2**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:
10.01.2001 Bulletin 2001/02

(51) Int. Cl.⁷: **B65D 85/76, B65B 25/06**

(21) Application number: **00830475.0**

(22) Date of filing: **05.07.2000**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **07.07.1999 IT BO990377**

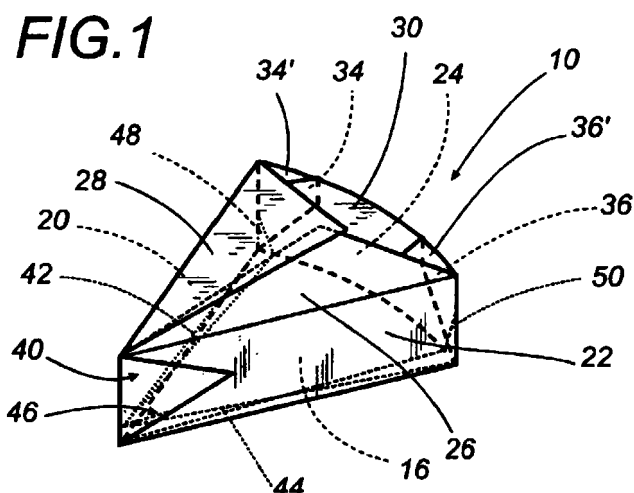
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(54) **PACKAGE, METHOD AND EQUIPEMENT FOR PACKAGING A PASTY FOOD PRODUCT**

(57) A pack (10) intended for a food product of paste consistency, typically processed cheese, comprises a wrapper erected from a blank (14) of essentially square outline (18) folded in such a way as to create a bottom (16) from which the sides (20, 22, 24) of the pack extend at right angles, and a lid consisting in a set of flaps (26, 28, 30) which extend from the sides (20, 22, 24) and are folded parallel to the bottom (16). The blank (14) presents a substantially quadrangular outline and is folded in such a manner that the bottom (16) will appear triangular, or as a sector to a circle, whilst the top flaps (26, 28, 30) are of dimensions sufficient in combination to conceal the entire upwardly directed surface presented by the portion of the packaged product, so that there is no need for a separate top.



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Description

[0001] The present invention relates to a pack for a food product of paste consistency.

[0002] In particular, the present invention relates to a food product of soft paste consistency, typically a processed cheese or the like.

[0003] Packs of familiar type for individual portions of processed cheese consist generally in a wrapper, proportioned to envelop a portion of the product, which is obtained from a flat blank typically of aluminium foil cut to an appropriate outline then folded in such a way as to establish a bottom face, and side faces extending perpendicularly from the bottom.

[0004] Such conventional packs are furnished also with suitable lid means applied uppermost and embodied in the majority of cases as a separate top, also of aluminium, which is positioned to coincide with the top face of the pack and retained on the product through the agency of flaps extending from the side faces and flattened over the top, parallel with the bottom.

[0005] In particular, when fashioning packs around such individual portions of processed cheese appearing triangular in shape or in the form of a sector to a circle, the packaging machine will utilize blanks of generally elongated shape with contoured edges, cut from a continuous strip of material decoiled from a roll, whilst the top is cut to a triangular shape from a separate strip decoiled likewise from a corresponding roll.

[0006] Such a method involves a considerable waste of the material used in fashioning the wrapper around the product. This waste is attributable not least to the large quantity of scrap generated in cutting and shaping the blanks.

[0007] Moreover, conventional machines produce excessive amounts of aluminium dust due to the type of cut employed when preparing blanks with a contoured outline. This aluminium dust will generally come into contact with the food product, resulting in undesirable contamination.

[0008] In certain types of pack embraced by the prior art, use is made of tear ribbons to break open the wrapper enveloping the product. The tear ribbon is made up in general of two linear elements sealed together and located on the inside of the wrapper. One portion of the tear ribbon extends for a short distance on the outside of the wrapper, attached to the external face. The operation of lifting up and pulling the exposed portion of the tear ribbon can in some cases be difficult to perform, especially for consumers whose dexterity may be impaired, such as the elderly for example.

[0009] Features of a pack according to the invention for a food product of paste consistency, in particular a processed cheese or the like, are recited in claim 1. Such a pack comprises a wrapper enveloping a portion of the food product, fashioned from a flat blank of appropriate outline folded in such a way as to create a bottom, from which the sides of the pack extend perpendicularly,

and incorporating lid means uppermost that consist in flaps extending from the sides and folded parallel to the bottom; the blank presents a substantially quadrangular outline and is folded in such a manner that the bottom will appear triangular or as a sector to a circle. The top flaps (26, 28, 30) moreover are of dimensions sufficient in combination to conceal the entire upwardly directed surface presented by the portion of the packaged product, thus constituting the top of the wrapper.

[0010] In this way, according to the present invention, the use of a separate top is eliminated and the machine components needed normally to apply such separate tops can therefore be dispensed with.

[0011] The economy achieved by eliminating the separate top and the relative overlap translates similarly into an overall saving on wrapping material that is quantifiable at between 2.5% and 6%, compared to conventional packs.

[0012] Also, the wrapper blank exhibits a quadrangular outline that can be produced easily, for example utilizing a simple and inexpensive linear cutting edge, whereas the preparation of contoured blanks according to the prior art requires the utilization of special cutting edges typified by a more complex geometry.

[0013] Similarly, a linear cut produces no dust, or in any event the dust produced is extremely limited in quantity compared to prior art packs for which a shaping cut is required to generate the blank. Accordingly, the risk of dust coming into contact with and contaminating the food product is eliminated or at least significantly reduced.

[0014] The pack recited in claim 12 incorporates means, associated with the wrapper, by which to tear open the selfsame wrapper; such means comprise at least one linear tear element presenting a lift and pull portion located to coincide with a tab afforded by the wrapper.

[0015] Combining the lift and pull portion of the tear element with a tab on which the user can lay hold, the operation of lifting and pulling the ribbon is made easy for the user, who can conveniently grip the tab and thus draw back the associated lift and pull portion of the tear ribbon at one and the same time. The problems connected with lifting the tear ribbon of a conventional pack are duly overcome in this way.

[0016] A further advantage of the pack disclosed is that by sealing the tab around the lift and pull portion of the tear ribbon, the step of seizing the ribbon and drawing it back to open the pack is made even easier for the user.

[0017] With the lift and pull portion of the linear tear element trapped and sealed internally of the tab, it becomes possible also to avoid extending the tear element beyond the dimensional compass of the wrapper enveloping the product. Moreover, the top flaps and all the lateral folds of the wrapper are similarly sealed and the pack thus made completely hermetic, thereby conserving the advantages of the tear ribbon as a means of

breaking open the wrapper neatly.

[0018] In packs of the prior art type, conversely, the lift and pull portion of the tear ribbon extends beyond the dimensional compass of the wrapper and is located in a channel affording a passage through which bacteria and other undesirable microorganisms are able to infiltrate, contaminating the product and among other negative consequences accelerating its deterioration.

[0019] In a further solution recited in claim 21, the pack includes a tear element associated with the wrapper, comprising at least a first branch and a second branch converging on a point of conjunction located at a vertex of the panel coinciding with the bottom of the pack; departing from the point of conjunction, the first and second branches extend in part along the folds coinciding with the sides of the pack, and in part along the bottom adjacent to the longitudinal side edges.

[0020] With this arrangement, the bottom of the pack can be detached together with a corresponding portion of each side fold located forwardmost on the pack. The lateral surface of the wrapper in contact with the food product is reduced in area, compared to a wrapper of conventional type, so that the contents can be separated with ease from the wrapper when open, whilst at the same time the side faces afford an appreciable surface area, especially at the rear ends, on which the fingers of the user can lay hold without touching the product directly: all of which helps both to ensure conditions of hygiene when opening the pack and to keep the fingers of the user clean.

[0021] The present invention relates also to a method of fashioning the pack disclosed, recited in claims 24, 36 and 45, and to equipment for fashioning the pack, recited in claim 48.

[0022] Other advantage of the invention are recited in the remaining claims.

[0023] The invention will now be described in detail, by way of example, with the aid of the accompanying drawings, in which:

- figure 1 illustrates a preferred embodiment of the pack disclosed, viewed in perspective and from the front;
- figure 2 illustrates a preferred embodiment of the pack disclosed, viewed in perspective and from the rear;
- figures 3 and 4 illustrate a preferred embodiment of the pack disclosed, viewed in elevation from the side and from the rear;
- figure 5 illustrates the blank of sheet material from which the wrapper of the pack according to the invention is fashioned, viewed in plan from above;
- figures 6 to 12 illustrate various steps of the method by which the pack according to the invention is fashioned;
- figure 13 illustrates the step of tearing and opening the wrapper of the pack disclosed, viewed in perspective;

- figure 14 illustrates a general schematic layout of equipment used to fashion the pack disclosed.

[0024] Figures 1 to 5 of the accompanying drawings show the preferred embodiment of a pack 10 according to the present invention, which is intended for use in packaging processed cheese and consists in a soft wrapper enveloping one portion of such a product; the wrapper is fashioned from a flat blank 14 of sheet material (shown in figure 5), for example aluminium foil or polypropylene film, of which one face at least is heat-sealable. The blank presents a substantially square outline 18 and is folded in such a way as to produce a bottom 16 appearing as a sector to a circle, albeit the shape might equally well be triangular, from which the sides 20, 22 and 24 of the pack 10 extend perpendicularly.

[0025] The pack comprises lid means coinciding with the top and consisting advantageously in flaps 26, 28 and 30 of which the combined dimensions will be sufficient to conceal the upwardly directed surface presented by the portion of the packaged product in its entirety.

[0026] Observing figure 5, the phantom lines indicated on the blank coincide with fold or crease lines by which the appearance of the wrapper is determined.

[0027] More exactly, the blank 14 exhibits a central panel 16 separated on either side by longitudinal crease lines 1620 and 1622 (converging on a vertex denoted V) from folds 20 and 22 coinciding with the longitudinal sides of the wrapper, and separated similarly at the rear by an arcuate transverse crease line 1624 from the end fold 24 of the pack.

[0028] The three folds 20, 22 and 24 in question are separated in turn by respective crease lines 2026, 2228 and 2430 from three folds denoted 26, 28 and 30 respectively, located outermost on the blank and serving to establish the top flaps of the pack.

[0029] The longitudinal folds 20 and 22 are separated at the forwardmost end by respective crease lines 2040 and 2240 from corresponding folds 40a and 40b such as can be pinched together along an intermediate crease line, denoted 40ab, which divides these same folds 40a and 40b and extends from the vertex V of the bottom panel 16 along a main diagonal D of the blank. The two folds 40a and 40b in question are designed when brought together to create a tab 40 at the tip of the pack, as will be explained in due course.

[0030] The longitudinal folds 20 and 22 are separated at the rear end by respective crease lines 2034 and 2236 from two relative folds 34a and 36a, separated in turn by intermediate crease lines 34ab and 36ab from further folds 34b and 36b which are separated by corresponding crease lines 2434 and 2436 from the end fold 24.

[0031] The pairs of folds 34a-34b and 36a-36b serve when united to create corresponding end fold tabs 34 and 36, as will be explained in due course.

[0032] The rear corners of the wrapper also incorporate pairs of folds denoted 34'a-34'b and 36'a-36'b, separated by respective crease lines, which when brought together will create a double thickness of material located beneath the relative longitudinal top flaps 26 and 28, between these and the flap 30 associated with the end fold.

[0033] The folds denoted 34'b and 36'b constitute the top layer of the end fold tabs 34 and 36, which are flattened over the end fold flap 30 and denoted 34' and 36' in figures 1 and 2.

[0034] The wrapper blank 14 is cut from a continuous strip of suitable material decoiling from a roll (not shown in the accompanying drawings), severed along lines T transverse to the longitudinal axis of the strip through the agency of a blade with a rectilinear cutting edge (likewise not shown in the drawings).

[0035] The blank 14 is made to advance along a direction denoted A in figure 5, perpendicular to the cutting line T and skew in relation to the median axis of the triangular or sector shaped portion of the food product, in such a way that the selfsame portion passes through the filling station disposed with its median axis aligned on the diagonal D of the blank 14.

[0036] Referring to figures 6 and 7, it will be seen how in a first step of the method disclosed the three main folds of the wrapper are bent at right angles to the bottom 16 and at the same time the tabs 34, 36 and 40 associated with the end folds and the tip are flattened against the corresponding sides 24 and 22.

[0037] Thereafter, with the wrapper erected as shown in figures 6 and 7, the paste product is introduced as illustrated in figure 8. The product is denoted P in this and subsequent figures of the drawings.

[0038] The next step, illustrated in figure 9, is that of flattening the end fold flap 30 over the product to assume a position parallel with the bottom 16.

[0039] Figures 10, 11 and 12 show the successive steps of the method, in which the top flaps 26 and 28 are flattened one over the other with the respective folds 34'a-34'b and 36'a-36'b interposed between the downwardly directed faces of the top flaps 26 and 28 and the upwardly directed face of the end flap 30.

[0040] This completes the top flaps 26 and 28, which extend from the longitudinal sides 20 and 22 of the pack and over the end flap 30 associated with and extending forward from the end fold 24, with the one flap 28 overlapping the other flap 26 along its free longitudinal edge.

[0041] At this point the pack will present the closed configuration of figures 1 and 2.

[0042] In particular, the longitudinal top flaps 26 and 28 are disposed in such a way as to overlap along a narrow longitudinal area of mutual contact.

[0043] The tab 40 of double thickness formed at the forwardmost tip of the pack by pinching together the corresponding end folds of the two longitudinal sides 20 and 22 is flattened against one side of the pack, and in

the example illustrated, more exactly, against the side 22 opposite the side 20 associated with the overlapping longitudinal top flap 28 positioned uppermost. This helps maintain the position of the one flap 28 over the opposite flap 26.

[0044] The pack comprises means 42 and 44 by which to tear and open the wrapper, connected permanently to the upwardly directed face of the blank destined ultimately to provide the internal surface of the wrapper.

[0045] Such tearing means comprise a linear element that includes two distinct tear branches 42 and 44 and a lift and pull portion 46 located to coincide with the aforementioned tab 40.

[0046] The dimensions of the blank 14, and the position of the portion of the product P on the diagonal D, are calculated so that the tab 40 extends through a distance, as discernible from the drawings, such that its width is no greater than the height of the pack. It will be observed in effect that there are no portions of the tab 40 folded over the top of the pack. Accordingly, a user wishing to tear open the pack can grip and pull the tab 40 with ease, as will be made clear in due course.

[0047] The tab 40 therefore consists in a double fold of material, sandwiching the lift and pull portion 46 of the tearing means 42 and 44, of which the two thicknesses are preferably sealed together so as to afford a more secure lift and pull action when the pack is torn open.

[0048] In the example illustrated, the tearing means are embodied preferably as a single linear element of which the two branches 42 and 44, first and second respectively, converge on a point of conjunction 46 located in close proximity to the vertex V of the panel establishing the bottom 16 of the pack. In this way, the tear element is furnished with a lift and pull end 46 incorporated into the tab 40 at the tip of the pack.

[0049] The first and second branches 42 and 44 extend through a first portion along the folds 20 and 22 coinciding with the sides of the pack, and through a second portion along the bottom 16 of the pack, adjacent to the two crease lines 1620 and 1622. The positioning of the tear element is such that the bottom 16 of the pack can be detached along with a corresponding portion at the forwardmost ends of the sides 20 and 22, as will be explained in due course.

[0050] The two branches 42 and 44 of the tear element further comprise respective third portions located at their free ends 48 and 50. More exactly, the two branches 42 and 44 are extended onto the rear end fold 24, terminating in third portions of oblique outline which lie contiguous to the relative crease lines 2434 and 2436 delimiting the end fold.

[0051] Whilst the preferred solution is to use a tear ribbon appearing as a single linear element, it would be possible just the same to utilize tearing means consisting in discrete branches joined one to another at the moment of their being applied to the blank.

[0052] To render the pack hermetic, the top longitudinal flaps are sealed one to another. In particular, the longitudinal flap 28 placed uppermost is overlapped with and sealed to the other longitudinal flap 26, and these two flaps 26 and 28 are overlapped with and sealed to the end fold flap 30.

[0053] In addition, the tabs 34, 36 and 40 associated with the end fold and the tip are folded double and sealed together.

[0054] Finally, the pairs of folds 34'a-34'b and 36'a-36'b between the top flaps 26 and 28 and the end fold flap 30 are pinched together, and the external faces are sealed to the corresponding faces of the longitudinal flaps 26 and 28 above and the end fold flap 30 beneath.

[0055] The pack according to the invention is easy to open, as discernible from figure 13. Indeed to open the wrapper, the consumer simply takes up the pack between the fingers of one one hand, gripping the two sides 20 and 22, then seizes the tab 40 at the tip with the other hand and tears it away from the remainder of the pack in such a manner as to pull the tear ribbon 42 and 44 and thus forcibly detach the forwardmost parts of the sides 20 and 22, the parts of the bottom 16 nearest the side edges, and the lower part of the end fold 24 (still intact in figure 13) near the side edges.

[0056] Figure 14 affords a schematic representation of a machine capable of manufacturing the pack described and illustrated. The machine comprises a frame 100 carrying a unit 102 by which a continuous strip of wrapping material is decoiled from a roll 104. The strip 106 of material is routed through a system of rollers such as will create and maintain a running loop 106', toward a labelling unit 108 by which the brand and/or other consumer information, typically a list of ingredients, are applied to one face.

[0057] Downstream of the labelling unit 108 the machine includes a unit, denoted 110 in figure 14, by which the tear ribbon is applied to the wrapper. Once the ribbon has been applied, the unit 112 next in line will cut the continuous strip 106 into quadrangular sheets, each of which forms the wrapper of a pack according to the present invention.

[0058] The single wrapping sheets or wrapper blanks are fed forward by a transfer conveyor 114 to a unit by which individual portions of the food product are wrapped. The wrapping unit includes a conveyor 116, illustrated schematically in figure 14, such as will advance the blanks through a folding unit 118 where each is erected to a tray configuration as shown in figures 6 and 7, into which the product can be dispensed, then a filling station 120 where a measure of the product is dropped into the folded and open-topped wrapper, a unit 122 by which the top flaps are folded, and finally a unit 124 by which the pack is sealed. Thereafter, the finished packs run out of the machine.

[0059] The equipment according to the present invention will utilize a single roll of strip material from which to cut the wrapper and a single roll of strip mate-

rial from which to obtain the tearing means. Though not indicated specifically in the drawings attached, such equipment will also comprise means by which the tear ribbon, consisting in a single linear element of Vee geometry, is positioned on the flat wrapper blank. The packaging equipment thus embodied will be both simple and compact.

[0060] Whilst the preferred geometry of the pack is that of a sector to a circle or a triangle, the features disclosed are applicable advantageously to other shapes, for example quadrangular.

Claims

1. A pack (10) for a food product (P) of paste consistency, typically a processed cheese or the like, comprising a wrapper enveloping a portion of the food product, fashioned from a flat blank (14) of appropriate outline (18) folded in such a way as to create a bottom (16), from which the sides (20, 22, 24) of the pack extend perpendicularly, and incorporating lid means uppermost that consist in flaps (26, 28, 30) extending from the sides (20, 22, 24) and folded parallel to the bottom (16), characterized in that the blank (14) presents a substantially quadrangular outline (18) and is folded in such a manner that the bottom (16) will appear triangular or as a sector to a circle, and in that the top flaps (26, 28, 30) are of dimensions sufficient in combination to conceal the entire upwardly directed surface presented by the portion of the packaged product (P), thus constituting the top of the wrapper.
2. A pack as in claim 1, wherein the blank (14) presents a diagonal (D), and the portion of the product (P) of triangular or sector shape is disposed with its median axis aligned on the diagonal (D).
3. A pack as in preceding claims, wherein the blank (14) presents a square outline (18).
4. A pack as in preceding claims, wherein the top flaps (26, 28) of the lid means associated with the longitudinal sides (20, 22) of the pack extend over the flap (30) associated with the rear end fold (24) and are disposed in such a way that the one longitudinal top flap (28) will overlap the other longitudinal top flap (26).
5. A pack as in preceding claims, wherein the dimensions of the blank (14) and the position of the portion of the product (P) on the diagonal are such that the longitudinal top flaps (26, 28) will overlap along the median line presented by the upwardly directed surface of the pack.
6. A pack as in preceding claims, wherein the longitu-

dinal top flaps (26, 28) overlap along a narrow longitudinal area of mutual contact.

7. A pack as in preceding claims, comprising first and second tabs (34, 36) of double thickness flattened against the rear end fold (24). 5
8. A pack as in claim 7, wherein portions (34', 36') of the wrapper extending upward from the first and second tabs (34, 36) are pinched and flattened over the end fold flap (30) beneath the longitudinal top flaps (26, 28), creating a fold of double thickness under each of the longitudinal top flaps (26, 28). 10
9. A pack as in preceding claims, wherein a tab (40) of double thickness formed at the forwardmost tip of the pack is flattened against one longitudinal side of the selfsame pack. 15
10. A pack as in claim 9, wherein the tab (40) formed at the forwardmost tip of the pack is flattened against the longitudinal side (22) opposite from the side (20) associated with the overlapping longitudinal top flap (28) positioned uppermost. 20
11. A pack as in claim 9 and claim 10, wherein the dimensions of the blank (14) and the position of the portion of the product (P) on the diagonal are such that the tab (40) extends through a transverse distance no greater than the height of the sides of the pack. 25
12. A pack as in preceding claims or as in the preamble of claim 1, comprising means (42, 44) associated with the wrapper by which to tear open the selfsame wrapper, consisting in at least one linear tear element (42, 44) furnished with a lift and pull portion (46) located to coincide with a tab (40) afforded by the wrapper. 30
13. A pack as in claim 12, wherein the tab (40) appears as a fold consisting in two thicknesses of material between which the lift and pull portion (46) of the tearing means (42, 44) is sandwiched. 35
14. A pack as in claim 13, wherein the tab (40) is an end fold tab flattened against one side (22) of the pack. 40
15. A pack as in claim 14, wherein the tab (40) is an end fold tab extending from the vertex (V) of the pack and flattened against one longitudinal side (22) thereof. 45
16. A pack as in claims 13 to 15, wherein the tab (40) presents mutually breasted faces between which the lift and pull portion (46) of the linear tear element is sandwiched, and which are sealed one to

another.

17. A pack as in preceding claims, wherein the one longitudinal top flap (28) is placed in overlapping contact with and sealed to the other longitudinal top flap (26). 5
18. A pack as in preceding claims, wherein the longitudinal top flaps (26, 28) are placed in overlapping contact with and sealed to the end fold flap (30). 10
19. A pack as in claims 17 and 18, wherein the pairs of folds (34'a, 34'b, 36'a, 36'b) lying between the folds of the end fold tabs (34, 36) and the fold coinciding with a corresponding longitudinal top flap (26, 28) are disposed with respective upwardly directed faces sealed to the relative longitudinal top flap (26, 28) and with respective downwardly directed faces sealed to the end fold flap (30). 15
20. A pack as in preceding claims, wherein all of the double folded tabs (34, 36, 40) are flattened with the respective mutually breasted surfaces sealed together. 20
21. A pack as in preceding claims or as in the preamble of claim 1, comprising tearing means associated with the wrapper, including at least a first branch (42) and a second branch (44) converging on a point of conjunction (46) located at a vertex (V) of the panel coinciding with the bottom (16) of the pack, wherein the first and second branches (42, 44) depart from the point of conjunction and extend in part along the folds coinciding with the sides (20, 22) of the pack, and in part along the bottom (16) adjacent to the longitudinal side edges. 25
22. A pack as in claim 21, wherein the tearing means comprise a single linear tear element of which the first branch (42) and the second branch (44) converge on a point of conjunction (46) located in the neighbourhood of the vertex (V) of the panel coinciding with the bottom (16) of the pack. 30
23. A pack as in claim 22, wherein at least one of the free ends (48, 50) of the branches (42, 44) of the linear tear element extends onto the end fold (24) and along the corresponding side edge (2434, 2436). 35
24. A method of fashioning a pack (10) for a food product (P) of paste consistency, typically a processed cheese or the like, comprising a wrapper enveloping a portion of the food product, fashioned from a flat blank (14) of appropriate outline (18) folded in such a way as to create a bottom (16), from which the sides (20, 22, 24) of the pack extend perpendicularly, and incorporating lid means uppermost that

- consist in flaps (26, 28, 30) extending from the sides (20, 22, 24) and folded parallel to the bottom (16), characterized in that the blank (14) presents a substantially quadrangular and preferably square outline (18) and is folded in such a manner that the bottom (16) will appear triangular or as a sector to a circle, and in that the top flaps (26, 28, 30) are of dimensions sufficient in combination to conceal the entire upwardly directed surface presented by the portion of the packaged product (P), thus constituting the top of the wrapper.
25. A method as in claim 24, wherein the blank (14) is cut from a continuous strip of material, along lines (T) transverse to the longitudinal axis of the strip.
26. A method as in claims 24 and 25, wherein the blank (14) presents a diagonal (D), and the bottom (16) of triangular or sector shape is disposed with its median axis aligned on the diagonal (D).
27. A method as in claim 26, wherein the blank (14) is made to advance along a direction perpendicular to the cutting line (T) and substantially skew in relation to the median axis of the portion of the packaged product.
28. A method as in claims 24 to 27, wherein the top flaps (26, 28) associated with the longitudinal sides (20, 22) of the pack are flattened over the flap (30) associated with the end flap (24), and one of the longitudinal top flaps (28) is flattened over the remaining top flap (26).
29. A method as in claims 24 to 28, wherein the dimensions of the blank (14) and the position of the portion of the product (P) on the diagonal are such that the longitudinal top flaps (26, 28) will overlap along the median line presented by the upwardly directed surface of the pack.
30. A method as in claims 24 to 29, wherein the longitudinal top flaps (26, 28) overlap along a narrow longitudinal area of mutual contact.
31. A method as in claims 24 to 30, comprising the step of generating first and second tabs (34, 36) of double thickness by pinching together intermediate folds lying between each of the longitudinal sides (20, 22) and the end fold (24), and flattening the selfsame tabs (34, 36) of double thickness against the rear end fold (24).
32. A method as in claim 31, wherein portions (34', 36') of the wrapper lying between the first and second tabs (34, 36) and the longitudinal top flaps (26, 28) are pinched and flattened over the end fold flap (30) beneath the longitudinal top flaps (26, 28).
33. A method as in claims 24 to 32, wherein a tab (40) of double thickness, formed at the forwardmost tip of the pack from an intermediate fold extending between the folds coinciding with each of the longitudinal sides (20, 22), is pinched double and flattened against one longitudinal side of the pack.
34. A method as in claim 33, wherein the tab (40) formed at the tip of the pack is flattened against the longitudinal side (22) opposite from the side (20) associated with the overlapping longitudinal top flap (28) positioned uppermost.
35. A method as in claims 33 and 34, wherein the dimensions of the blank (14) and the position of the portion of the product (P) on the diagonal are such that the tab (40) formed at the tip of the pack extends through a transverse distance no greater than the height of the longitudinal sides.
36. A method as in claims 24 to 35 or as in the preamble of claim 1, comprising means (42, 44) associated with the wrapper, by which to tear open the selfsame wrapper, including at least one linear tear element (42, 44) that affords a lift and pull portion (46) located to coincide with a tab (40) afforded by the pack.
37. A method as in claim 36, wherein the tab (40) appears as a fold consisting in two thicknesses of material between which the lift and pull portion (46) of the tearing means (42, 44) is sandwiched.
38. A method as in claim 37, wherein the tab (40) is an end fold tab flattened against one longitudinal side (22) of the pack.
39. A method as in claim 38, wherein the tab (40) is an end fold tab extending from the vertex (V) of the pack and flattened against one longitudinal side (22) thereof.
40. A method as in claims 37 to 39, wherein the tab (40) presents mutually breasted faces between which the lift and pull portion (46) of the linear tear element is sandwiched, and which are sealed one to another.
41. A method as in claims 24 to 40, wherein the one longitudinal top flap (28) is placed in overlapping contact with and sealed to the other longitudinal top flap (26).
42. A method as in claims 24 to 41, wherein the longitudinal top flaps (26, 28) are placed in overlapping contact with and sealed to the end fold flap (30).
43. A method as in claims 41 and 42, wherein the pairs

of folds (34'a, 34'b, 36'a, 36'b) lying between the folds of the end fold tabs (34, 36) and the fold coinciding with a corresponding longitudinal top flap (26, 28) are disposed with respective upwardly directed faces sealed to the relative longitudinal top flap (26, 28) and with respective downwardly directed faces sealed to the end fold flap (30).

44. A method as in claims 24 to 43, wherein all of the double folded tabs (34, 36, 40) are flattened with the respective mutually breasted surfaces sealed together.
45. A method as in claims 35 to 44 or as in the preamble of claim 24, comprising the step of applying tearing means to the wrapper, comprising at least a first branch (42) and a second branch (44) converging on a point of conjunction (46) located at a vertex (V) of the panel coinciding with the bottom (16) of the pack, in such a way that the selfsame first and second branches (42, 44) of the linear tear element extend along the folds coinciding with the sides (20, 22) of the pack, and along the bottom (16) adjacent to the longitudinal side edges.
46. A method as in claim 45, wherein the tearing means comprise a single linear tear element of which the first branch (42) and the second branch (44) converge on a point of conjunction (46) located in the neighbourhood of the vertex (V) of the panel coinciding with the bottom (16) of the pack, on the diagonal (D) of the blank (14).
47. A pack as in claim 46, wherein at least one of the free ends (48, 50) of the branches (42, 44) of the linear tear element extends onto the end fold (24) and along the corresponding side edge (2434, 2436).
48. Equipment for fashioning packs as in any one of the preceding claims and by the method as in any one of the preceding claims.
49. Equipment as in claim 48, wherein the single packs are fashioned through the agency of means (102, 104, 110, 112) by which to generate a wrapper blank, means (118) by which to bend the sides of the wrapper perpendicular to the bottom, means (120) by which the wrapper is filled with the product, and means (124) by which to fold the top flaps over the product and close the pack.
50. Equipment as in claims 48 and 49, wherein the single packs are fashioned utilizing a single roll of linear material from which the tearing means of the wrapper are obtained, and means by which the tearing means are applied as a single linear element of Vee geometry to the wrapper while still flat.

FIG.1

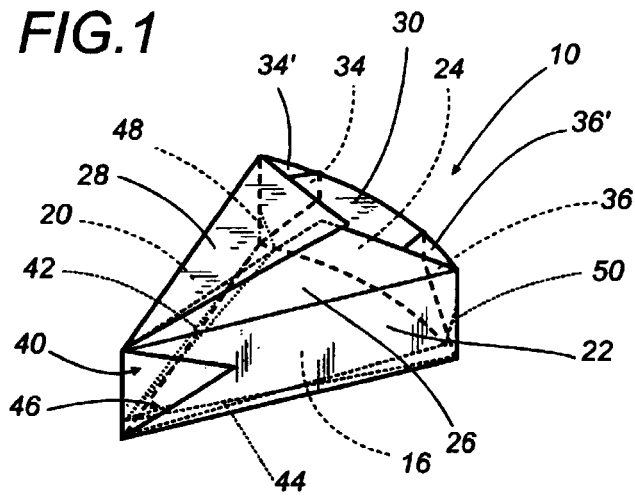


FIG.2

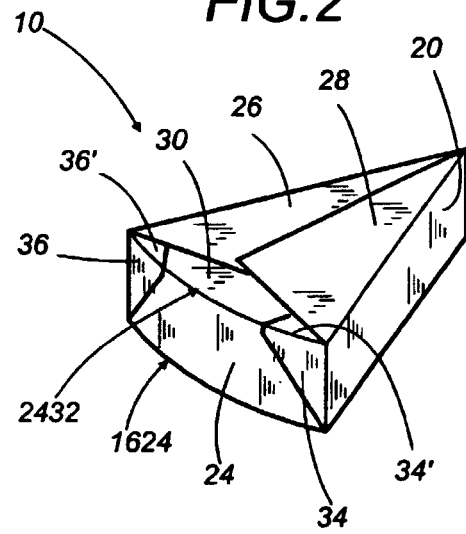


FIG.3

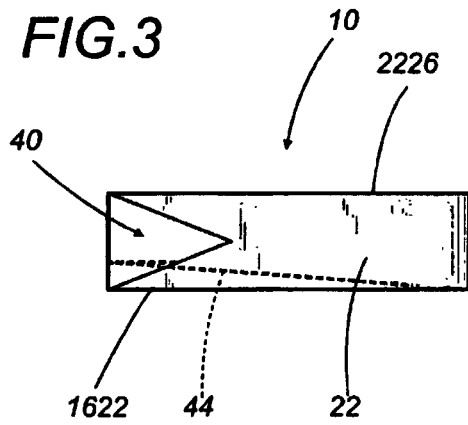


FIG.4

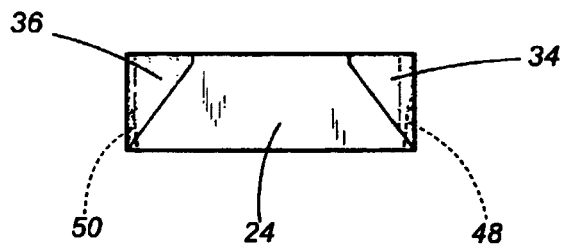


FIG.6

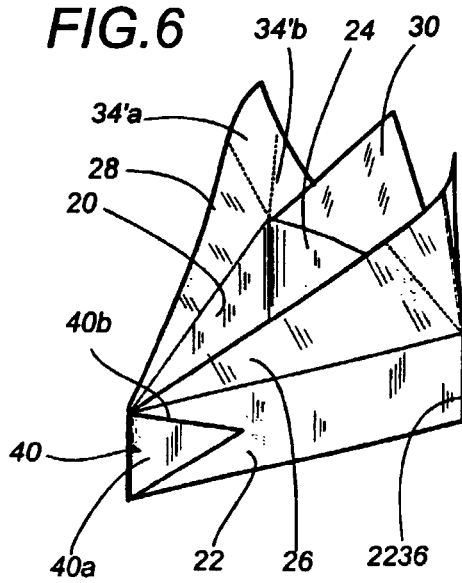


FIG.7

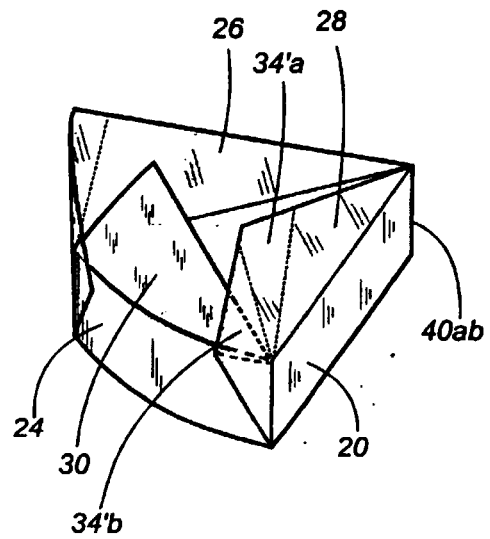


FIG.8

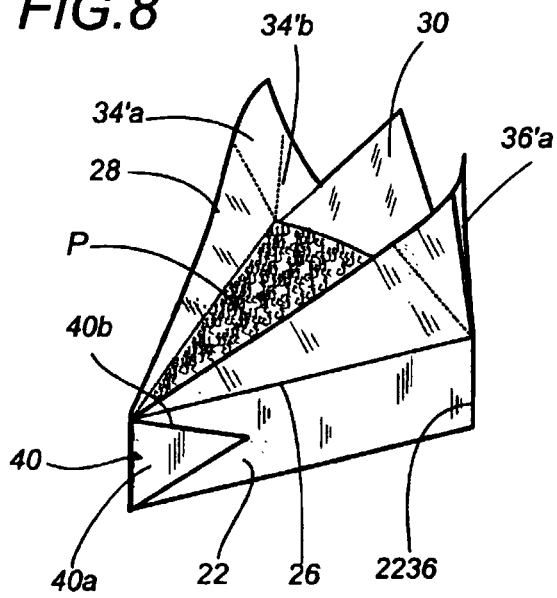


FIG.9

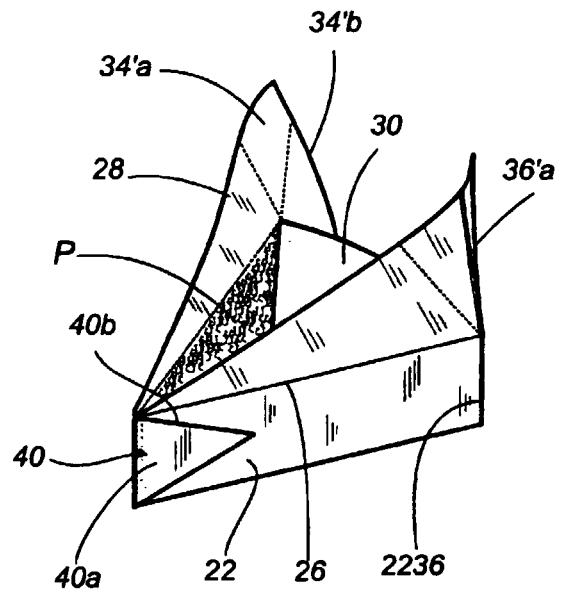


FIG.10

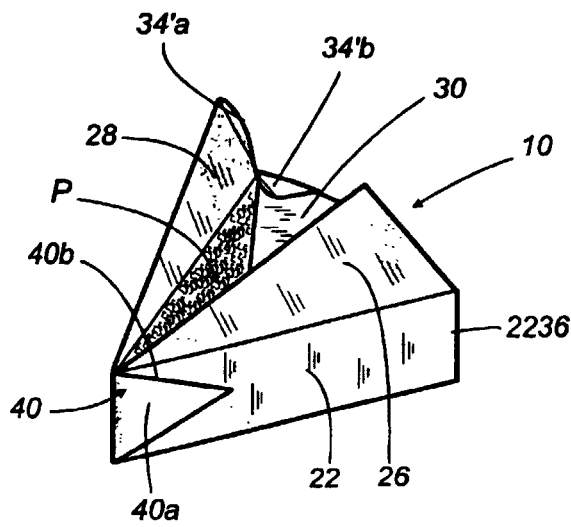


FIG.11

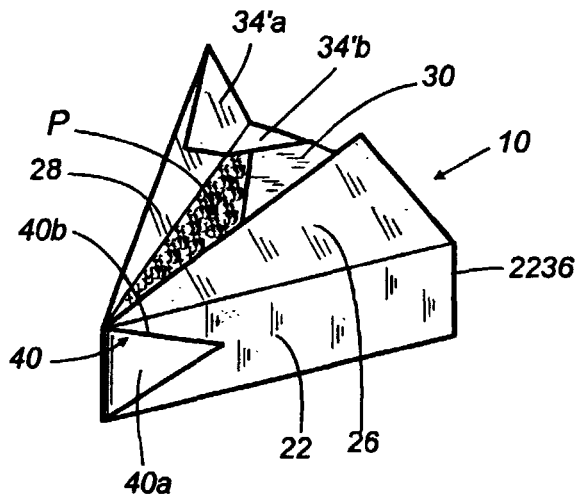


FIG.12

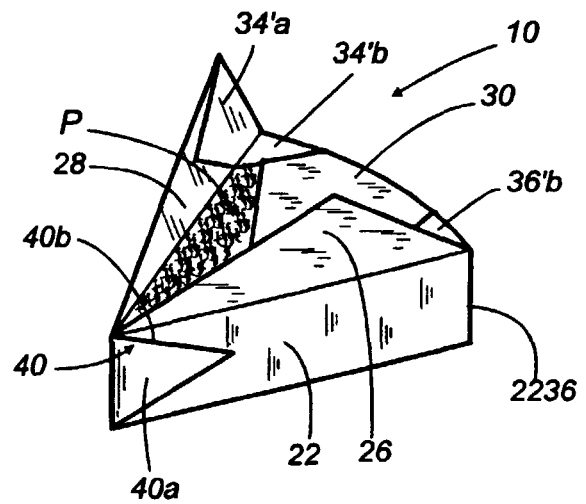


FIG.13

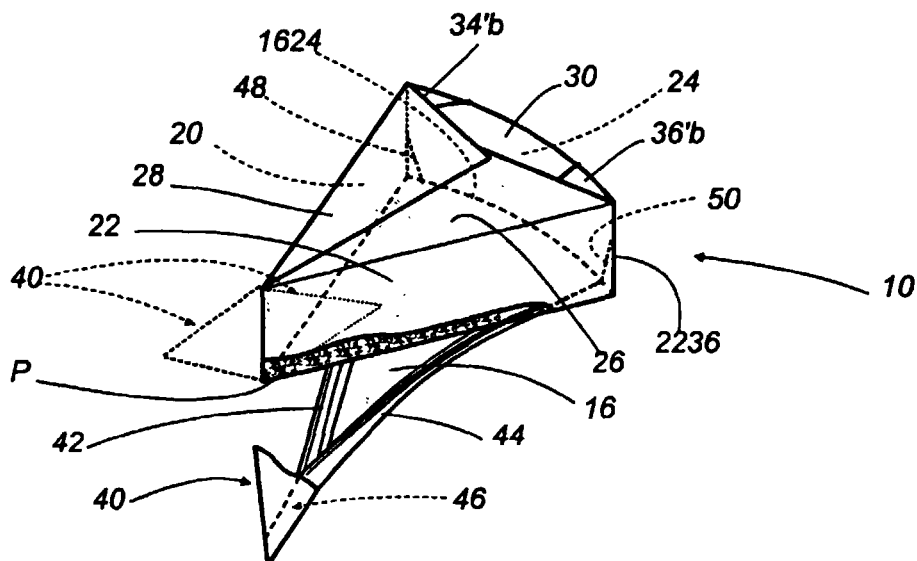


FIG.5

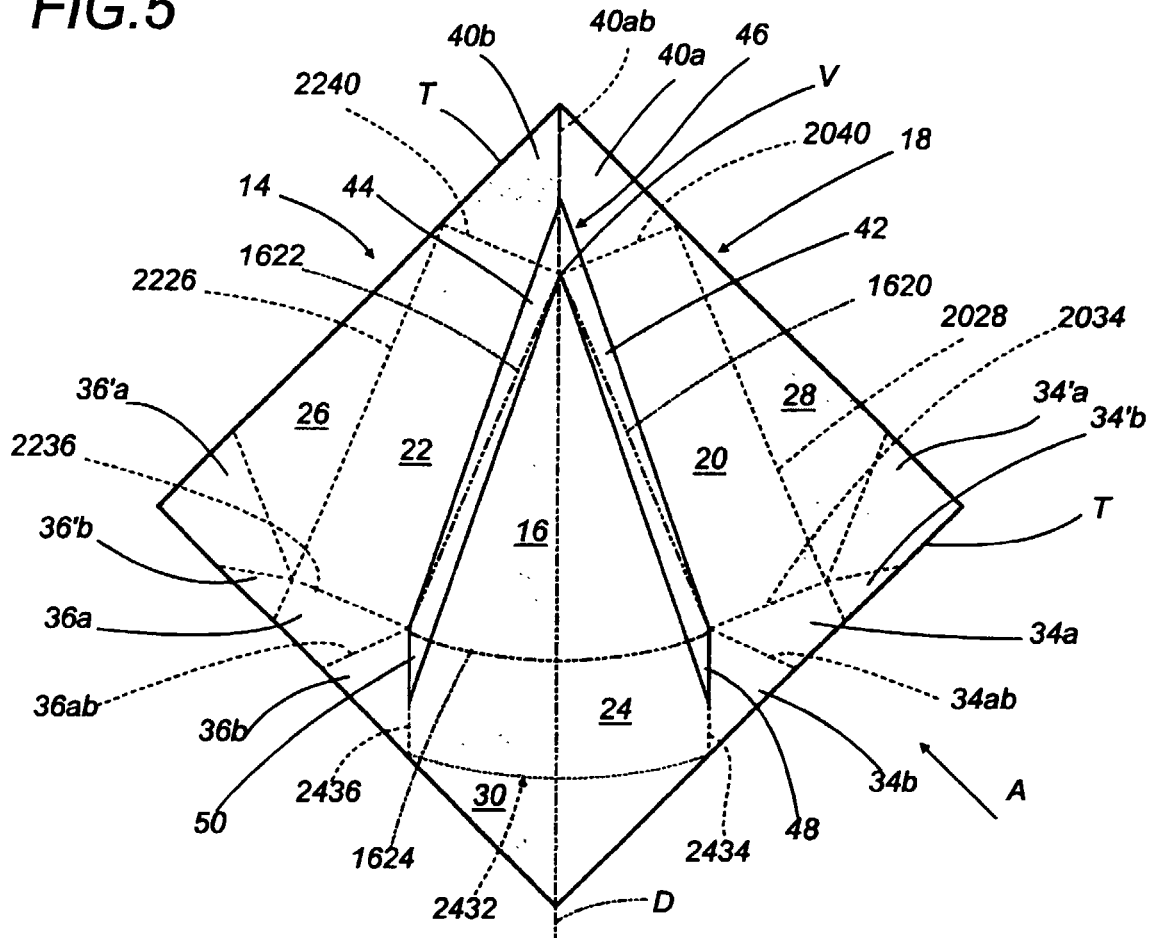


FIG.14

