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(54) **Packaging, in particular for a food product**

(57) Packaging, in particular for a food product,
which includes:

- a plurality of packed units (2) arranged in a juxtaposed configuration and each including a product enclosed in a sealed wrapper (3),
- at least one retaining element (7) for holding the said packed units (2) together and securing them in

the juxtaposed configuration, and including a portion of self-adhesive tape (7) adhered to adjacent sides (6) of the packed units (2),

in which the said portion of self-adhesive tape (7) has a serrated pattern along at least one of its lateral edges (8), which extend across adjacent sides (6) of the packed units (2).

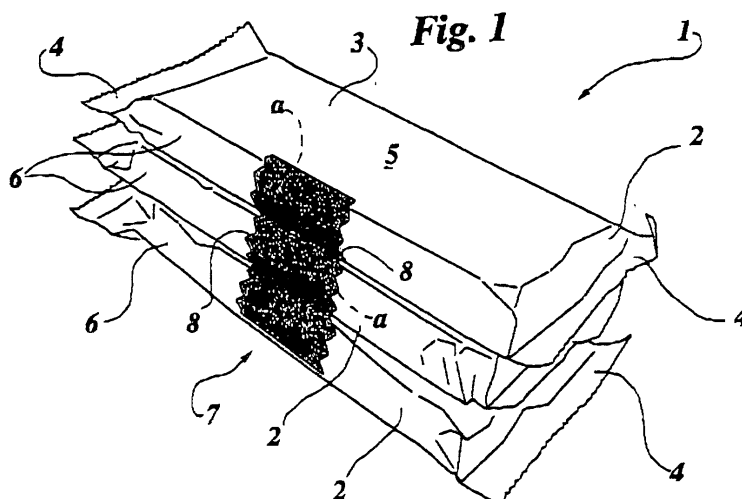


Fig. 1

Description

[0001] The present invention relates to packaging for holding together a plurality of products or portions of a product, which have already been individually wrapped in packaging material.

[0002] In particular, the invention relates to packaging which contains a plurality of packed units of a particular product, with the said packed units arranged in a juxtaposed or stacked configuration and held together by a retaining element which holds them in the said configuration and is constituted by a self-adhesive element applied to the adjacent sides of the packed units.

[0003] Packaging of the type described above is known and used on an industrial scale, in particular to pack baked goods such as cake or other snack bars: for example the product marketed by the Applicant under the trade name "KINDER FETTA AL LATTE". Such baked goods are generally flat and elongate and wrapped individually in a sheet material, the ends of which are sealed by heat bonding.

[0004] In mass production of these items, single units advance on a conveyor belt and, once they have been wrapped, are arranged in piles or stacks, typically of three to seven units, before being joined together by self-adhesive labels, one of each preferably being attached to each side of the pile or stack.

[0005] For this purpose, a self-adhesive label is used with the adhesive surface in contact with an easily detachable support such as a silicone-coated support. At the wrapping station where the individual packed units are arranged in stacks, self-adhesive labels, of around the same height as the stack, are removed from the support and attached one to each side of the stack. In order to enable the consumer easily to separate the individual units when required, the self-adhesive label has transverse notched or weakened tear lines, spaced by substantially the thickness of a packed unit. The self-adhesive label is fixed to the side of the stack in such a way that the notched or weakened tear lines are positioned in the area separating one packed unit from the next.

[0006] The consumer can therefore separate a unit from the stack simply by pulling it, which causes the adhesive wrapper to tear along the notched or weakened tear line.

[0007] The object of the present invention is to provide packaging of the type described above which significantly reduces packaging costs and also makes it easier for the consumer to separate the individually packed units.

[0008] This object is achieved according to the invention by providing packaging having the characteristics claimed in the Claims which follow.

[0009] Further advantages and characteristics of the packaging of the invention will become apparent from the following detailed description, provided with reference to the appended drawings, which illustrate one embodiment by way of example, and in which:

Figure 1 is a perspective view of a packaging according to the invention;

Figure 2 is a perspective view of a retaining element of self-adhesive film attached to the prepacked units; and

Figures 3a-d show various embodiments of the serrated edge of the self-adhesive strip.

[0010] The drawing of Figure 1 shows a pack 1 formed by three packed units 2 juxtaposed, or rather, in the orientation of the drawing, stacked with their larger sides 5 on top of each other. It is clear that the number of three is only used by way of example, since the pack could include any number of packed units 2, though this would generally be from two to seven, in dependence on the size of the units.

[0011] The packed units are generally elongate and flat; they will often be flow packed, whereby a food item or plurality of food items are wrapped in a tubular casing 3 of a sheet material suitable for contact with food which is then sealed at each end 4.

[0012] It is clear, however, that the manufacturing principle on which the invention is based could be applied to other types of packaging material, cardboard for example, provided that the overall shape of the packaging makes it possible to align or stack several packaged items.

[0013] The food item contained in each wrapper is preferably a baked item or the like, with a prismatic or, preferably, parallelepiped shape; the invention could be applied, however, to elongate items such as bread sticks, long biscuits, snack bars or confectionery items such as chocolates or truffles which are not elongate but can be packed in a strip of several units.

[0014] As shown in the drawings, the individual packed units are arranged aligned or stacked with their larger sides 5 in contact. A portion of self-adhesive strip 7, without tear lines, is applied to one side, or preferably both sides of the stack, adhering to the adjacent sides 6 of the packed units.

[0015] According to the invention, it is not necessary to use a self-adhesive label with pre-formed tear lines supplied on a removable backing, since it is possible to use a roll of pressure-sensitive self-adhesive tape, similar to that conventionally used for packaging and constituted by a film of plastics material with a thin layer of pressure-sensitive adhesive on one side and a release coating on the other for making it easier to unroll the tape from the roll it is conventionally supplied in.

[0016] The constituent characteristics of the plastics material making up the tape mean that when an initial tear is made, this tear preferably extends longitudinally. The self-adhesive tape is chosen with a width which almost matches, or is slightly less than the height of the stack formed by the packed units on top of each other.

[0017] The self-adhesive tape is cut into portions 7 with serrated edges 8 (transverse the length of the tape) and a portion 7 is attached to the adjacent sides 6 of the

packed units, arranging the serrated edges 8 parallel to the height of the stack. For preference, two portions 7 are attached one to each of two opposite sides of the stack.

[0018] The serrated edge may follow any pattern; it is preferable, however, if a sharp corner 10 is formed between each pair of adjacent teeth 9. One preferred pattern with a sharp corner between adjacent teeth is a saw or zigzag pattern (Figure 3a); other examples of toothed patterns are shown in Figures 3b-3d.

[0019] The pitch and dimensions of the teeth are preferably chosen so that, when the portion of self-adhesive tape is applied to the adjacent packed units, a sharp corner 10 corresponding to the recess between two adjacent teeth is in or almost in the region separating two adjacent packed units 2. In this way, when a consumer exerts a traction force on one packed unit, in order to separate it from the package, the sharp corner acts as a tear-initiation point whereby, once started, the tear continues through the tape, in a direction substantially orthogonal to the general direction of the serrated edge (direction which is indicated with the broken line a) in Figures 1 and 2), enabling the packed unit to be separated easily.

[0020] The invention thus provides packaging which involves low manufacturing costs since it requires little packaging material as well as fewer assembly operations, but is able to hold together a plurality of packed units.

[0021] In addition, the packaging of the invention successfully resolves the problem of separating the individual packed units, since a consumer is able to separate them easily without having to use such force that the food products contained in each individual wrapper, which may well be delicate, could be damaged.

Claims

1. Packaging, in particular for food products, which includes:

- a plurality of packed units (2) arranged in a juxtaposed configuration and each comprising a product enclosed in a sealed wrapper (3),
- at least one retaining element (7) for holding the said packed units (2) together and maintaining them in the juxtaposed configuration, which comprises a self-adhesive element (7) adhered to adjacent sides (6) of the packed units (2),

characterised in that the said self-adhesive element is constituted by a portion of self-adhesive tape (7) having a serrated pattern along at least one of its edges (8) extending across the adjacent sides (6) of the packed units (2), in such a way as to provide a tear-invitation point between adjacent teeth.

2. Packaging according to Claim 1, **characterised in that** the said serrated edge comprises a plurality of tooth-like formations (9), with a sharp corner (10) formed between adjacent teeth as a tear-invitation point.

3. Packaging according to Claim 1 or Claim 2, **characterised in that** the serrated edge has a saw tooth or a zigzag pattern.

4. Packaging according to any one of Claims 1 to 3, **characterised in that** the said portion of self-adhesive tape (7) is applied to adjacent sides (6) of the juxtaposed packed units (2) in such a way that a sharp corner (10) between adjacent teeth (9) is in the region separating two juxtaposed packed units.

5. Packaging according to any one of Claims 1 to 4, in which the said portion of self-adhesive tape (7) is serrated along both its edges (8) which extend like a bridge across the adjacent sides of the packed units (2).

6. Packaging according to any one of Claims 1 to 5, **characterised in that** the said packed units include a sealed wrapping (3) of sheet material.

7. Packaging according to Claim 6, in which the said sealed wrapping is of a flow-pack type.

8. Packaging according to any one of Claims 1 to 7, in which the said packed units are flat and elongate and arranged on top of each other to form a stack.

9. Packaging according to any one of the preceding Claims, **characterised in that** the said packed units (2) are joined to each other by first and second portions (7) of self-adhesive tape applied to opposite sides of the juxtaposed packed units.

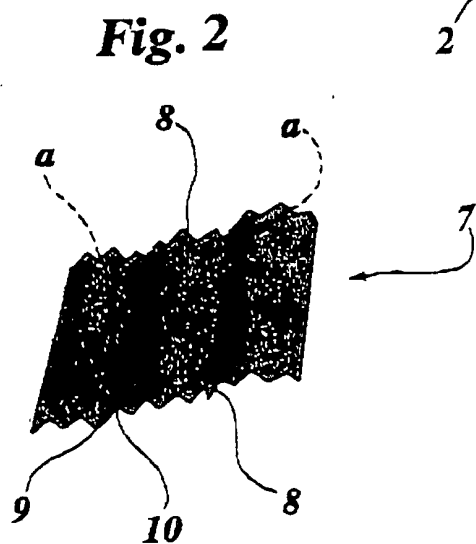
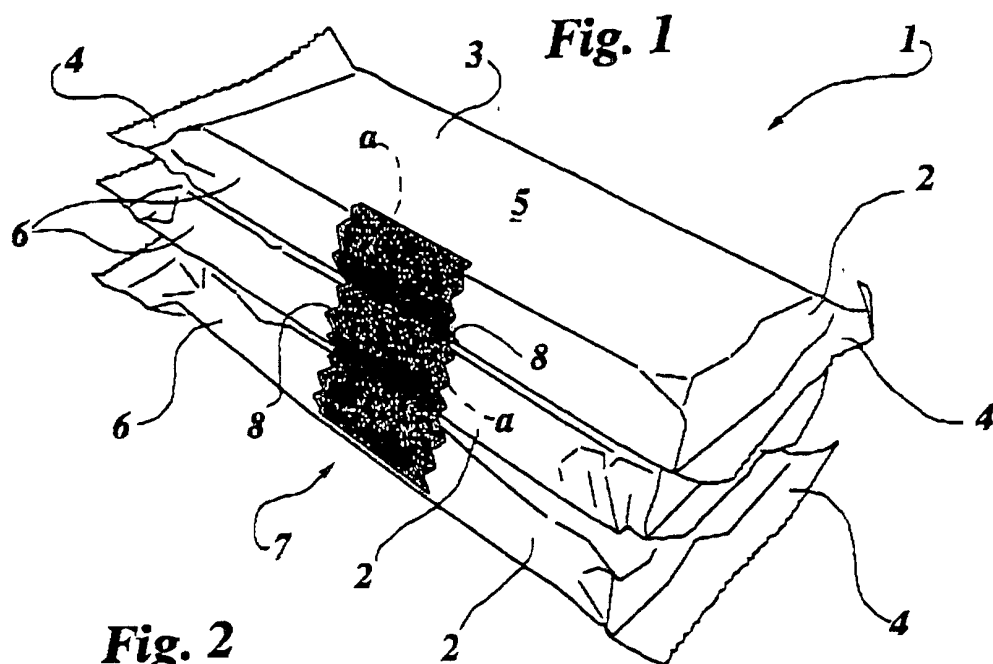
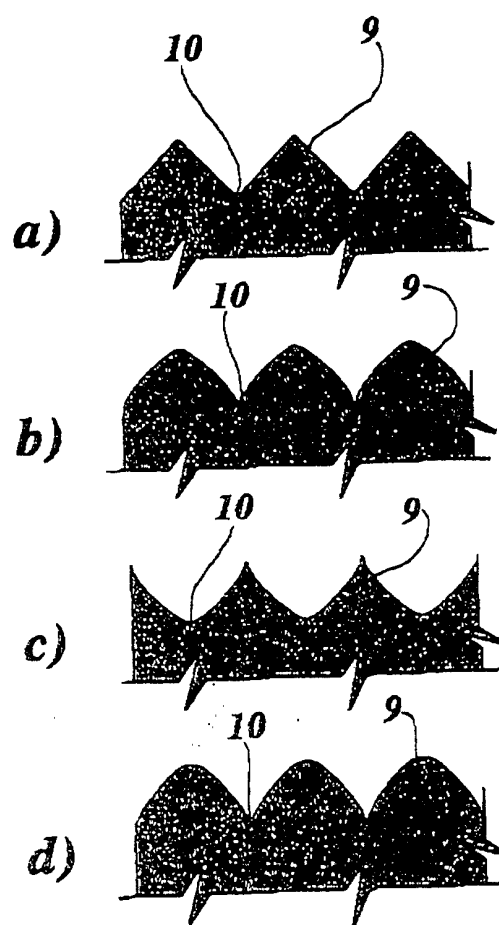


Fig. 3





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 01 83 0050

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	LU 41 914 A (FRÖHLING) 20 August 1962 (1962-08-20) * claims 1,2; figure 2 *	1-3,5,8,9	B65D71/50
X	EP 0 757 958 A (NESTLE SA) 12 February 1997 (1997-02-12) * column 3, line 49 - column 4, line 39; figures *	1-9	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 15 August 2001	Examiner 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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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 83 0050

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
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15-08-2001

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