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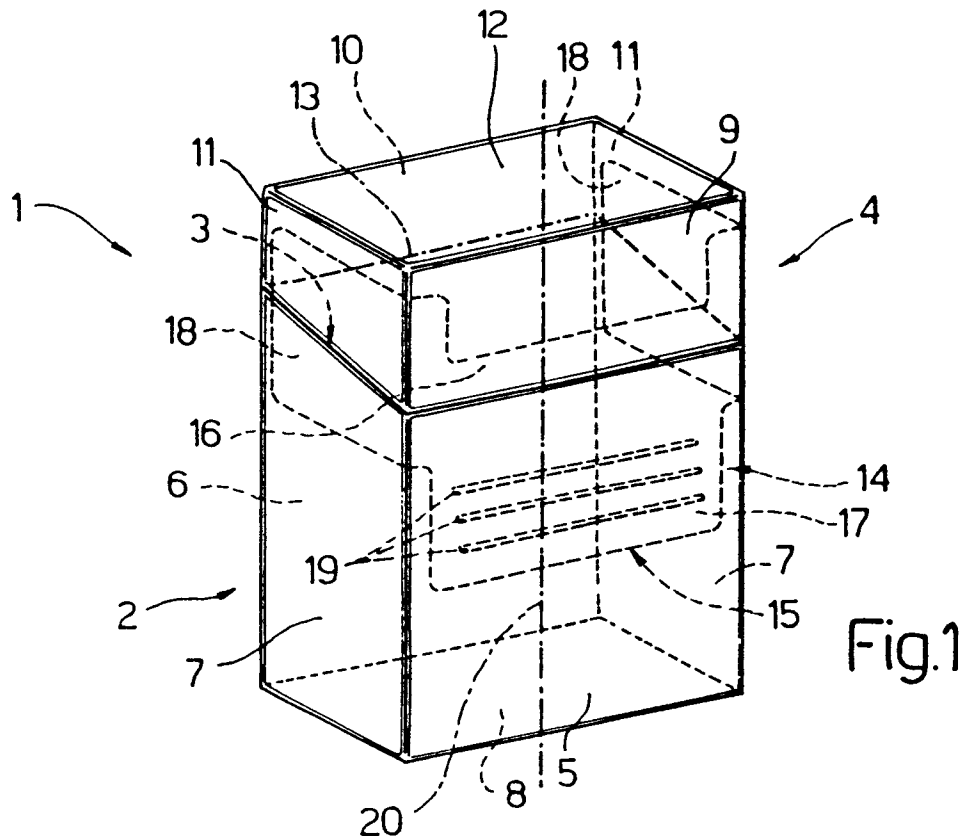
EUROPEAN PATENT APPLICATION

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I-40133 Bologna (IT)**(54) A cigarette packet with a hinged lid**

(57) A typical rigid cigarette packet (1) consists of a box-like container (2) with one open end (3) that can be exposed and closed by rotating a lid (4) hinged to a rear edge of the container (2); the contents are restrained by a frame (14) of which a first portion (17) is anchored to

the container (2) and a second portion (16) projects through the open end (3) and into the lid. To advantage, the first portion (17) of the frame (14) incorporates a set of transverse stiffening ribs (19).

**Fig.1****EP 0 710 609 A1**

Description

The present invention relates to a cigarette packet with a hinged lid.

In particular, the present invention relates to a cigarette packet of substantially rigid embodiment, typically comprising a box-like container with a predominating longitudinal axis, exhibiting a front panel disposed parallel to the longitudinal axis and open at one end, a lid associated hingedly with the container and capable of movement in relation thereto away from and toward a position whereby the open end is closed, also a frame element comprising a first portion located internally of the container and disposed at least partially in contact with the front panel, and a second portion projecting from the container by way of the open end.

Conventional cigarette packets of the type outlined above are fashioned normally from blanks, i.e. flat die-cuts of cardboard or similar material, of which the thickness has been reduced further and further over time for obvious reasons of economy; latterly indeed such materials have become so thin that an assembled packet can no longer even be guaranteed to retain a stable shape in normal use. It has been found with packets of more recent manufacture, in particular, that the simple operation of opening the lid can sometimes cause the front panel of the container to buckle outwards permanently, so that difficulty is experienced subsequently when closing the lid.

The object of the present invention is to provide a packet of the type described above such as can be fashioned from particularly thin sheet material and yet remain unaffected by the drawback in question. The stated object is realized in a cigarette packet with hinged lid according to the invention, which comprises a box-like container with a predominating longitudinal axis exhibiting a front panel disposed parallel to the longitudinal axis and open at one end, a lid associated hingedly with the container and capable of movement in relation thereto away from and toward a position whereby the open end is enclosed, also a frame element comprising a first portion, located internally of the container and disposed at least partially in contact with the front panel, and a second portion projecting from the container by way of the open end, characterized in that it further comprises transverse stiffening elements associated with the front panel, of which the function is to prevent the selfsame front panel from collapsing transversely inward and/or outward during normal use.

In a preferred embodiment of the packet described above, the stiffening elements consist in ribs disposed transversely to the longitudinal axis of the container and formed advantageously on part of a forwardmost portion of the frame element located internally of the front panel of the container. The invention will now be described in detail, by way of example, with the aid of the accompanying drawings, in which:

- fig 1 illustrates a preferred embodiment of the packet according to the present invention, viewed in perspective;
- fig 2 illustrates a detail of the packet of fig 1, developed and viewed in plan.

With reference to the drawings, 1 denotes a rigid packet serving to accommodate a group of cigarettes (not illustrated), which comprises a container 2 at bottom embodied essentially as a box with an open top end 3, and a lid 4 uppermost, also of box-like appearance, hinged to the container 2 and rotatable thus between open and closed positions in which the top end 3 is exposed and concealed, respectively. The container 2 exhibits a front panel 5 and a rear panel 6, mutually opposed and parallel, two lateral or flank panels 7 disposed mutually parallel and perpendicular to the front and rear panels 5 and 6, and a bottom end panel 8 disposed perpendicular to the remaining panels 5, 6 and 7.

The lid 4 has a front panel 9 and a rear panel 10, mutually opposed and parallel, two flank panels 11 disposed mutually parallel and perpendicular to the front and rear panels 9 and 10, and an end panel 12 disposed perpendicular to the other four panels 9, 10 and 11. In particular, the top and bottom edges presented respectively by the rear panel 6 of the container and by the rear panel 10 of the lid are permanently and plially associated along a crease line affording a hinge 13 about which the lid 4 can be rotated between the open and closed positions mentioned above.

The packet 1 also incorporates a frame element 14 of "U" shape projecting in part from the open end 3 of the container and affording a central section 15 which in turn is composed of an upper portion 16 extending upward from behind the front panel 5 of the container and a lower portion 17 associated rigidly with an inside face of the front panel 5. The frame element 14 further comprises two lateral portions 18, each secured to the inside face of the corresponding flank panel 7 and projecting beyond the open end 3 into the lid 4.

As discernible from fig 2, the frame element 14 affords a plurality of stiffening ribs 19 extending across the lower portion 17 of the aforementioned central section 15, transversely to a predominating longitudinal axis 20 of the container 2, of which the function is to add rigidity both to the central section 15 itself and to the front panel 5 of the container 2 associated therewith. The ribs 19 are rectilinear in the example illustrated, taking the form of ridges impressed forcibly from the sheet material in which the frame 14 is fashioned. Naturally, the ribs 19 might well exhibit a shape other than rectilinear as illustrated, for example sinusoidally curvilinear, and could be impressed directly into the front panel 5 of the container 2 rather than into the frame element 14.

In a further embodiment, not illustrated in the drawings, the ribs 19 might be dispensed with and replaced by a stiffening element rigidly associated with the inside face of the front panel 5. By way of example, an added

stiffening element of the type in question could take the form of a tongue or flap (not illustrated) extending from the top end of the front panel 5, bent over and flattened against the front inside face of the container and perhaps also exhibiting ribs similar to the ribs 19 shown in the drawings. 5

Claims

1. A cigarette packet (1) with a hinged lid, of the type comprising: a box-like container (2) with a predominating longitudinal axis (20), exhibiting a front panel (5) disposed parallel to the selfsame longitudinal axis (20) and open at one end (3); a lid (4) associated hingedly with the container (2) and capable of movement in relation thereto away from and toward a position whereby the open end (3) is enclosed; also a frame element (14) comprising a first portion (17), located internally of the container (2) and disposed at least partially in contact with the front panel (5), and a second portion (16) projecting from the container (2) by way of the open end (3), characterized in that it further comprises transverse stiffening elements (19) associated with the front panel (5), of which the function is to prevent the panel (5) from collapsing transversely inward and/or outward during normal use. 10 15 20 25
2. A packet as in claim 1, wherein the stiffening elements (19) consist in ribs (19). 30
3. A packet as in claim 2, wherein the ribs (19) are disposed transversely to the longitudinal axis (20) of the packet (1). 35
4. A packet as in claim 2 or 3, wherein the ribs (19) are rectilinear.
5. A packet as in claim 2 or 3 or 4, wherein the ribs (19) are embodied as ridges impressed forcibly from a sheet material utilized to fashion a part of the packet (1). 40
6. A packet as in preceding claims, wherein the ribs (19) are afforded by a central section (15) of the frame element (14) occupying substantially the same plane as the front panel (5) of the container (2). 45 50
7. A packet as in claim 6, wherein the ribs (19) are afforded by a lower portion (17) of the central section (15) of the frame element (14), located internally of the container (2) and disposed in contact with an inside face of the front panel (5). 55

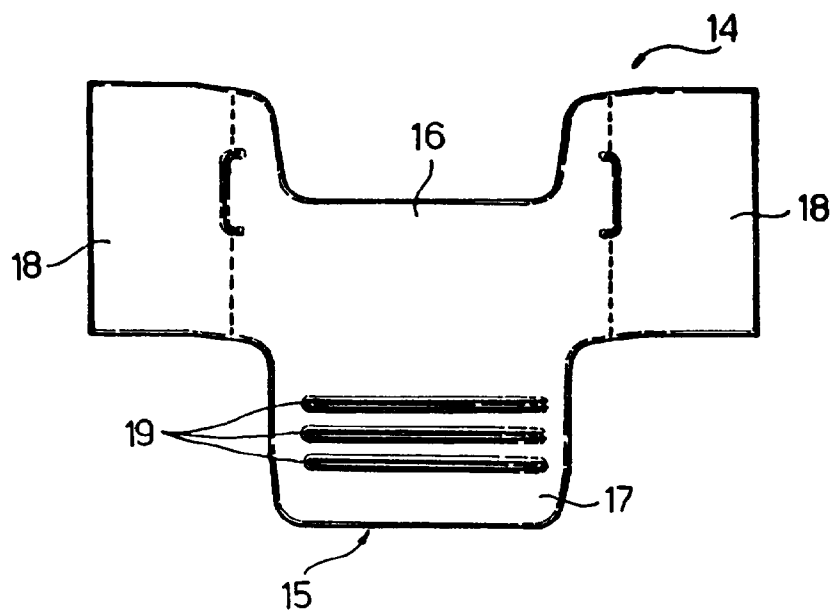


Fig. 2

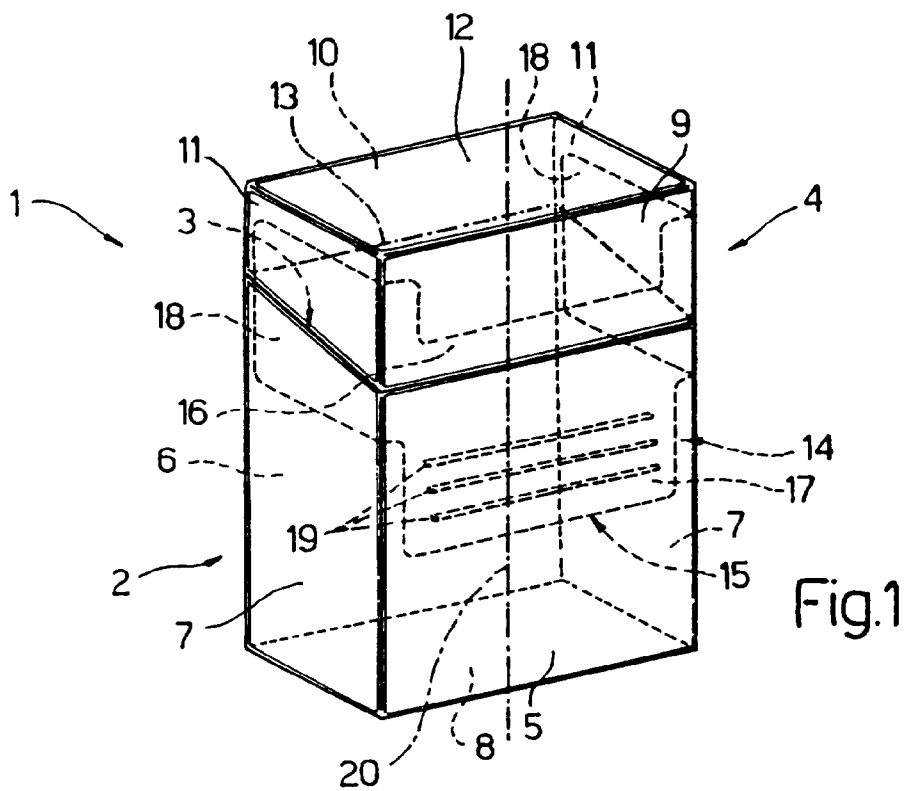


Fig. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 95 83 0464

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)
X	US-A-3 708 108 (ROSENBERG C) 2 January 1973 * column 2, line 15 - line 16 * * column 3, line 4 - line 6; figures 1,2 * ---	1-7	B65D85/10
A	DE-A-37 13 612 (FÖCKE & CO) 17 November 1988 * column 1, line 61 - column 2, line 6 * * column 2, line 43 - line 60 * * column 4, line 41 - line 56; figures 2,3,5,6 * ---	1-6	
A	DE-U-77 20 179 (KRAUTTER) 17 November 1977 ---		
A	DE-A-23 34 190 (COPACO GMBH) 23 January 1975 -----		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B65D
Place of search BERLIN		Date of completion of the search 12 February 1996	Examiner Spettel, J
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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