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(71) Applicant: **G.D S.p.A.**
40133 Bologna (IT)

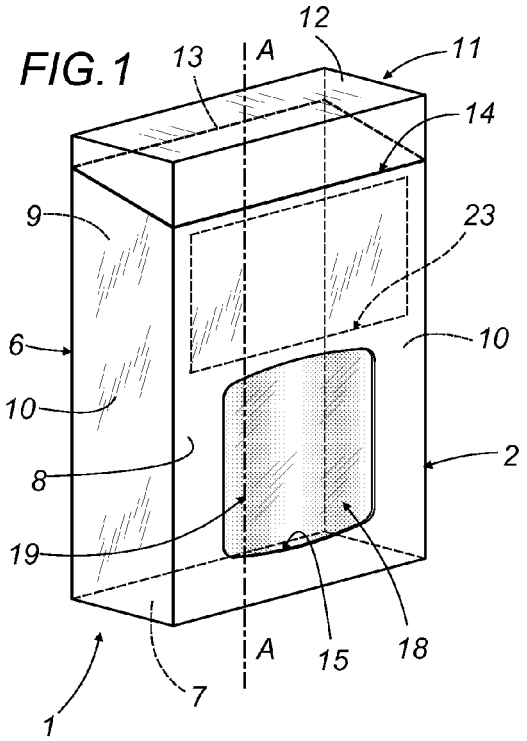
(72) Inventors:
- **Bertuzzi, Ivanoe**
  40033 Casalecchio di Reno (Bologna) (IT)
- **Marchitto, Giuseppe**
  48022 Lugo (Ravenna) (IT)
- **Polloni, Roberto**
  47015 Modigliana (Forlì-Cesena) (IT)
- **Biondi, Andrea**
  40133 Bologna (IT)

(74) Representative: **Ghioni, Carlo Raoul Maria**
c/o Bugnion S.p.A.
Via di Corticella, 87
40128 Bologna (IT)

(54) CIGARETTE PACKAGE

(57) A cigarette packet substantially having the shape of a parallelepiped with a longitudinal axis (A) comprises a first wrapper (2) with an opening (14) and a lid (11, 17) for closing the latter, and a second wrapper (3), inside the first wrapper (2), for surrounding a group (4) of cigarettes (5) and at its longitudinal end towards the lid (11) having an opening (24) for extracting the cigarettes (5); there being interposed between the first wrapper (2) and the second wrapper (3) a sliding element (18), able to move between a position in which it covers and a position in which it uncovers the opening (24) of the second wrapper (3) and the opening (14) of the first wrapper (2).

FIG.1



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Description

[0001] This invention relates to a cigarette packet, in particular of the rigid type.

[0002] As is known, cigarette packets of the rigid type substantially have the shape of a parallelepiped and comprise an inner wrapper, normally made of silver paper and surrounding a group of cigarettes, and an outer wrapper, made of paperboard, consisting of a box-shaped body and a hinged lid. A collar, fixed to the box-shaped body and forming a connection between the box-shaped body and the lid, guarantees the stability of the lid when closed. The packet is completed by an overwrap, made of transparent thermoplastic material, able to guarantee a hermetic seal for the packet until the moment it is used.

[0003] In that way, the tobacco in the cigarettes maintains its correct level of humidity and its aroma.

[0004] It is also known that when the packet is opened the protective overwrap is torn and at least partly removed and, after opening the lid, part of the inner wrapper made of silver paper, called the "PULL", is similarly removed.

[0005] This means that, from the moment when the packet is opened until all its contents have been used, the cigarettes in the packet are not protected from the outside environment and tend to rapidly oxidise and lose their correct levels of humidity and aroma. The need for packets which have a strong seal is particularly felt in the case of "light" cigarettes, which have a low nicotine content and a strong aroma.

[0006] Therefore, the aim of this invention is to provide a cigarette packet which overcomes the disadvantage described above.

[0007] Accordingly, this invention provides a cigarette packet as described in one or more of the appended claims.

[0008] The invention will now be described with reference to the accompanying drawings which illustrate a preferred, non-limiting embodiment of it and in which:

- Figures 1, 2, 3 are perspective views of the cigarette packet according to this invention in three different configurations: closed, open with the inner wrapper extracted to its completely open position, and with the inner wrapper partly closed and partly positioned inside the outer wrapper;
- Figures 4, 5, 5a are side and cross-section views of the packet of Figure 1;
- Figures 6, 6a, 6b are perspective views separately showing the different component parts of the pack of Figure 1;
- Figures 7 and 8 are perspective views of a second embodiment of the cigarette packet according to this invention, respectively in the closed and open configurations; and
- Figures 9 and 10 are perspective views separately showing two of the component parts of the pack illustrated in Figures 7 and 8.

[0009] With reference to Figures 1 to 6 and 7 and 8, the numeral 1 denotes in its entirety a cigarette packet substantially having the shape of a rectangular parallelepiped with a longitudinal axis A and comprising an outer wrapper 2 made of paperboard and an inner wrapper 3 made of paperboard, the latter being positioned in direct contact with a group 4 of cigarettes 5 which are positioned parallel with the axis A.

[0010] The outer wrapper 2 comprises a box-shaped body 6 formed by a lower or bottom wall 7 and by four lateral walls which are parallel with the axis A, consisting of a larger front wall 8, a larger rear wall 9 and two smaller walls or sides 10.

[0011] In particular, in the embodiment illustrated in Figures 1 to 6, a hood-style lid 11, having an upper or top end wall 12, is connected to an upper end of the rear wall 9 by means of a hinge 13 transversal to the axis A, in such a way that the lid can move between a position in which the opening end or mouth, labelled 14, of the box-shaped body 6 is closed, and a position in which the mouth 14 is open.

[0012] In the front wall 8 of the outer wrapper 2 there is a substantially rectangular opening 15, whose function is described in detail below.

[0013] At the end of the box-shaped body 6 where the mouth 14 is located, the inner wrapper 3 has an opening 24 designed to allow the cigarettes 5 to be gripped and extracted.

[0014] Interposed between the outer wrapper 2 and the inner wrapper 3 there is a sliding element 18 (Figure 6a), comprising a band 19 of material with a low friction coefficient, closed in a loop around an axis B which is transversal to the axis A and perpendicular to the sides 10 of the box-shaped body 6.

[0015] The numeral 20 denotes an intermediate position, between the bottom wall 7 and the top end 12, for fixing the band 19 to the inner face of the rear wall 9 (Figures 5a and 6). Said fixing can be performed by means of a sealing operation or using an adhesive substance.

[0016] The annular band 19 comprises an opening 23, which is positioned, with reference to Figure 1 (in which the opening 23 in the band 19 is illustrated with a dashed line), that is to say, when the wrapper 3 is completely housed in the box-shaped body 6, between the opening 15 in the front wall 8 and the end of the box-shaped body 6 where the mouth 14 is located.

[0017] In practice after opening the lid 11, the user engages with the annular band 19 through the opening 15 in the front wall 8, applying to the band a pushing action according to the axis A and directed, according to the arrow F1, towards the mouth 14 of the box-shaped body 6, in such a way as to cause the inner wrapper 3 to partly come out of the box-shaped body 6 until it reaches a predetermined final position.

[0018] The pushing action applied to the band 19 from the side of the front wall 8, together with the stopping action caused by the fixing, at the position 20, of the band

19 to the rear wall 9, produces a rotary movement of the band 19 about the axis B (anti-clockwise for those observing Figure 2), making the band slide relative to the walls of the inner wrapper 3, the result being that at the final position the opening 23 in the band 19 is superposed on the opening 24 in the foil inner wrapper 3.

[0019] In such conditions the two openings 23 and 24, which are substantially superposed, allow the user to extract cigarettes 5 from the group 4 (Figure 2). The extraction of individual cigarettes 5 is facilitated by the fact that their ends project outside the box-shaped body 6.

[0020] Once a cigarette has been extracted by the user, by applying to the annular band 19 a pushing action directed according to the axis A and according to the arrow F2, towards the bottom wall 7 of the box-shaped body 6, the band 19 is made to rotate about the axis B (clockwise for those observing Figure 3) in such a way that the band 19 slides over the inner wrapper 3 in the opposite direction to the sliding which allowed it to reach the position in which the openings 23 and 24 were superposed, and allows the band 19 to gradually close the opening 24 in the inner wrapper 3 again (see Figure 3, which shows an intermediate position in which the band 19 is about to completely close the opening 24).

[0021] Consequently, starting from the above-mentioned final position, the movement of the band 19 clockwise (Figure 3) and according to the arrow F2 allows the inner wrapper 3 to be inserted in the box-shaped body 6 again, thus allowing the lid 11 to be closed.

[0022] At the end of that step, as a result of band 19 sliding relative to the inner wrapper 3, the opening 23 is again at its starting position (Figure 1) interposed between the opening 8 and the mouth 14 of the box-shaped body 6, thus guaranteeing optimum protection of the cigarettes 5 for as long as the packet 1 contains any.

[0023] The embodiment illustrated in Figures 7 to 10 differs from that previously illustrated due to the fact that in this case the annular band 19 is not constrained to the box-shaped body 6 of the outer wrapper 2 and the outer wrapper 2 of the packet 1 does not have a hood-style lid 11 like the embodiment illustrated in Figures 1 to 6.

[0024] At its top end 12, the outer wrapper 2 comprises a lid 17, whose edges are formed by a perforation line 25 delimiting a removable panel 26.

[0025] Once the panel 26 has been removed, at the top end 12 the packet 1 comprises an opening or mouth 14 of the box-shaped body 6, which in the embodiment illustrated in Figures 7 to 10 coincides with the outer wrapper 2 (Figure 8).

[0026] The opposite longitudinal ends of the opening 14 are adjacent to two walls 27 which are parallel with the bottom wall 7, said two walls forming stop means designed to retain the inner wrapper 3 inside the outer wrapper 2.

[0027] Again in this embodiment the inner wrapper 3 is made of paperboard and the band 19 comprises an opening 23 substantially equal to the opening 24 in the inner wrapper 3 and the opening or mouth 14 of the outer wrapper 2.

[0028] It should be noticed that, like the outer wrapper 2, the inner wrapper 3 also has its opening 24 closed at the two longitudinal ends by walls 27a (Figure 10) which, when the packet 1 is complete, are positioned below the walls 27 of the outer wrapper 2 with the annular band 19 interposed between them.

[0029] In practice, once the panel 26 has been removed, through the opening 15 in the front wall 8, the user uses a finger to engage with the annular band 19 and to apply to the band an axial pushing action, according to the arrow F1 and directed towards the mouth 14 of the outer wrapper 2.

[0030] Since the inner wrapper 3 is locked inside the outer wrapper 2 due to the presence of the walls 27, on which the walls 27a of the inner wrapper 3 press, said pushing action causes only sliding of the annular band 19 relative to the inner wrapper 3 and relative to the outer wrapper 2.

[0031] As illustrated in Figures 7 and 8, to facilitate the sliding of the band 19, the outer wrapper 2 also comprises an opening 15 in its rear wall 9.

[0032] As a result of said relative sliding, the opening 23 in the band 19 is gradually superposed on the opening 24 in the inner wrapper 3 and coincides with the opening 14 in the wrapper 2 (see Figure 8 which shows a band 19 intermediate position between that in which the openings 24 and 14 are completed closed and that in which they are completely open), thus allowing the extraction of cigarettes 5.

[0033] Once a cigarette has been extracted, the user applies to the annular band 19 a pushing action according to the arrow F2 in Figure 8, directed towards the bottom wall 7 of the outer wrapper 2, in such a way that the opening 23 is returned to its starting position, as shown in Figure 8, below the lid 17.

[0034] This second embodiment also guarantees optimum protection of the cigarettes for as long as the packet 1 contains any.

Claims

1. A cigarette packet substantially having the shape of a parallelepiped extending according to a longitudinal axis (A), and comprising a first wrapper (2) with an opening or mouth (14), and a second wrapper (3), inside the first wrapper (2) and containing a group (4) of cigarettes (5) which are positioned parallel with the longitudinal axis (A), the longitudinal end towards the opening or mouth (14) comprising an opening (24) for extracting the cigarettes (5), **characterised in that** it comprises a sliding element (18) interposed between the first wrapper (2) and the second wrapper (3), the sliding element being able to move between a position in which it covers the opening (24) of the second wrapper (3) and a position in which it uncovers the opening of the second wrapper.

2. The packet according to claim 1, where the first wrapper (2) comprises a box-shaped body (6) formed by a bottom wall (7) and by four lateral walls which are positioned parallel with the longitudinal axis (A) and comprise a larger front wall (8) and a larger rear wall (9) and two smaller side walls (10), **characterised in that** the sliding element (18) is a band (19) surrounding the inner wrapper (3), forming a loop around a second axis (B) which is transversal to the longitudinal axis (A) and perpendicular to the smaller side walls (10) of the box-shaped body (6), and comprising an opening (23) designed to coincide with the opening (24) of the second wrapper (3) in the uncovered position.

3. The packet according to claim 2, **characterised in that** at least one larger lateral wall (9, 10) of the box-shaped body (6) comprises an opening (15) forming an operating zone for the sliding element (18).

4. The packet according to any of claims from 1 to 3, **characterised in that** the sliding element (18) is integral with the rear wall (9) of the box-shaped body (6) at a fixing zone (20).

5. The packet according to claim 4, **characterised in that** it comprises a hood-style lid (11) joined by means of a hinge line (13) to the rear wall (9) and able to move between a position in which it closes the box-shaped body (6) and a position in which it is open, this latter open position being designed to allow the inner wrapper (3) to come out due to the action of the sliding element (18).

6. The packet according to claim 1, **characterised in that**, at its top end (12), the outer wrapper (2) comprises a lid (17) formed by a perforation line (25), forming a removable panel (26).

7. The packet according to claim 6, **characterised in that** it comprises means (27) for locking the inner wrapper (3) inside the outer wrapper (2).

8. The packet according to claim 7, **characterised in that** the locking means comprise at least one wall (27) positioned at the opening (14) of the outer wrapper (2), the opening (14) being formed by removing the removable panel (26).

9. The packet according to any of the claims from 6 to 8, **characterised in that** the sliding element (18) is a band (19) surrounding the inner wrapper (3), forming a loop around a second axis (B) which is transversal to the longitudinal axis (A) and perpendicular to the smaller walls (10) of the outer wrapper (2) and comprising an opening (23) designed to coincide with the opening (24) of the second wrapper (3) and with the opening (14) of the outer wrapper (2) in the uncovered position.

10. The packet according to any of claims from 1 to 9, **characterised in that** the sliding element (18) is made of material with a low coefficient of friction.

FIG.1

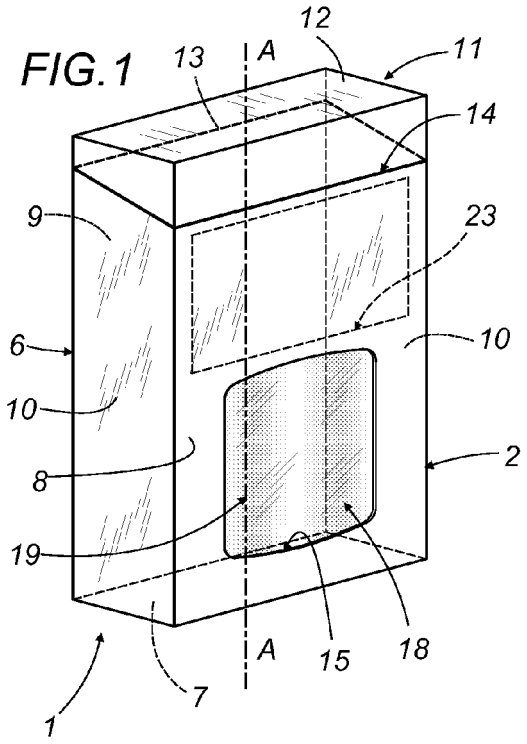

FIG.2

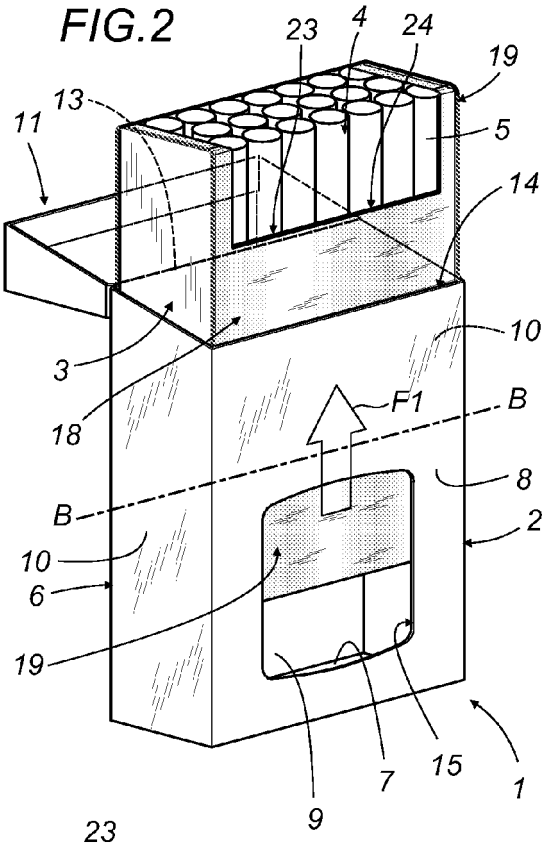

FIG.3

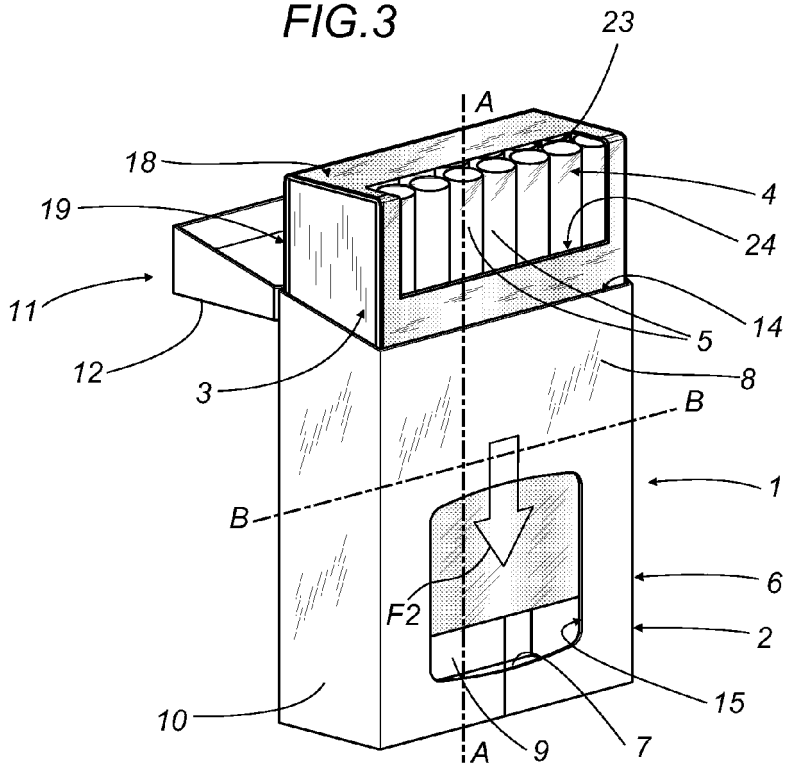

FIG.4

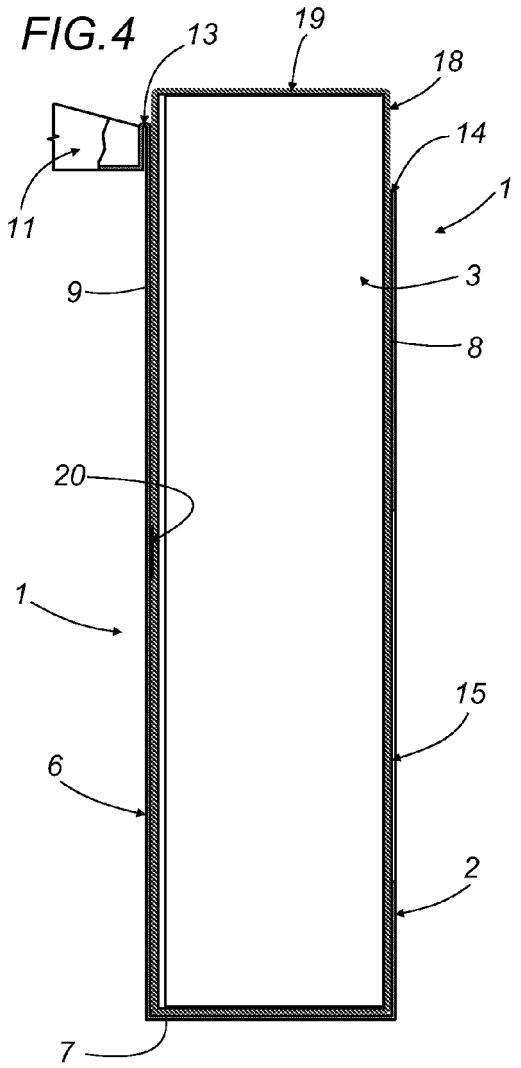

FIG.5

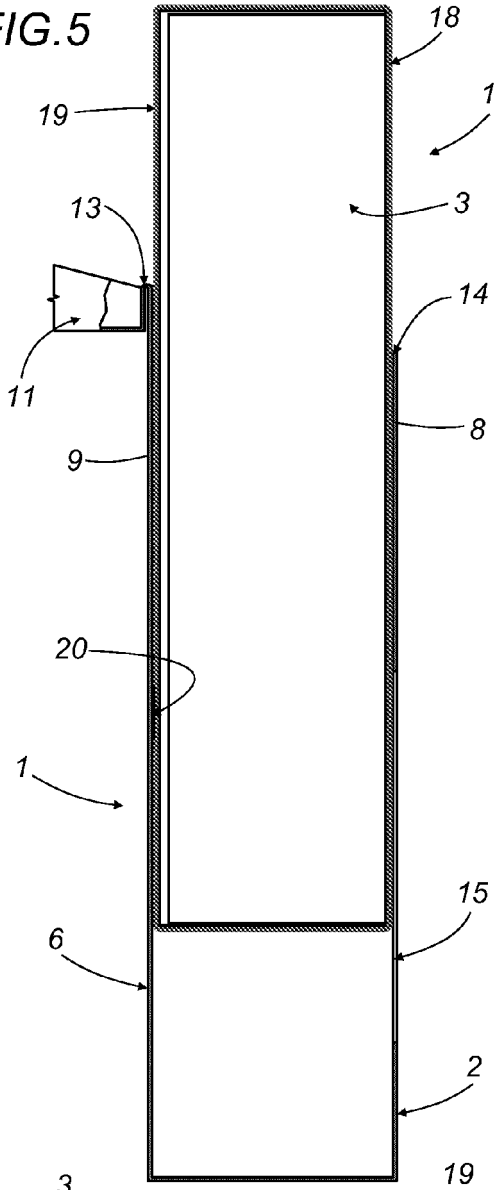

FIG.5a

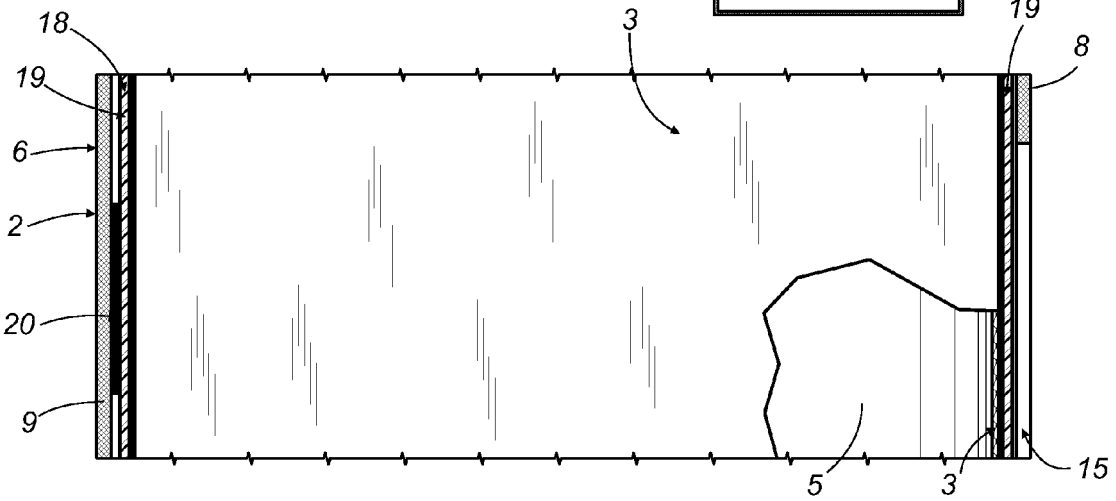

FIG.6

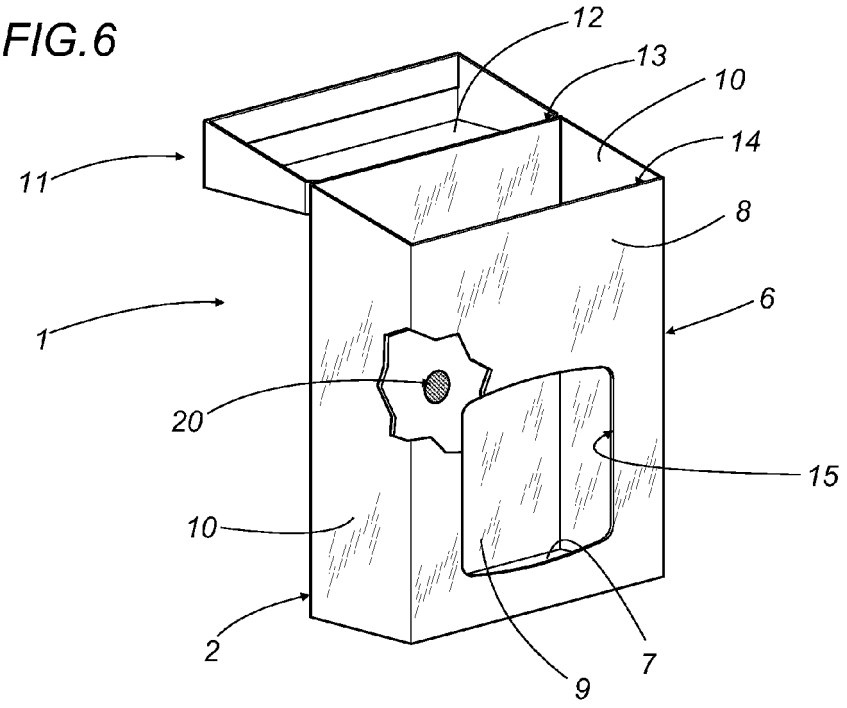

FIG.6b

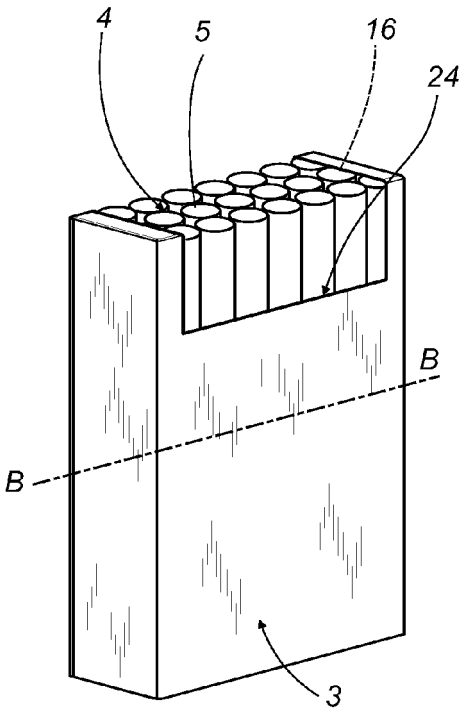

FIG.6a

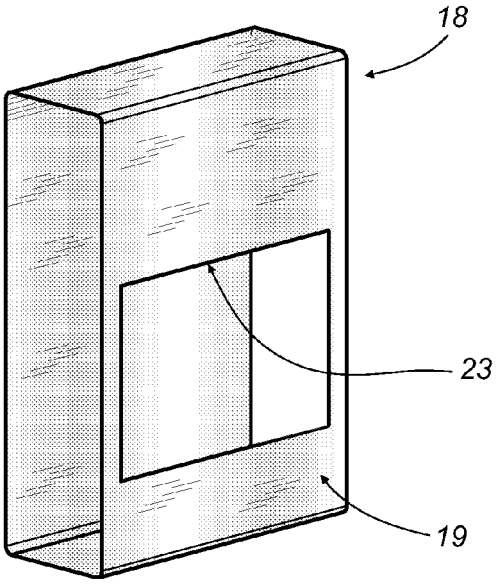

FIG.7

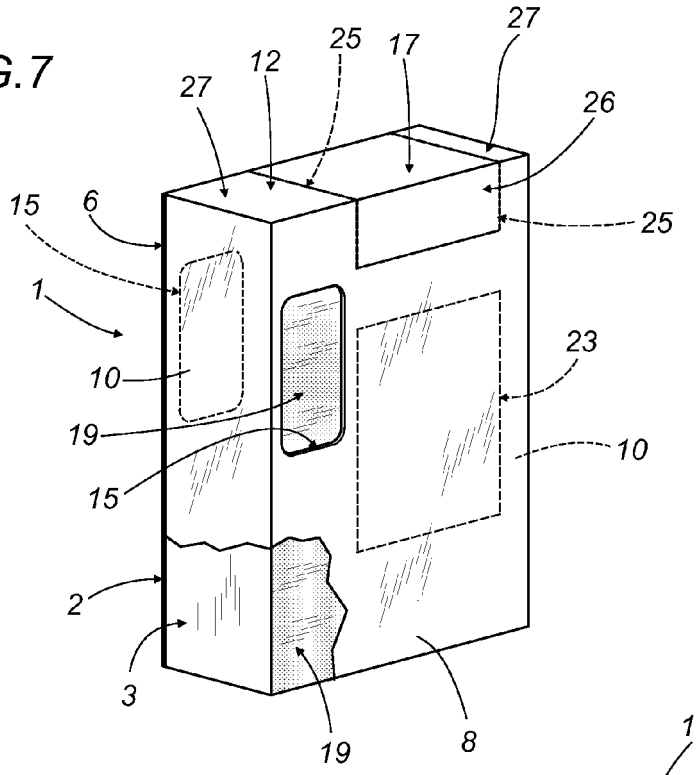
27
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FIG.8

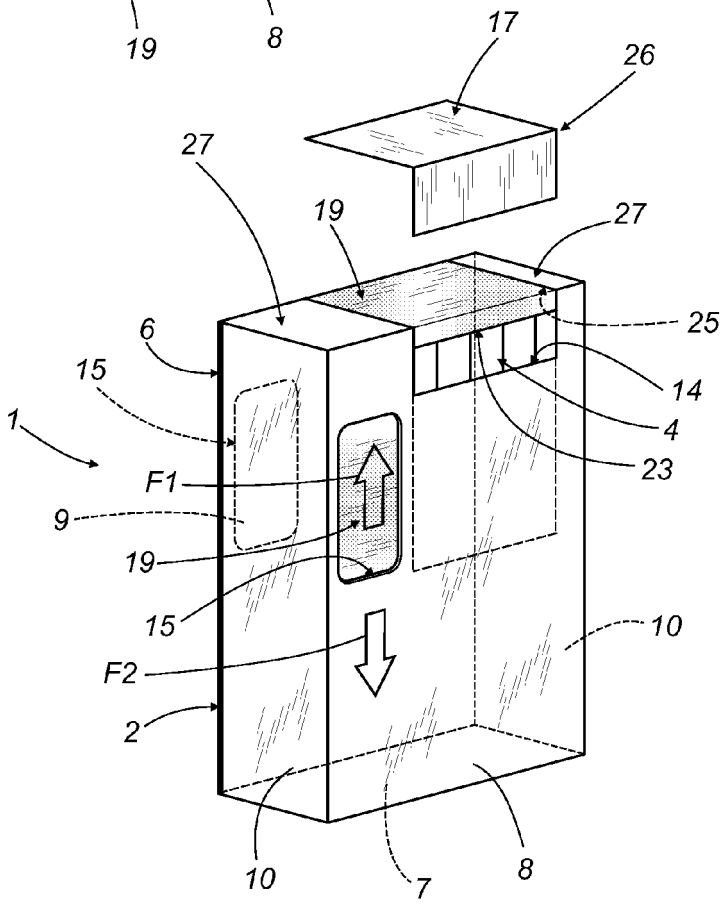
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FIG.9

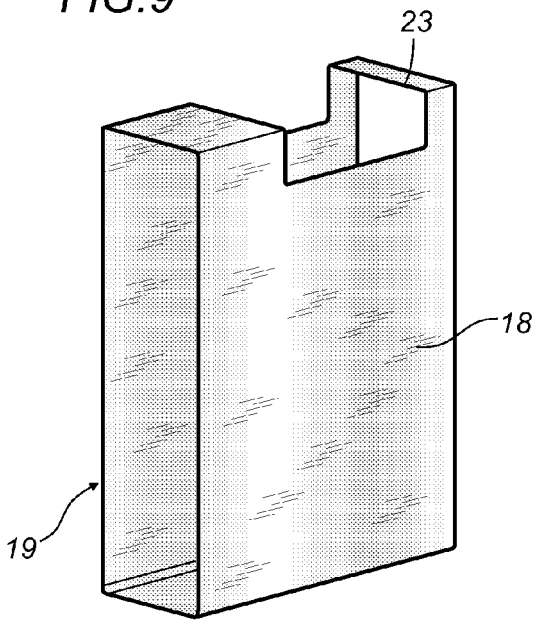
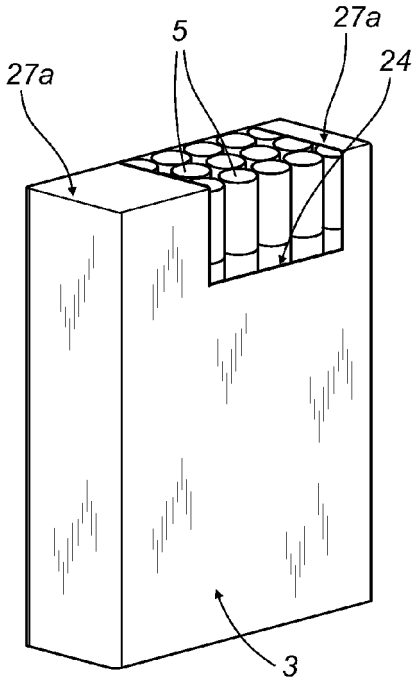


FIG.10



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EUROPEAN SEARCH REPORT

Application Number
EP 11 15 4730

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 2 984 384 A (WALKER CHALMERS JOHN ET AL) 16 May 1961 (1961-05-16) * page 1, column 1, line 51 - page 1, column 2, line 9; figures 1-3 *	1-10	INV. B65D85/10
A	WO 2009/148034 A1 (JAPAN TOBACCO INC [JP]; NAKAMURA TETSUYA [JP]; TAWADA SHUNSUKE [JP]; T) 10 December 2009 (2009-12-10) * figures 1-3 *	1-10	

TECHNICAL FIELDS SEARCHED (IPC)

B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	22 June 2011	Cazacu, Corneliu

CATEGORY OF CITED DOCUMENTS

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22-06-2011

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2984384 A	16-05-1961	DE 1047108 B	18-12-1958
		DE 1142546 B	17-01-1963
		FR 1158865 A	20-06-1958
		NL 103533 C	
		NL 210507 A	
WO 2009148034 A1	10-12-2009	CA 2724107 A1	10-12-2009
		CN 102046478 A	04-05-2011
		EP 2305567 A1	06-04-2011
		JP 2009292516 A	17-12-2009
		KR 20110002087 A	06-01-2011
		US 2011062175 A1	17-03-2011

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