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- (71) Applicant: **G.D. S.P.A.** [IT/IT]; Via Battindarno 91,
40133 Bologna (IT).
- (72) Inventors: **MARCHITTO, Giuseppe**; Via Colombo
19/21, 48022 Lugo (Ravenna) (IT). **FEDERICI, Luca**;
Via Lippo di Dalmasio 13, 40135 Bologna (IT).
- (74) Agents: **PERSI, Patrizia** et al.; Luppi Crugnola & Part-
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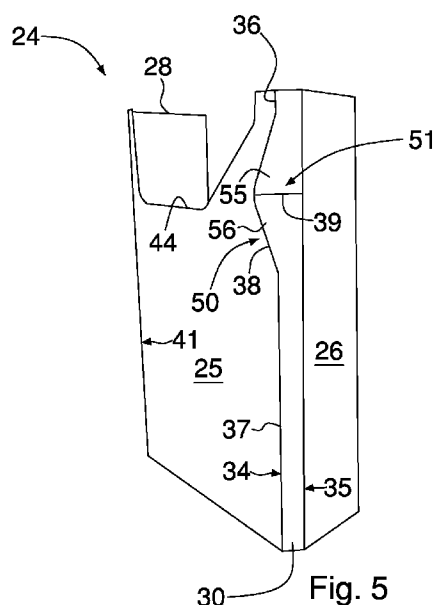
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- (54) Title: PACKET OF SMOKE ARTICLES



(57) Abstract: Packet (1) of smoke articles comprising: an outer container (2), which is cup-shaped and has an open top end (6); a lid (3), which is hinged to the outer container (2) to rotate, with respect to the outer container (2) between an open position and a closed position of the open top end (6); a soft inner wrapper (5), housed inside the outer container (2), which encloses a group of smoke articles and has an opening (17) for extracting the smoke articles which is closed by a reclosable closure tab (21) provided with a grab flap (23), in particular a corner grab flap (23), to move the closure tab (21); and an inner stiffener (24), housed inside the soft inner wrapper (5) in contact with the smoke articles, which has grab promoting means (50) to facilitate the grab of the grab flap (23), which grab promoting means (50) is arranged at the grab flap (23); wherein the grab promoting means (50) comprises a portion (51, 57) of the inner stiffener (24), which portion (51, 57) is connected to a remaining portion of the inner stiffener (24) through an intended folding line (54; 58; 66) along which the portion (51, 57) is folded to form a projection and/or a recess at the grab flap (23) such that at least one portion of the grab flap (23) is available for grabbing.

“Packet of smoke articles”.TECHNICAL FIELD

The present invention relates to a packet of cigarettes with an inner wrapper provided with a closure tab.

- 5 For the sake of brevity, the following description will refer to a rigid hinged lid packet of cigarettes, without prejudice to the generality of the present invention.

BACKGROUND ART

- 10 The traditional rigid hinged lid packets of cigarettes are presently the most widespread packet of cigarettes on the market since they are easy to make, practical and easy to use and they offer a good mechanical protection to the cigarettes contained therein.

- A rigid hinged lid packet of cigarettes comprises an inner wrapper made of metalized paper which completely wraps a group of cigarettes, and an outer container which houses therein the inner wrapper and it is provided with a hinged lid. The outer container is cup-shaped, houses the group of cigarettes and has an open top end, while the lid, which is cup-shaped
15 too, is hinged to the outer container to rotate, with respect to the container, between an open position and a closed position of the open top end. Furthermore, an inner frame is normally provided, which is folded up like a “U” and connected inside the outer container to partially protrude outside the open top end and engage a corresponding internal surface of the lid when the lid is in the closed position.

- 20 It is known that tobacco is highly sensitive to external environmental effects, since it tends to modify its organoleptic characteristics when it is in contact with the atmosphere both for the effect of humidity, tobacco may dry too much, or it may absorb too much humidity, and for the evaporation of volatile substances tobacco is impregnated with, mainly in the case of cigarettes with characteristic flavours as menthol.

- 25 In order to preserve the cigarettes tobacco integrity, the above mentioned rigid hinged lid packets of cigarettes are wrapped with cellophane, i.e. they are covered with a heat-sealed external over-wrapper of waterproof plastic material. However, the heat-sealed external over-wrapper might not be enough to fully preserve the organoleptic characteristics of the tobacco contained in a packet of cigarettes, in particular when the packet of cigarettes is
30 consumed after a period of time from its production. Furthermore, when the packet is firstly opened, the external over-wrapper is eliminated and consequently the tobacco of the cigarettes contained in the packet comes into contact with the external environment; if the cigarettes contained in the packet are not consumed quickly after the packet is first opened,

the organoleptic characteristics of the tobacco contained in the remaining cigarettes may be remarkably deteriorated.

In order to overcome the above mentioned drawback, rigid packets of cigarettes have been developed wherein the inner wrapper comprises a sheet of material that can be heat-sealed, which forms a waterproof barrier and is sealed by means of heat-sealing. The inner wrapper has an opening for extracting the cigarettes, which is closed by a reclosable adhesive tab. The reclosable adhesive tab is provided with a reusable adhesive strip that does not dry and that allows to lock the tab several times in a closed position of the opening for extracting the cigarettes.

In order to facilitate the grab of the tab when the tab is lifted, the tab comprises a grab flap, devoid of glue, leaning on a front wall of the inner wrapper. A drawback affecting the rigid packet of cigarettes wherein the inner wrapper comprises a sheet of material that can be heat-sealed having an opening for extracting the cigarettes is that, after extracting a part of the cigarettes contained in the inner wrapper, the latter tends to sag making the extraction of the remaining cigarettes difficult and, in particular, making the opening and the following closing of the reclosable tab extremely difficult.

In order to overcome the above mentioned drawback, rigid packets of cigarettes have been developed wherein, inside the inner wrapper, a stiffener element is arranged. The stiffener element surrounds the group of cigarettes, has a front wall and a pair of lateral walls, and has the function of protecting the cigarettes during the folding and sealing of the inner wrapper of heat-sealable material and to maintain the correct configuration of the inner wrapper. A problem afflicting the rigid packet of cigarettes wherein a stiffener element is arranged inside the inner wrapper is how to facilitate the grab of the grab flap.

In order to solve this problem, packets of the type disclosed in WO2012/095135A1 have been proposed. WO2012/095135A1 discloses a rigid packet of cigarettes wherein, inside the inner wrapper, a stiffener element is arranged having a projection/recess arranged at the grab flap to facilitate the grab of the grab flap. The projection/recess is realized by drawing, i.e. by plastic deformation of a portion of the material forming the front wall of the stiffener element and is configured so as to leave a portion of the grab flap free in order to facilitate the grab by the user.

DISCLOSURE OF THE INVENTION

The object of the present invention is providing a packet of smoke articles with an inner wrapper provided with a closure tab having a grab flap, which comprises means to

facilitate the grab of the grab flap which is an alternative to the ones disclosed in WO2012/095135A1 and, which is, at the same time, easy and cheap to make.

According to the present invention a packet of smoke articles is provided as claimed in the enclosed claims.

5 BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be now described referring to the enclosed drawings, illustrating some non-limiting embodiments thereof, wherein:

- Figure 1 is a front axonometric view of a packet of cigarettes in a closed configuration made according to the present invention;
- 10 – Figure 2 is a rear axonometric view of the packet of cigarettes in Figure 1 in a closed configuration;
- Figure 3 is a front axonometric view of the packet of cigarettes in Figure 1 in an open configuration;
- Figure 4 is a front axonometric view of a stiffener element included in the packet of
15 cigarettes in Figure 1;
- Figure 5 is another front axonometric view of the stiffener element in Figure 4;
- Figure 6 is a view of a blank used to make the stiffener element in Figure 4;
- Figure 7 is a front axonometric view of a version of the packet of cigarettes in Figure 1 in an open configuration;
- 20 – Figure 8 is a front axonometric view of a stiffener element included in the packet of cigarettes in Figure 7;
- Figure 9 is a front axonometric view of another version of the packet of cigarettes in Figure 1 in an open configuration;
- Figure 10 is a front axonometric view of a stiffener element included in the packet of
25 cigarettes in Figure 9;
- Figure 11 is a view of a blank used to make the stiffener element in Figure 8;
- Figure 12 is view of a blank used to make the stiffener element in Figure 10;
- Figure 13 is a front axonometric view of a further version of the packet of cigarettes in Figure 1 in a closed configuration;
- 30 – Figure 14 is a rear axonometric view and in a closed configuration of the packet of cigarettes in Figure 13;
- Figure 15 is a front axonometric view and in an open configuration of the packet of cigarettes in Figure 13;

- Figure 16 is a front axonometric view of a stiffener element included in the packet of cigarettes in Figure 13;
- Figure 17 is a view of a blank used to make the stiffener element in Figure 16;
- Figure 18 is a front axonometric view of a version of the packet of cigarettes in Figure 13 in an open configuration;
- Figure 19 is a front axonometric view of a stiffener element included in the packet of cigarettes in Figure 18; and
- Figure 20 is a view of a blank used to make the stiffener element in Figure 19.

PREFERRED EMBODIMENTS OF THE INVENTION

10 In the present description, the elements structurally and functionally similar that are common to the illustrated embodiments are indicated with the same reference numbers.

In the Figures from 1 to 3, by the number 1, it is indicated as a whole a rigid packet of cigarettes extending along a longitudinal axis A parallel to a longitudinal axis of prevalent extension of the cigarettes, which are not shown.

15 The packet of cigarettes 1 comprises an outer container 2, a lid 3, which is hinged to the back of container 2 along a hinge 4, and an inner wrapper 5 housed inside the container 2.

The container 2 is of rigid type, that is, made of a rigid wrap material such as cardboard or rigid card, it is cup-shaped and has an open top end 6, a bottom wall 7 opposite to the open top end 6, a front wall 8 and a rear wall 9 parallel and opposite one another, and a first lateral wall 10 and a second lateral wall 11 being parallel one another and interposed between the walls 8 and 9.

Four longitudinal edges are defined between the front wall 8 and rear wall 9 and the lateral walls 10 and 11, while eight transverse edges are defined between the walls 8, 9, 10, 11 and the bottom wall 7.

25 The lid 3 is of rigid type too, that is, made of a rigid wrap material such as cardboard or rigid card, it is cup-shaped and it is configured to rotate with respect to container 2, along the hinge 4, between an open position, shown in Figure 3, and a closed position, shown in Figures 1 and 2, of the open top end 6.

More precisely, the lid 3 has a top wall, that is parallel and opposite to the bottom wall 7 of the container 2 when the lid 3 is arranged in the closed position, a front wall 13, that is coplanar to the front wall 8 of the container 2 when the lid 3 is arranged in the closed position, a rear wall 14, that is hinged through the hinge 4 to the rear wall 9 of the container 2 and coplanar to the rear wall 9 of the container 2 when the lid 3 is arranged in

the closed position, a first lateral wall 15, that is coplanar to a first lateral wall 10 of the container 2 when the lid 3 is arranged in the closed position, and a second lateral wall 16 that is coplanar to the second lateral wall 11 of the container 2 when the lid 3 is arranged in the closed position.

5 In the lid 3, four longitudinal edges are defined between the respectively front and rear walls 13 and 14 and the lateral walls 15, 16, while eight transverse edges are defined between the walls 13, 14, 15 and 16 and the top wall 12.

10 In the embodiments shown in the Figures 1-3, 7 and 9, all the longitudinal edges are beveled, that is defined by flat corner walls, which are transverse with respect to the front wall 8, the rear wall 9, the first lateral wall 10 and the second lateral wall 11; according to the embodiment shown in the Figures 13-15 and 18, all the longitudinal edges are right, that is, defined by a rectilinear line; according to alternative embodiments which are not shown and perfectly equivalent, the longitudinal edges can be rounded, that is defined by rounded corner walls.

15 The inner wrapper 5 surrounds a group of cigarettes, not shown, and is made by folding a wrapper sheet, not shown, made of metallised or transparent paper, i.e. of a soft wrap material that is heat-sealable and without rigidity, around the group of cigarettes, so as to be in direct contact with the cigarettes of the group of cigarettes, and stabilized through heat-sealing.

20 The inner wrapper 5 comprises an opening 17 for extracting the cigarettes, which is arranged at a top wall 18 and at a front wall 19 of the wrapper 5 and is delimited by a separation line 20, illustrated by a dash-dot line in the Figure 3. The separation line 20 can be separated from the remaining part of the inner wrapper 5 from the beginning or it can be tearable, being typically a perforated line, to be fully torn off when the inner wrapper 5 is first opened. In general, it is preferable for the separation line to be tearable in order to facilitate the handling of the wrapper sheet used to form the inner wrapper 5.

25 According to what is shown in the Figure 3, the packet of cigarettes 1 comprises a closure tab 21, which is reclosable, i.e. reusable, to close the opening 17 for extracting the cigarettes of the inner wrapper 5.

30 The closure tab 21 is of the "open & close" type, in other words it allows to open and close the extraction opening 17 of the inner wrapper 5, and overlaps a rear wall (not shown), the top wall 18 and the front wall 19 of the inner wrapper 5. The closure tab 21 is fixed to the inner wrapper 5 by means of a repositionable adhesive that does not dry, i.e. which remains

always sticky, that is an adhesive allowing to separate and join again the parts even after a long time; in such a way, the closure tab 21 adheres to the inner wrapper 5 to close, in particular to seal, the extraction opening 17 and it can be provisionally lifted from the inner wrapper 5 to free the extraction opening 17 and thus allow to extract a cigarette through the extraction opening 17.

In other words, the presence of a repositionable adhesive that does not dry, being applied to a lower surface of the closure tab 21, determines a provisional gluing, that while being used is separated, between the portion of the inner wrapper 5 surrounding the separation line 20, that is, surrounding the extraction opening 17 and the closure tab 21, to allow to the closure tab 21 to be partially separated from the inner wrapper 5 several times, that is each time the inner wrapper 5 is opened and then fixed again to the inner wrapper 5.

Furthermore, the closure tab 21 comprises a permanent adhesive that determines the permanent gluing, in other words that while being used is never separated, of the portion of the inner wrapper 5 contained within the separation line 20, i.e. at the extraction opening 17, to the closure tab 21; therefore, when the closure tab 21 is lifted from the inner wrapper 5, the portion of the inner wrapper 5 contained within the separation line 20, i.e. at the extraction opening 17, lifts up together with the closure tab 21 clearing the extraction opening 17.

The closure tab 21 also comprises a grab flap 23 to move, i.e. to lift up and to lower, the closure tab 21.

The grab flap 23 is "angular", i.e. it is positioned in a corner area, i.e. lateral, with respect to the opening 17 for extracting the cigarettes, and it has a lower surface, i.e. a surface facing the front wall 19 of the inner wrapper 5, being without adhesive to facilitate the grab.

According to what has been shown in the Figures 4 and 5, the packet of cigarettes 1 also comprises a reinforcement element 24 generally called "inner stiffener", of rigid type, made of cardboard or rigid card, "U"-shaped and housed inside the inner wrapper 5 in direct contact with the group of cigarettes in order to protect the cigarettes during the folding and sealing of the heat-sealable material wrapper sheet, and serving as abutment for the closure tab 21.

According to the embodiment shown in Figures 4 and 5, the inner stiffener 24 has a front wall 25 facing the front wall 19 of the inner wrapper 5, a first lateral wall 26 perpendicular to the front wall 19 and facing a first lateral wall 27 of the inner wrapper 5, a second lateral

wall 28 perpendicular to the front wall 19 and facing a second lateral wall 29 of the inner wrapper 5, a first corner wall 30 connecting the front wall 25 to the first lateral wall 26 and facing a first corner 31 of the inner wrapper 5, a second corner wall 32 connecting the front wall 25 to the second lateral wall 28 and facing a second angular wall 33 of the inner wrapper 5, and a recess 44, asymmetrical, obtained in the front wall 25 to facilitate the extraction of the cigarettes.

In the embodiment shown in Figures 4 and 5, the first corner wall 30 and the second corner wall 32 are flat, the first corner wall 30 is arranged transversally with respect to the front wall 25 and to the first lateral wall 26, and the second corner wall 32 is arranged transversally with respect to the front wall 25 and to the second lateral wall 28. According to an alternative embodiment, which is not illustrated and exactly equivalent, the first corner wall 30 and the second corner wall 32 are rounded.

The first corner wall 30 is longitudinally delimited by a first edge 34 and by a second edge 35. More precisely, the first edge 34 comprises a first upper rectilinear section 36, a second lower rectilinear section 37 and an intermediate section 38 arranged between the first section 36 and the second section 37 and projecting, i.e. protruding, towards the front wall 25 of the inner stiffener 24.

According to the embodiment shown in the Figures 4 and 5, the intermediate section 38 is formed by a curved line. According to an alternative embodiment, which is not illustrated and exactly equivalent, the intermediate section 38 is formed by a polyline.

On the contrary, the second edge 35 is rectilinear.

The first corner wall 30 further has an edge 39, which is transverse with respect to the first edge 34 and the second edge 35, connecting a substantially central portion of the intermediate section 38 of the first edge 34 with the second edge 35.

Moreover, the second corner wall 32 is longitudinally delimited by a first edge 41 and by a second edge 42, both rectilinear.

The inner stiffener 24 is obtained folding around the group of cigarettes a blank 40, shown in Figure 6, comprising a plurality of panels that will be marked with accented reference numbers equal to the reference numbers that distinguish the corresponding parts of the inner stiffener 24.

According to what is illustrated in Figure 6, the blank has a first intended folding line 45 and a second intended folding line 46, which are longitudinal, respectively defining the first edge 34 and the second edge 35 of the first corner wall 30, a first intended folding line

47 and a second intended folding line 48, which are longitudinal, respectively defining the first edge 41 and the second edge 42 of the second corner wall 32, and an intended folding line 49, which is transverse, defining the edge 39.

In particular, the first intended folding line 45 comprises a first upper rectilinear section 52 that defines the first section 36 of the first edge 34, a second lower rectilinear section 53 that defines the second section 37 of the first edge 34, and an intermediate section 54, arranged between the first section 52 and the second section 53, that defines the intermediate section 38 of the first edge 34.

Such a configuration of the blank 40 allows, by the folding of the blank 40 around the group of cigarettes, to make, in the inner stiffener 24, grab promoting means 50 having the function of facilitating the grab of the grab flap 23, which is arranged at, in particular below, the grab flap 23.

More precisely, the grab promoting means 50 comprises a portion 51 of the inner stiffener 24 which is connected to a remaining portion of the inner stiffener 24 by the first intended folding line 45, in particular by the intermediate section 54, along which the portion 51 is folded so as to form, owing to the particular shape of the intermediate section 54, a recess, or depression, below the grab flap 23, thus making a free (concave) zone below the grab flap 23 so that at least a portion of the grab flap 23 remains available for grabbing.

In other words, by way of the folding of the blank 40, in the inner stiffener 24, through the portion 51 a recess is formed below the grab flap 23 so as to favour the grab of the grab flap 23 by the user.

Moreover, the portion 51 of the inner stiffener 24 is part of the first corner wall 30 of the inner stiffener 24, and is defined between the intermediate section 54 of the first intended folding line 45 and a section of the second intended folding line 46 facing the intermediate section 54, i.e. between two consecutive intended folding lines of the inner stiffener 24.

Moreover, in the embodiments of Figures 4 and 5, the portion 51 comprises a first upper portion 55, and a second lower portion 56, connected one another by the intended folding line 49 (defining the edge 39), the latter having the function of favouring and increasing the curve (concavity) of the portion 51 towards the inside of the packet of cigarettes 1 after the folding of the blank.

According to a not illustrated version of such embodiment, the intended folding line 49, and thus the edge 39, are not present. Therefore, in such version, the portion 51 will have a smaller curve (concavity) than the one of the portion 51 according to the embodiment of

Figures 4 and 5.

It should be noted that an arrangement of a group of cigarettes formed by twenty cigarettes in three rows composed respectively of six, seven and seven cigarettes, wherein the row composed of six cigarettes is disposed nearer to the front wall 19 of the inner wrapper 5, makes available a wider space, towards the inside of the packet of cigarettes 1, which can be occupied by the portion 51 of the inner stiffener 24, thus improving the functionality of the portion 51.

In addition, it should be noted how the recess defined in the portion 51 of the inner stiffener 24 extends, in the direction of the bottom wall 7 of the container 2, beyond the lower edge of the grab flap 23. This increases the free zone below the grab flap 23 further facilitating the grab by a user.

According to a version shown in Figure 7 of the packet of cigarettes 1 according to the invention, the inner stiffener 24 shown in Figure 8 has the front wall 25, the first lateral wall 26 perpendicular to the front wall 19, the second lateral wall 28 perpendicular to the front wall 19, the first corner wall 30 connecting the front wall 25 to the first lateral wall 26, the second corner wall 32 connecting the front wall 25 to the second lateral wall 28 and the asymmetric recess 44, obtained in the front wall 25 to facilitate the extraction of the cigarettes.

Also in the embodiment shown in Figure 8, the first corner wall 30 and the second corner wall 32 are flat, the first corner wall 30 is arranged transversally with respect to the front wall 25 and to the first lateral wall 26, and the second corner wall 32 is arranged transversally with respect to the front wall 25 and to the second lateral wall 28. According to an alternative embodiment, which is not illustrated and exactly equivalent, the first corner wall 30 and the second corner wall 32 are rounded.

According to the embodiment shown in Figure 8, the first corner wall 30 is longitudinally delimited by a first edge 34 and by a second edge 35 both rectilinear. More precisely, the first edge 34 comprises a first upper rectilinear section 36 and a second lower rectilinear section 37, the first section 36 being longitudinally spaced apart from the second section 37.

Moreover, the second corner wall 32 is longitudinally delimited by a first edge 41 and by a second edge 42, both rectilinear.

According to the embodiment shown in Figure 8, the inner stiffener 24 comprises a panel 57 hinged to a remaining portion of the inner stiffener 24 along an intended folding line 58,

which is part of the second edge 35. Furthermore, the panel 57 is partially separated by the remaining portion of the inner stiffener 24 by means of a cutting line (also shown in Figure 11), being "C"-shaped and obtained on the front wall 25 and on the first corner wall 30 of the inner stiffener 24. More precisely, the cutting line 59 is formed by a polyline formed by
5 three rectilinear segments; a first segment that extends parallel to the longitudinal axis A of the packet of cigarettes 1 and a second and a third segments, among which the first segment is interposed, which extend transversally, in particular perpendicularly, with respect to the longitudinal axis A of the packet of cigarettes 1.

The panel 57 is thus defined by contiguous portions of the front wall 25 and of the first
10 corner wall 30 of the inner stiffener 24. In a preferred embodiment, the panel 57 is folded 180°, and optionally stuck, onto an external surface, i.e. facing to the inner wrapper 5, of the first lateral wall 26 of the inner stiffener 24. Thereby, after the folding of the inner stiffener 24 around the group of cigarettes, below the grab flap 23, a recess is formed defined by a pass-through window 61, obtained folding the panel 57 onto the first lateral
15 wall 26.

According to the embodiment shown in Figure 8, the inner stiffener 24 is obtained by folding a blank 60, shown in Figure 11, around the group of cigarettes, the blank comprising a plurality of panels that will be marked with accented reference numbers equal to the reference numbers that distinguish the corresponding parts of the inner stiffener 24.

According to what is illustrated in Figure 11, the blank 60 has a first intended folding line 45 and a second intended folding line 46, (a part of which coincides with the intended folding line 58), being longitudinal, respectively defining the first edge 34 and the second edge 35 of the first corner wall 30, and a first intended folding line 47 and a second intended folding line 48, being longitudinal, respectively defining the first edge 41 and the
25 second edge 42 of the second corner wall 32.

In particular, the first intended folding line 45 comprises a first upper rectilinear section 52 that defines the first section 36 of the first edge 34 and a second lower rectilinear section 53 that defines the second section 37 of the first edge 34, the first section 52 and the second section 53 being separated by the cutting line 59.

According to the embodiment shown in Figures 7 and 8, the portion 51 of the inner stiffener 24 is thus defined by the panel 57, it is connected to the remaining part of the inner stiffener 24 by means of the intended folding line 58 and forms, by the folding of the panel 57 onto the first lateral wall 26 of the inner stiffener 24, a recess, defined by the
30

window 61, arranged at, in particular below, the grab flap 23. Such recess arranged below the grab flap 23 makes a free zone below the grab flap 23 so as to favour the grab of the grab flap 23 by the user.

Also for the packet of cigarettes 1 according to the embodiment shown in Figure 7, an arrangement of a group of cigarettes formed by twenty cigarettes in three rows respectively composed of six, seven and seven cigarettes, wherein the row composed of six cigarettes is disposed nearer to the front wall 19 of the inner wrapper 5, makes available a wider space towards the inside of the packet of cigarettes 1, at the window 61, that can be used by the user to facilitate the grab of the grab flat 23.

Moreover, it should be noted as the window 61 defined by the folding of the panel 57 of the inner stiffener 24 extends, in the direction of the bottom wall 7 of the container 2, beyond the lower edge of the grab flap 23. This increases the free zone below the grab flap 23 further facilitating the grab by a user.

According to another version shown in Figure 9 of the packet of cigarettes 1 according to the invention, the inner stiffener 24 shown in Figure 10 has the front wall 25, the first lateral wall 26 perpendicular to the front wall 19, the second lateral wall 28 perpendicular to the front wall 19, the first corner wall 30 connecting the front wall 25 to the first lateral wall 26, the second corner wall 32 connecting the front wall 25 to the second lateral wall 28 and the asymmetric recess 44, obtained in the front wall 25 to facilitate the extraction of the cigarettes.

Also in the embodiment shown in Figure 10, the first corner wall 30 and the second corner wall 32 are flat, the first corner wall 30 is arranged transversally with respect to the front wall 25 and to the first lateral wall 26, and the second corner wall 32 is arranged transversally with respect to the front wall 25 and to the second lateral wall 28. According to an alternative embodiment, which is not illustrated and exactly equivalent, the first corner wall 30 and the second corner wall 32 are rounded.

According to the embodiment shown in Figure 10, the first corner wall 30 is longitudinally delimited by a first edge 34 and by a second edge 35, both rectilinear.

More precisely, the first edge 34 comprises a first upper rectilinear section 36 and a second lower rectilinear section 37, the first section 36 being longitudinally spaced apart from the second section 37.

In addition, the second corner wall 32 is longitudinally delimited by a first edge 41 and by a second edge 42, both rectilinear.

According to the embodiment shown in Figure 10, the inner stiffener 24 comprises a panel 57 that is hinged to a remaining portion of the inner stiffener 24 along an intended folding line 58, which is formed in the front wall 25 of the inner stiffener 24 and is parallel to the first edge 34 and the second edge 35. Furthermore, the panel 57 is partially separated from the remaining portion of the inner stiffener 24 by means of a cutting line 59 (also shown in Figure 12), being “C”-shaped and obtained on the front wall 25 and on the first corner wall 30 of the inner stiffener 24. More precisely, the cutting line 59 is formed by a polyline formed by three rectilinear segments; a first segment that extends parallel to the longitudinal axis A of the packet of cigarettes 1 and a second and a third segments, among which the first segment is interposed, which extend transversally, in particular perpendicularly, with respect to the longitudinal axis A of the packet of cigarettes 1.

The panel 57 is thus defined by contiguous portions of the front wall 25 and of the first corner wall 30 of the inner stiffener 24. In a preferred embodiment, the panel 57 is folded 180° by, and optionally stuck, onto an external surface, i.e. facing the inner wrapper 5, of the first lateral wall 25 of the inner stiffener 24. Thereby, after the folding of the inner stiffener 24 around the group of cigarettes, below the grab flap 23, a projection is formed having the thickness of the panel 57 as well as a recess, defined by a pass-through window 61, obtained by folding the panel 57 onto the front wall 25.

According to the embodiment shown in Figure 10, the inner stiffener 24 is obtained by folding a blank 62, shown in Figure 12, around the group of cigarettes comprising a plurality of panels that will be marked with accented reference numbers equal to the reference numbers that distinguish the corresponding parts of the inner stiffener 24.

According to what is illustrated in Figure 12, the blank 62 has the intended folding line 58, a first intended folding line 45 and a second intended folding line 46, longitudinal, respectively defining the first edge 34 and the second edge 35 of the first corner wall 30, and a first intended folding line 47 and a second intended folding line 48, longitudinal, respectively defining the first edge 41 and the second edge 42 of the second corner wall 32. In particular, the first intended folding line 45 comprises a first upper rectilinear section 52 that defines the first section 36 of the first edge 34 and a second lower rectilinear section 53 that defines the second section 37 of the first edge 34, the first section 52 and the second section 53 being separated by the cutting line 59.

According to the embodiment shown in Figures 9 and 10, the portion 51 of the inner stiffener 24 is thus defined by the panel 57, it is connected to the remaining part of the

inner stiffener 24 by means of the intended folding line 58 and it forms, by the folding of the panel 57 onto the front wall 25 of the inner stiffener 24, a projection defined by the panel 57, and a recess, defined by the window 61, disposed at, in particular below, the grab flap 23. Such projection and recess below the grab flap 23 make a free wide zone below the grab flap 23 such as to favour the grab of the grab flap 23 by a user.

Also for the packet of cigarettes 1 according to the embodiment shown in Figure 9, an arrangement of a group of cigarettes formed by twenty cigarettes in three rows respectively composed of six, seven and seven cigarettes, wherein the row composed of six cigarettes is disposed nearer to the front wall 19 of the inner wrapper 5, makes available a wider space towards the inside of the packet of cigarettes 1, at the window 61, that can be used by the user to facilitate the grab of the grab flat 23.

Moreover, it should be noted the way the panel 57 and the window 61 defined by the folding of the panel 57 of the inner stiffener 24 extend, in the direction of the bottom wall 7 of the container 2, beyond the lower edge of the grab flap 23. This increases the free zone below the grab flap 23 further facilitating the grab by a user.

The packet of cigarettes 1 shown in the version of the Figures 13 and 14 differs from the packet of cigarettes 1 shown in the Figures 1-3, 7 and 9, in that all the longitudinal edges are right, that is defined by a rectilinear line.

According to the version shown in Figures 13 and 14 of the packet of cigarettes 1 according to the invention, the inner stiffener 24, shown in the Figure 16, has the front wall 25, the first lateral wall 26 perpendicular to the front wall 19, the second lateral wall 28 perpendicular to the front wall 19 and the asymmetric recess 44 obtained in the front wall 25 in order to facilitate the extraction of the cigarettes.

According to the embodiment shown in Figure 16, between the front wall 25 and the first lateral wall 26, a first longitudinal rectilinear edge 63 is defined, while between the front wall 25 and the second lateral wall 28 a second longitudinal rectilinear edge 64 is defined.

According to the embodiment shown in Figure 16, the inner stiffener 24 comprises a panel 57 hinged to a remaining portion of the inner stiffener 24 along an intended folding line 58, which is part of the first edge 63. Furthermore, the panel 57 is partially separated from the remaining portion of the inner stiffener 24 by means of a cutting line 59 (also shown in Figure 17), being "C"-shaped and obtained on the front wall 25 of the inner stiffener 24 and defined by a single curvilinear line.

The panel 57 is thus defined by a portion of the front wall 25 of the inner stiffener 24. In an

alternative embodiment, which is not illustrated, the panel 57 is folded 180°, and optionally stuck, onto an external surface, i.e. facing the inner wrapper 5, of the first lateral wall 26 of the inner stiffener 24. Thereby, after the folding of the inner stiffener 24 around the group of cigarettes, below the grab flap 23, a recess is formed, defined by a pass through window, obtained folding the panel 57 onto the first lateral wall 26.

According to the embodiment shown in Figure 16, the inner stiffener 24 is obtained folding a blank 65 around the group of cigarettes, shown in Figure 17, comprising a plurality of panels that will be marked with accented reference numbers equal to the reference numbers that distinguish the corresponding parts of the inner stiffener 24.

According to what is shown in Figure 17, the blank 65 has a first longitudinal intended folding line 66 (a part of which coincides with the intended folding line 58), defining the first edge 63, a second intended folding line 67, longitudinal, defining the second edge 64, and a cutting line 59.

According to the embodiment shown in Figures 15 and 16, the portion 51 of the inner stiffener 24 is thus defined by the panel 57, it is connected to the remaining part of the inner stiffener 24 through the intended folding line 58 and it forms, after the folding of the panel 57 along the intended folding line 58 towards the inside of the packet of cigarettes 1 following a pressure operated by a user, a recess, disposed at, in particular below, the grab flap 23. Such recess below the grab flap 23 makes a free zone below the grab flap 23 such as to favour the grab of the grab flap 23 by the user.

Also for the packet of cigarettes 1 according to the embodiment shown in Figure 15, an arrangement of a group of cigarettes formed by twenty cigarettes in three rows respectively composed of six, seven and seven cigarettes, wherein the row composed of six cigarettes is disposed nearer to the front wall 19 of the inner wrapper 5, makes available a wider space towards the inside of the packet of cigarettes 1, which can be used by the user to facilitate the grab of the grab flat 23.

Moreover, it should be noted the way the recess defined by the moving of the panel 57 with respect to the front wall 25 of the inner stiffener 24 towards the inside of the packet of cigarettes 1 extends, in the direction of the bottom wall 7 of the container 2, beyond the lower edge of the grab flap 23. This increases the free zone below the grab flap 23 further facilitating the grab by a user.

According to the version shown in Figure 18 of the packet of cigarettes 1 according to the invention, the inner stiffener 24, shown in Figure 19, differs from the inner stiffener 24

shown in Figure 16 only in that the cutting line 59 (also shown in Figure 20) is defined by a polyline, whose segments extend transversally with respect to the longitudinal axis A of the packet of cigarettes. According to the embodiment shown in Figure 19, the inner stiffener 24 is obtained by folding a blank 66, shown in Figure 20, around the group of cigarettes comprising a plurality of panels that will be marked with accented reference numbers equal to the reference numbers that distinguish the corresponding parts of the inner stiffener 24.

According to another not illustrated version of the above described embodiments, the inner stiffener 24 comprises a panel 57 hinged to a remaining portion of the inner stiffener 24 along an intended folding line 58, which is formed in the first lateral wall 26 of the inner stiffener 24 and is parallel to a longitudinal edge of the packet of cigarettes 1. According to such a version, the panel 57 is also partially separated from the remaining portion of the inner stiffener 24 through a cutting line 59, being "C"-shaped and obtained on the first lateral wall 26 of the inner stiffener 24. The panel 57 is thus defined by a portion of the first lateral wall 26 of inner stiffener 24. In a preferred embodiment of such a version, the panel 57 is folded 180°, and optionally stuck, onto an external surface, i.e. facing the inner wrapper 5, of the first lateral wall 26 of the inner stiffener 24.

According to another not illustrated version of the above described embodiments, the recess 44 of the inner stiffener 24 is "U" -shaped, i.e. it is symmetric, and the closure tab 21 has a grab flap 23 positioned below the opening 17 for extracting the cigarettes. According to such a version, the portion 51 of the inner stiffener 24 (according to any one of the above described embodiments) is a part of the front wall 25 of the inner stiffener 24, and it is arranged at, and below, the grab flap 23. Furthermore, according to such a version, the intended folding line, along which the portion 51 is folded, extends transversally with respect to the longitudinal axis A of the packet of cigarettes 1, in particular parallel to the hinge 4 along which the lid 3 rotates with respect to the container 2.

The above described packet of cigarettes 1 has several advantages, in that it is simple and cheap to make, not requiring any plastic deformation of the inner stiffener 24 to facilitate the grab of the grab flap 23, and, owing to the grab promoting means 50, it permits the practical and safe grab of the grab flap 23.

CLAIMS

1. A packet (1) of smoke articles comprising:

a cup-shaped outer container (2) having an open top end (6);

5 a lid (3) which is hinged to the outer container (2) to rotate, with respect to the outer container (2), between an open position and a closed position of the open top end (6);

a soft inner wrapper (5), housed inside the outer container (2), which encloses a group of smoke articles and has an opening (17) for extracting the smoke articles which is closed by a reclosable closure tab (21) provided with a grab flap (23), in particular a corner grip flap (23), to move the closure tab (21); and

10 an inner stiffener (24), housed inside the soft inner wrapper (5) in contact with the smoke articles, which has grab promoting means (50) to facilitate the grab of the grab flap (23), which grab promoting means (50) is arranged at the grab flap (23);

the packet (1) is **characterised in that** the grab promoting means (50) comprises a portion (51, 57) of the inner stiffener (24), which portion (51, 57) is connected to a remaining portion of the inner stiffener (24) through an intended folding line (54; 58) along which the portion (51, 57) is folded to form a projection and/or a recess at the grab flap (23) such that at least one portion of the grab flap (23) is available for grabbing.

2. Packet (1) of smoke articles according to claim 1, wherein the intended folding line (54; 58) is part of one longitudinal edge (34, 35, 63) of the inner stiffener (24), which longitudinal edge is positioned between a front wall (25) and a lateral wall (26) of the inner stiffener (24).

3. Packet (1) of smoke articles according to claim 1, or 2, wherein the intended folding line (54) is formed by a polyline, or by a curved line.

25 4. Packet (1) of smoke articles according to claim 1, or 2, wherein the intended folding line (58) is formed within a front wall (25), or a lateral wall (26) of the inner stiffener (24) and is parallel to a longitudinal edge (34, 35, 63) of the inner stiffener (24) positioned between the front wall (25) and the lateral wall (26).

5. Packet (1) of smoke articles according to any one of claims 1 to 4, wherein the portion (51) of the inner stiffener (24) is defined between two consecutive intended folding lines of the inner stiffener (24), is positioned between a front wall (25) and a lateral wall (26) of the inner stiffener (24), and defines a curved recess at the grab flap (23).

6. Packet (1) of smoke articles according to one of claims 1 to 5, wherein the portion (51) of the inner stiffener (24) is formed by a first portion (55) and a second portion (56) which are connected one another through an intended folding line (49) which is transverse with respect to the intended folding line (54) which connects the portion (51) of the inner stiffener (24) to the remaining portion of the inner stiffener (24), the portion (51) is folded along the intended folding line (49) to increase the curvature of the recess at the grab flap (23).

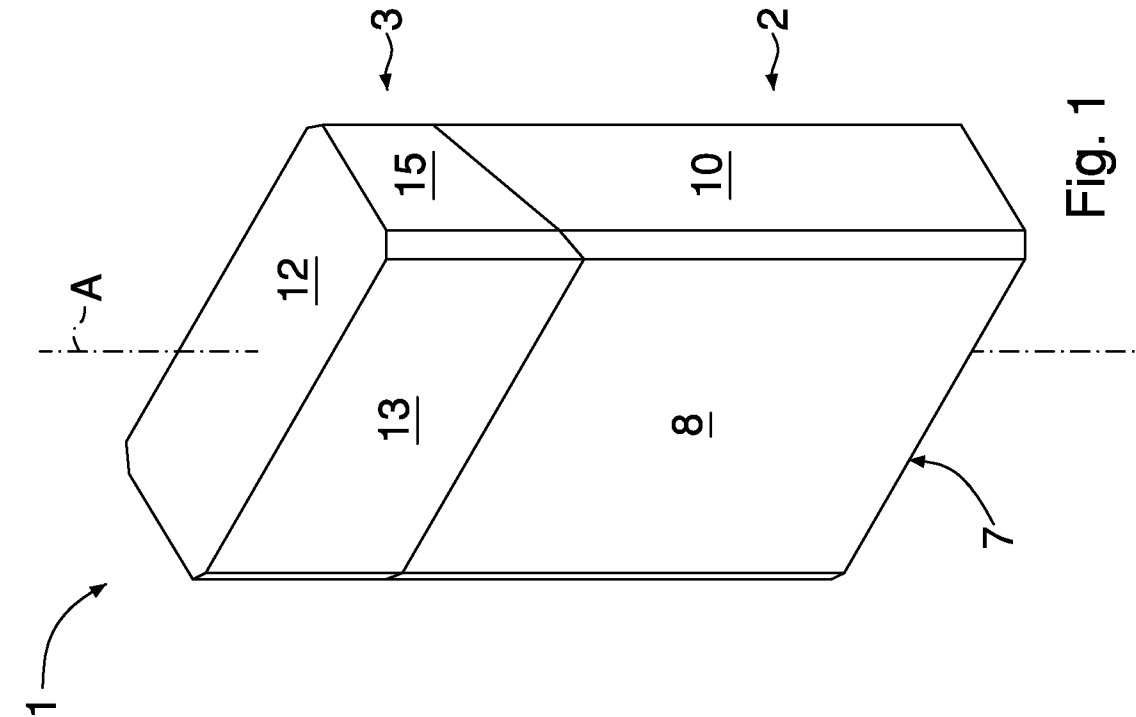
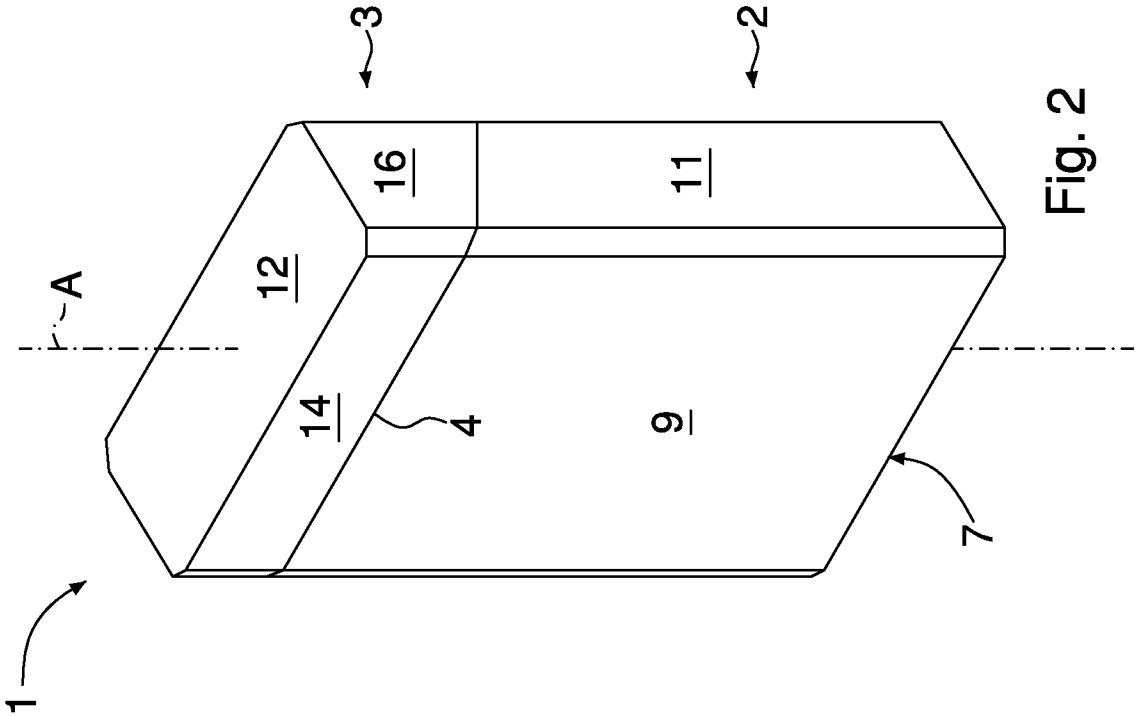
7. Packet (1) of smoke articles according to one of claims 1 to 4, wherein the portion (51) of the inner stiffener (24) is formed by a panel (57) of the inner stiffener (24) which is partially separable from the remaining portion of the inner stiffener (24) along a cutting line (59) so as to define a recess at the grab flap (23).

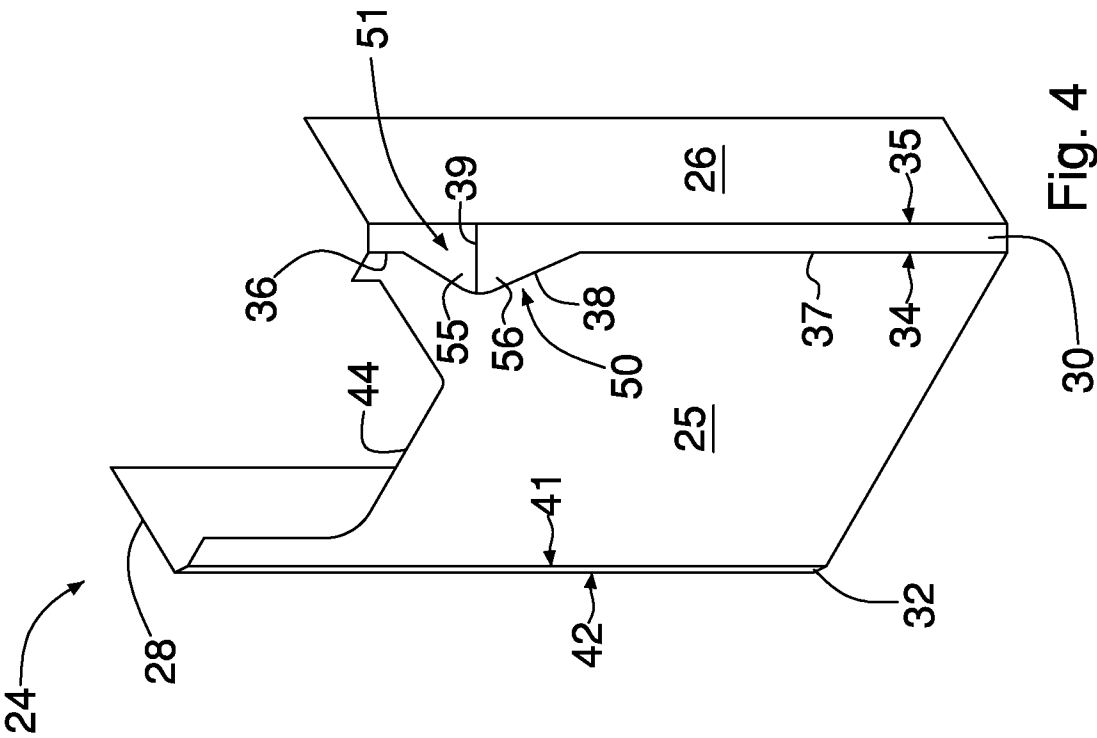
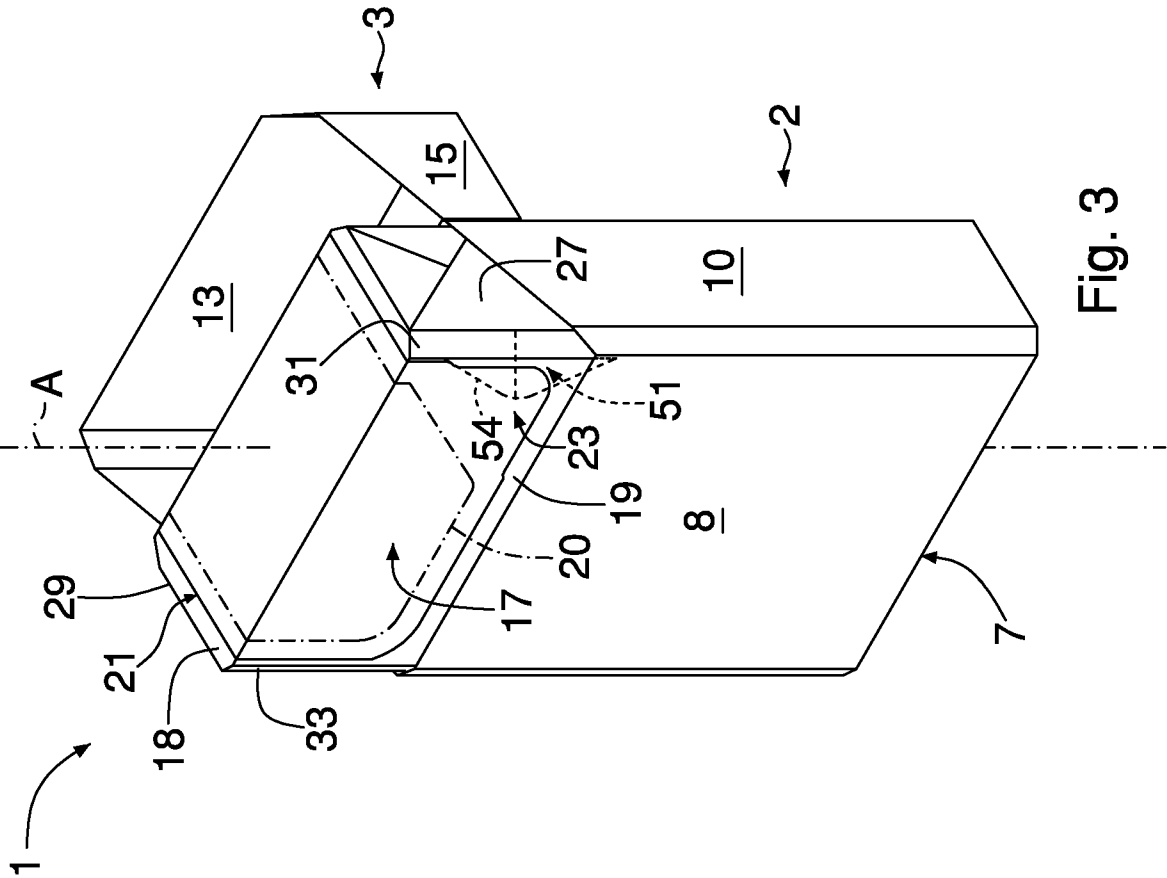
8. Packet (1) of smoke articles according to claim 7, wherein the cutting line (59) is "C" shaped and/or is obtained on a front wall (25) and/or a lateral wall (26, 30) of the inner stiffener (24).

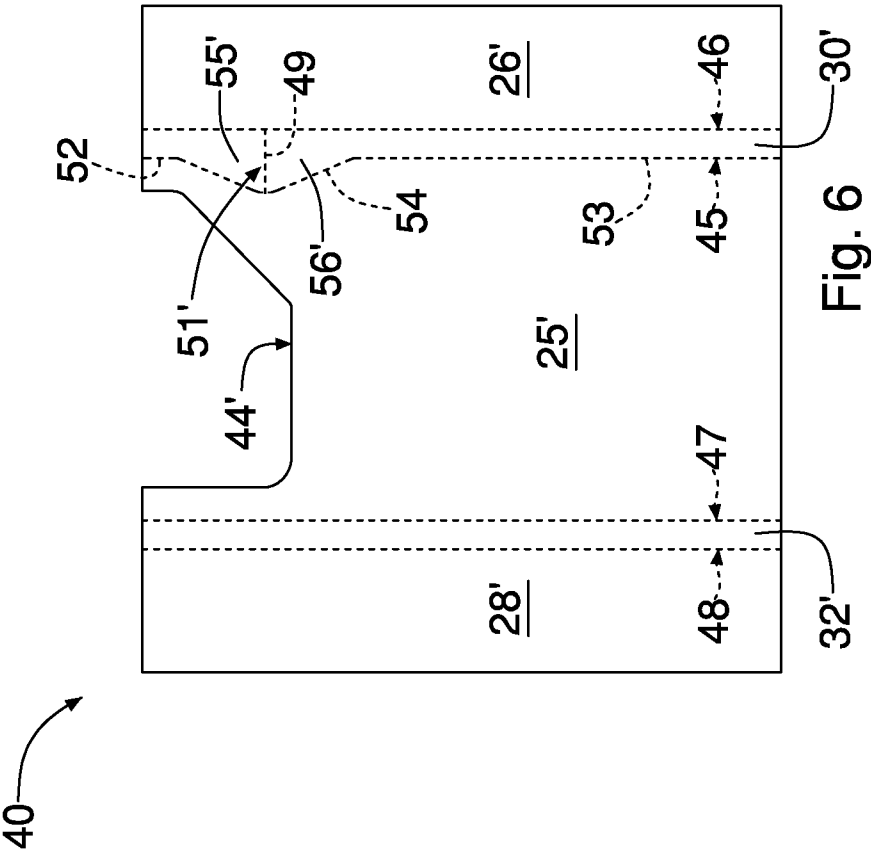
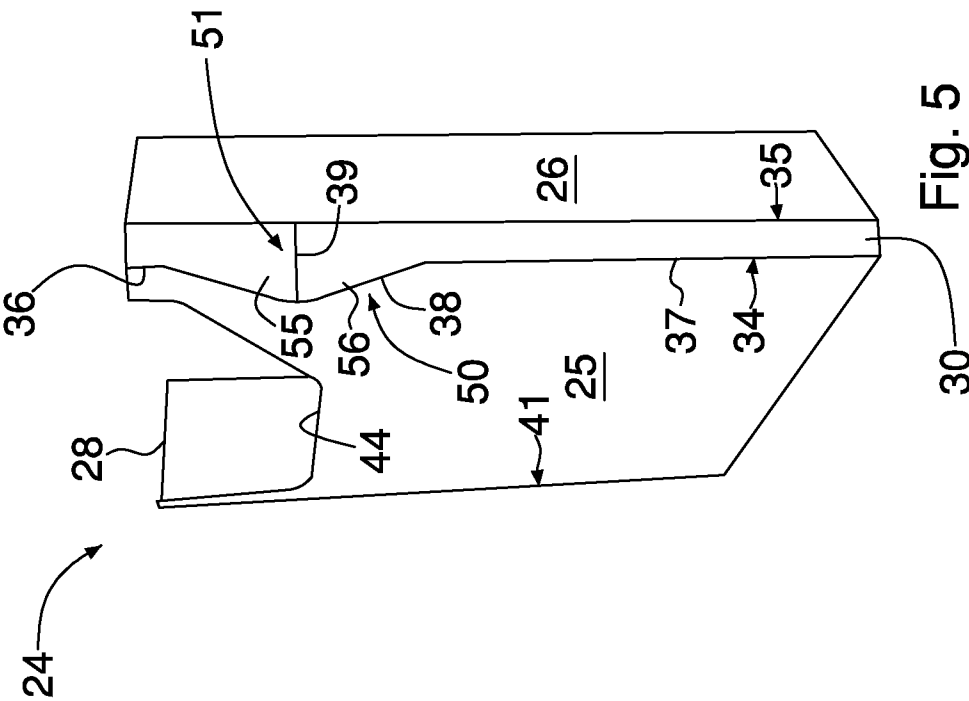
9. Packet (1) of smoke articles according to claim 7, or 8, wherein the panel (57) is folded 180° onto a front wall (25) of the inner stiffener (24) so as to define a projection and a recess (61) at the grab flap (23), or it is folded 180° onto a lateral wall (26) of the inner stiffener (24) so as to define a recess (61) at the grab flap (23).

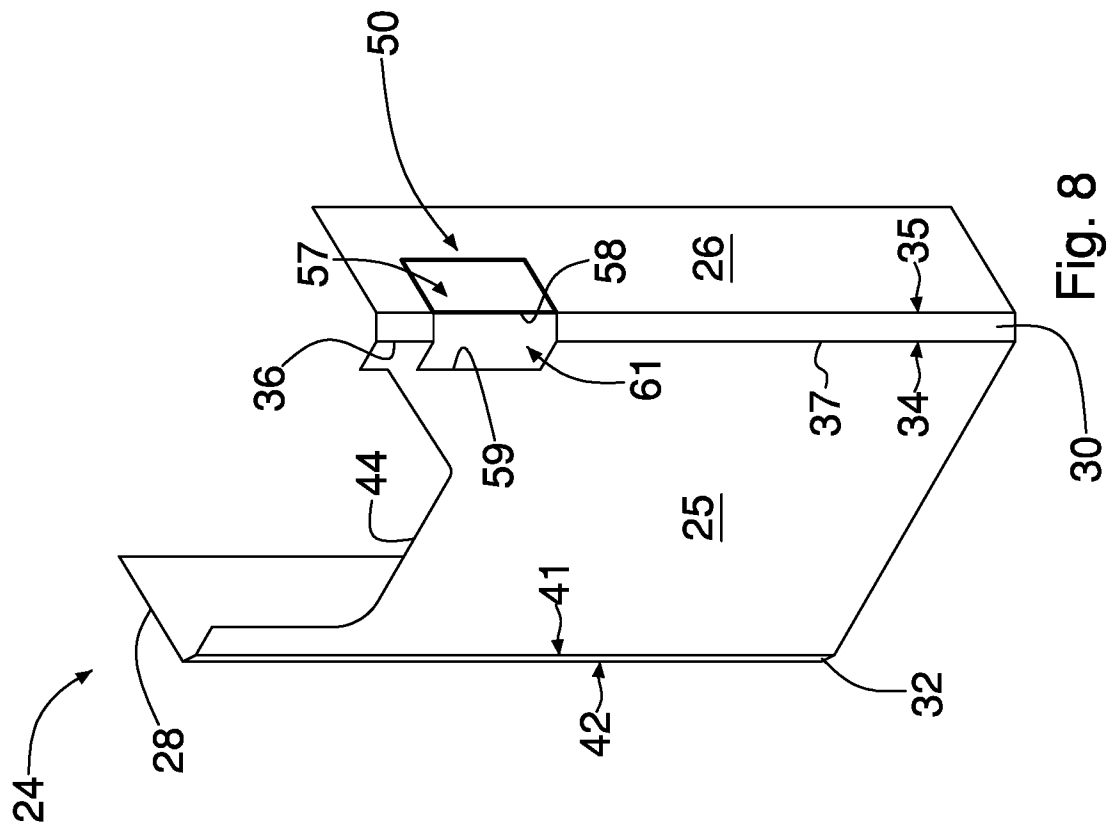
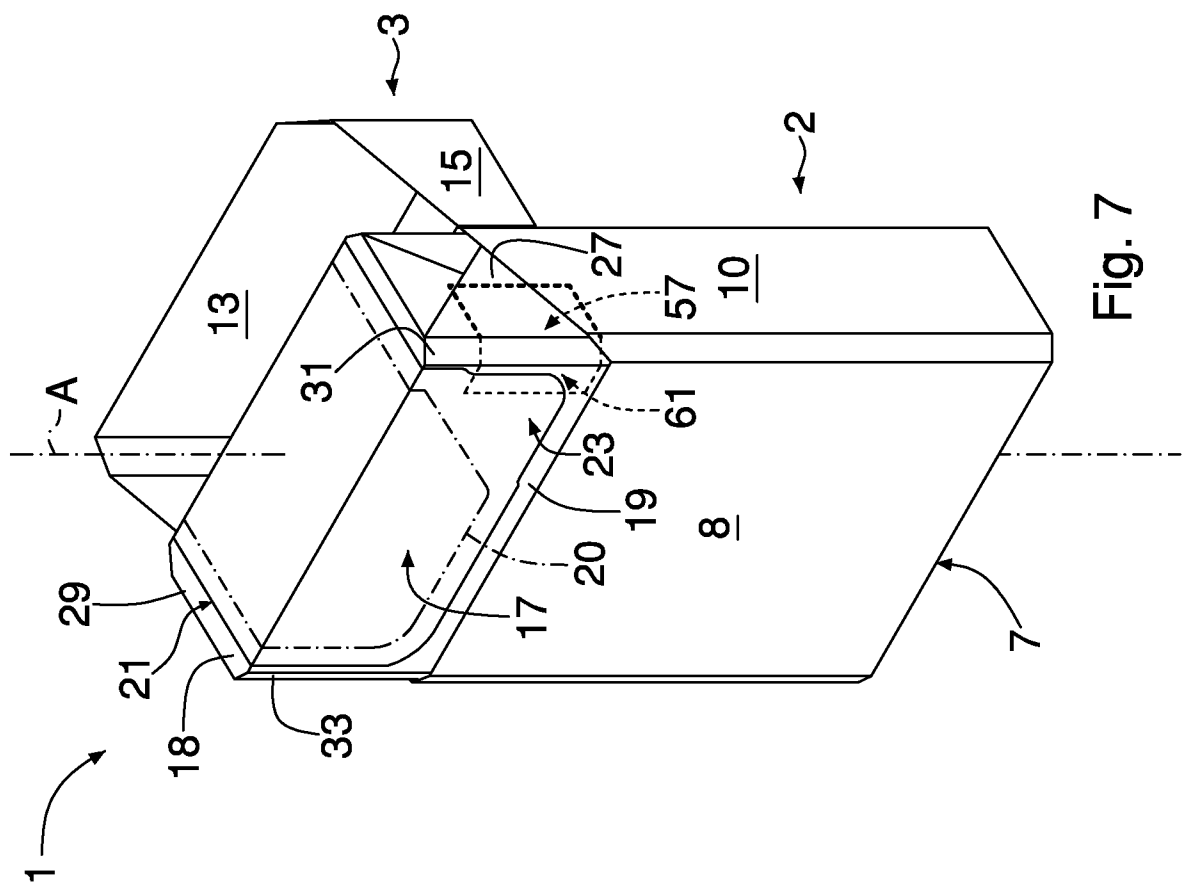
10. Packet (1) of smoke articles according to any one of claims 1 to 9, wherein the projection and/or recess formed by the portion (51, 57) of the inner stiffener (24) extend beyond a lower edge of the grab flap (23).

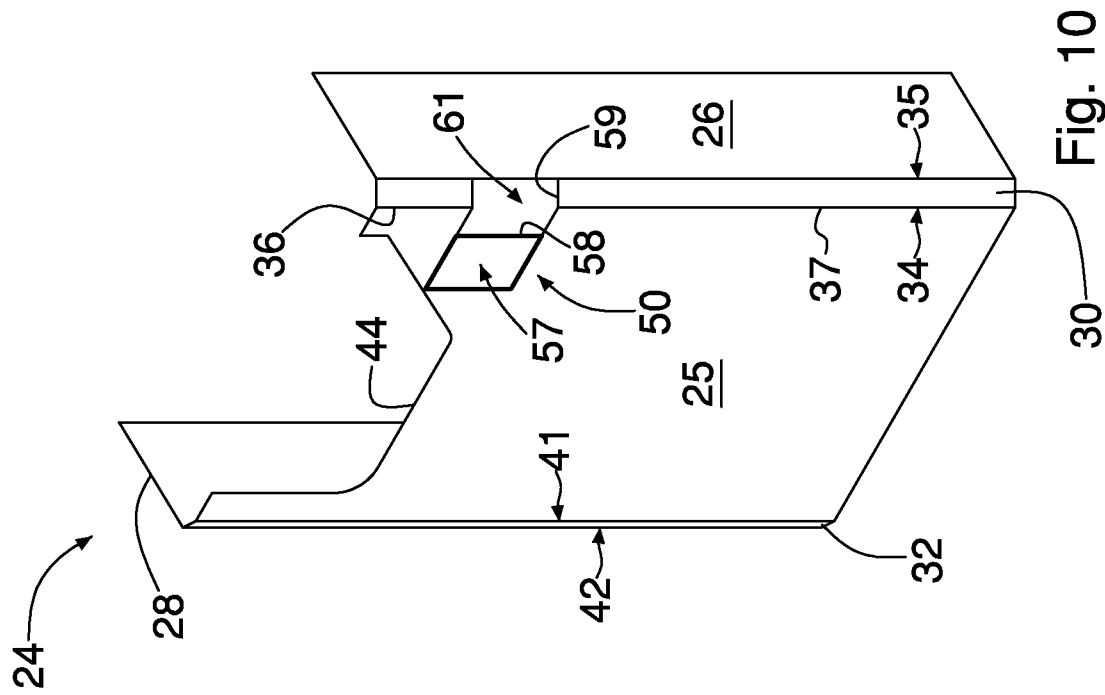
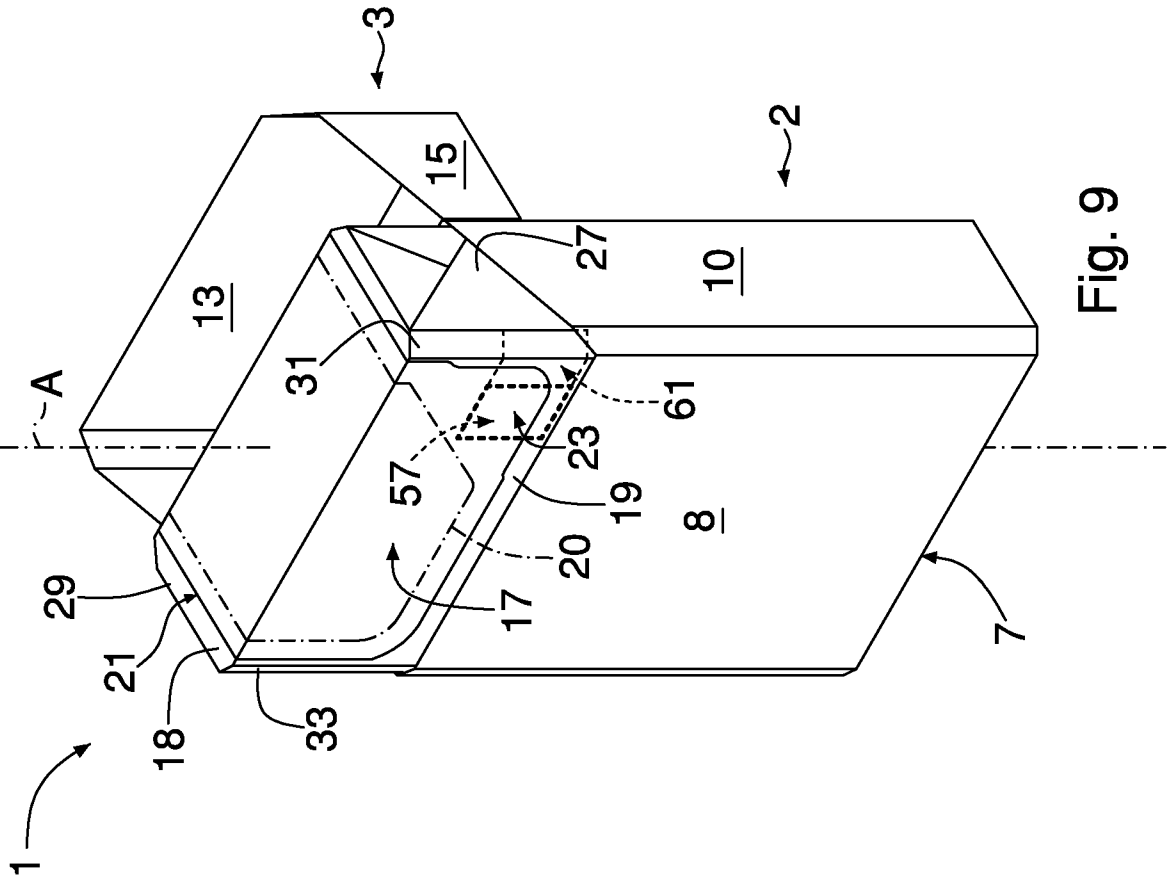
11. Packet (1) of smoke articles according to any one of claims 7 to 10, wherein the inner stiffener (24) has a front wall (25), a lateral wall (26) arranged perpendicularly to the front wall (25), and a corner wall (30) to connect the front wall (25) to the lateral wall (26); wherein the corner wall (30) is rounded, or it is flat and arranged transversely with respect to the front wall (25) and the lateral wall (26) of the inner stiffener (24); wherein the portion (51, 57) of the inner stiffener (24) comprises contiguous portions of the front wall (25) and of the corner wall (30) of the inner stiffener (24).

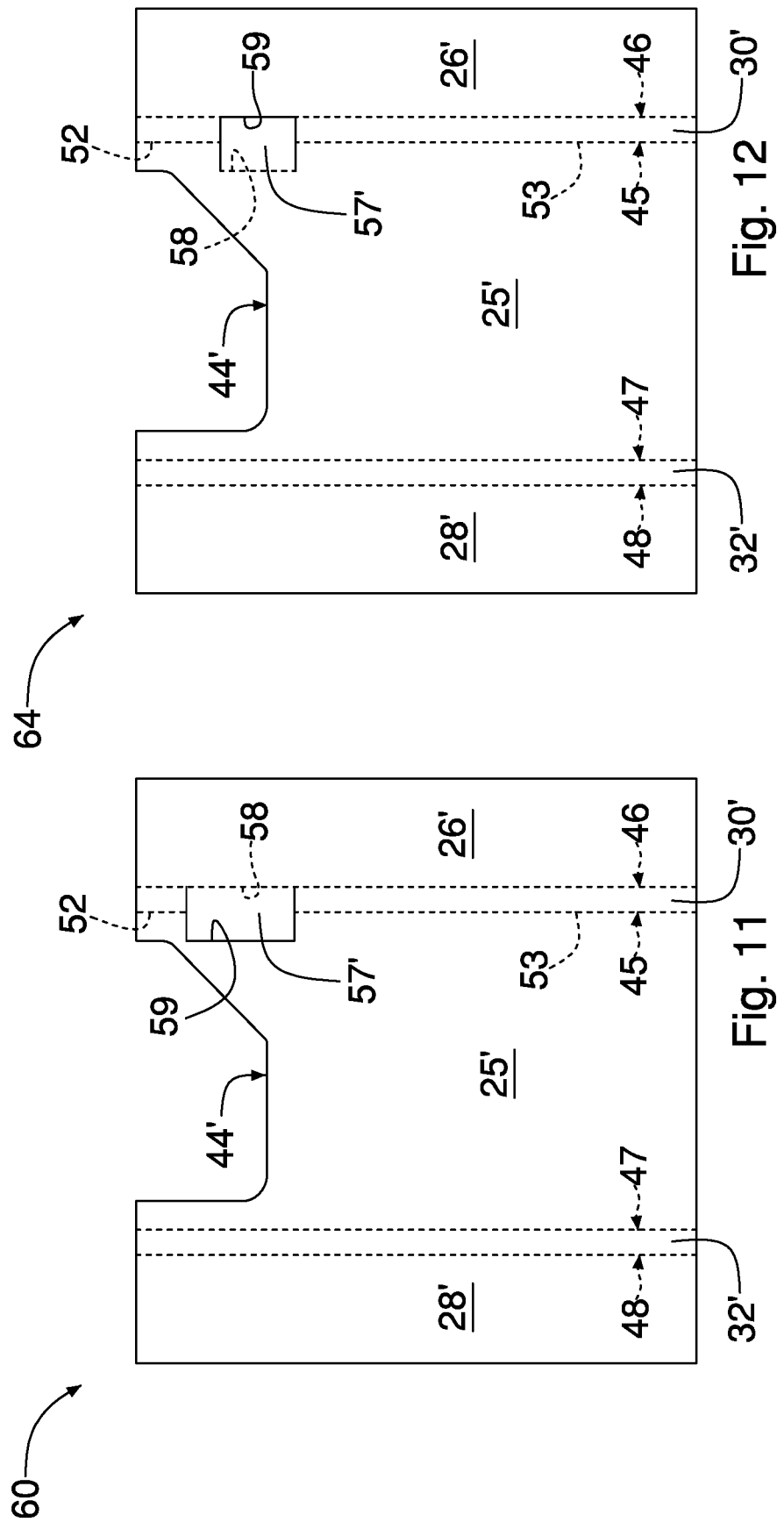


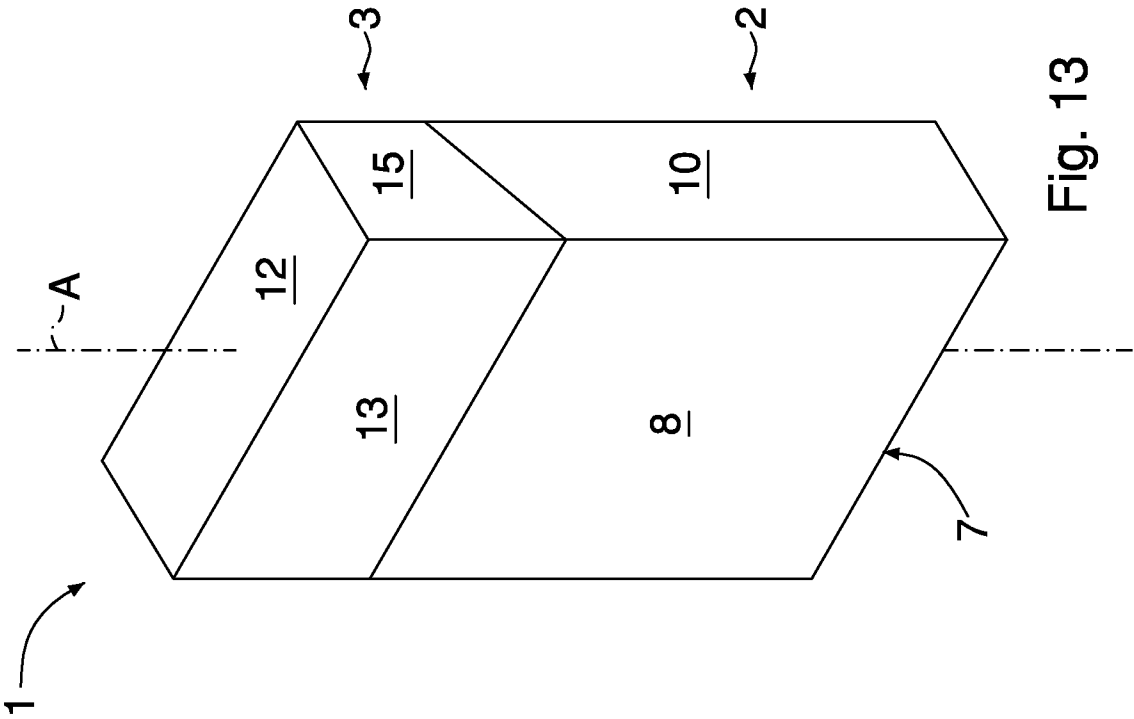
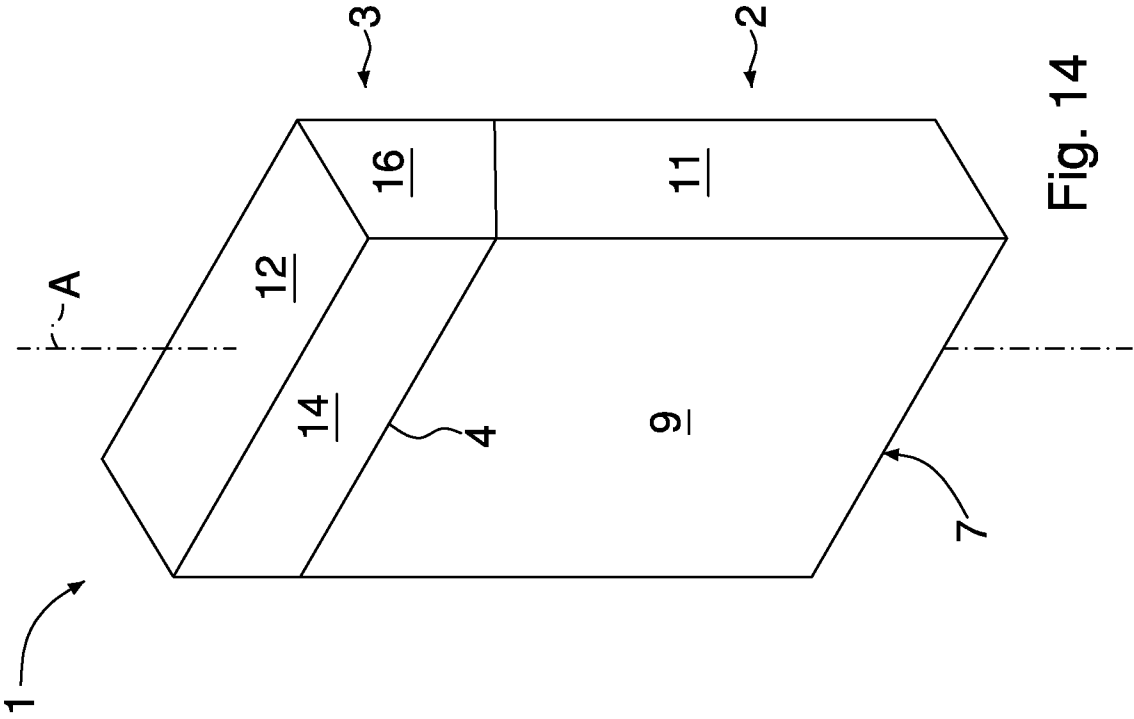


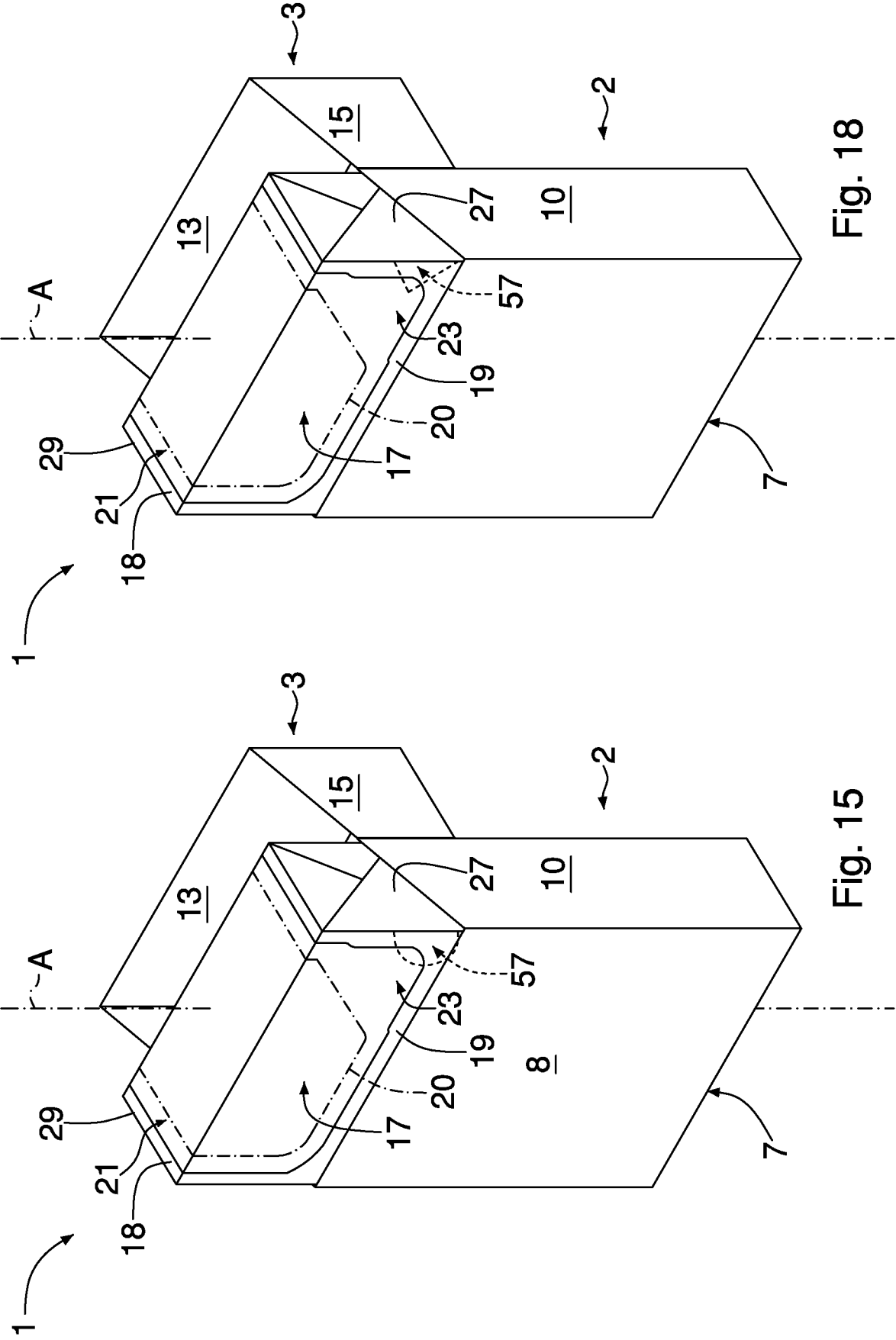












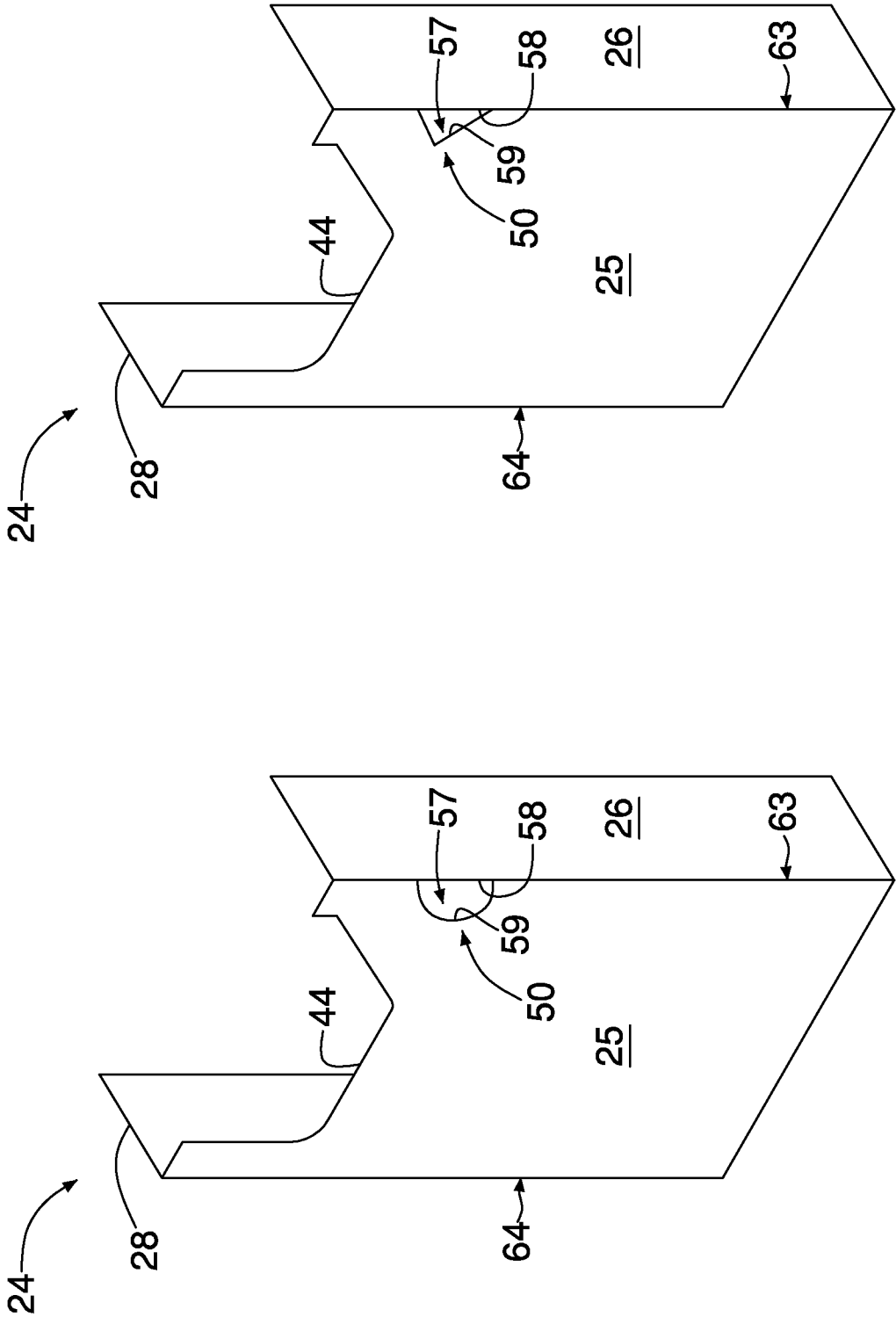


Fig. 16

Fig. 19

65

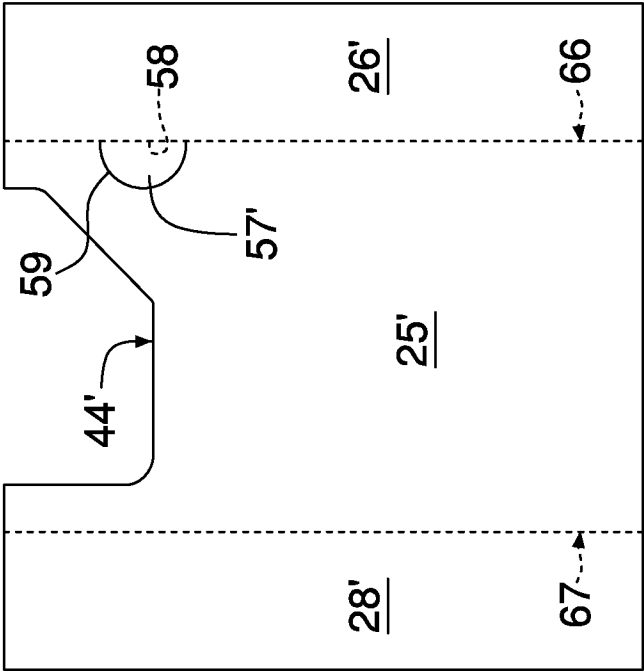


Fig. 17

68

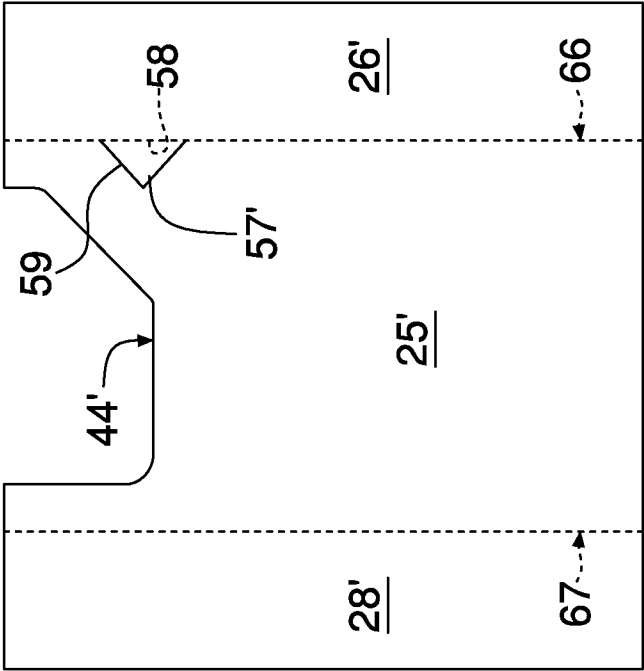


Fig. 20

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2016/057854

A. CLASSIFICATION OF SUBJECT MATTER
 INV. B65D85/10
 ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EP0-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2014/013478 A1 (GD SPA [IT]) 23 January 2014 (2014-01-23) page 6, line 20 - page 9, line 21; figures 2-6 -----	1-11
A	US 2 910 175 A (WILLIAMS BARNEY B) 27 October 1959 (1959-10-27) column 2, line 12 - line 26; figures 1-4 -----	1-11
A	DE 30 37 109 A1 (BRITISH AMERICAN TOBACCO CO [GB]) 16 April 1981 (1981-04-16) figure 4 -----	1-11
A	WO 2015/114019 A1 (JT INT SA [CH]) 6 August 2015 (2015-08-06) figures 7, 9, 10, 14 -----	1-11



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search

7 March 2017

Date of mailing of the international search report

17/03/2017

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
 NL - 2280 HV Rijswijk
 Tel. (+31-70) 340-2040,
 Fax: (+31-70) 340-3016

Authorized officer

Czerny, M

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2016/057854

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WO 2015114019 A1	06-08-2015	KR 20160115948 A SG 11201605930U A TW 201538403 A WO 2015114019 A1	06-10-2016 30-08-2016 16-10-2015 06-08-2015