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(54) PACKET OF SMOKE ARTICLES

PACKUNG FÜR RAUCHARTIKEL

PAQUET D'ARTICLES À FUMER

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Description

TECHNICAL FIELD

[0001] The present invention relates to a rigid hinged-lid packet of smoke articles which internally houses a package provided with at least one extraction opening of the smoke articles closed by a reclosable adhesive panel.

[0002] In the following description reference is made, for the sake of brevity, to a rigid hinged-lid packet of cigarettes without the present invention being thereby narrowed in scope.

BACKGROUND ART

[0003] Rigid packets of cigarettes with hinged lid of traditional type comprise an inner package of metal foil that completely wraps a group of cigarettes and an outer package that encloses the inner package and is provided with a hinged lid. Such packets are easy and practical to use and offer good mechanical protection to the cigarettes contained therein.

[0004] It is known that tobacco is very sensitive to the effects of the outer environment, inasmuch as in contact with the atmosphere its organoleptic features tend to vary both by the effect of variations in humidity (tobacco may dry excessively, or may absorb too much moisture) and by the evaporation of the volatile substances with which the tobacco is impregnated (especially in the case of cigarettes with particular aromas such as menthol).

[0005] To preserve the integrity of the tobacco of the cigarettes, the packets of cigarettes are then cellophane-wrapped, i.e. they are wrapped in a heat-sealable overwrapping of airtight plastic material. Nevertheless, the heat-sealable overwrapping might not be sufficient to fully preserve the organoleptic characteristics of the tobacco contained in a packet of cigarettes, in particular when the packet of cigarettes is consumed some time after manufacture. Further, when the packet is first opened, the overwrapping is removed thus exposing the tobacco of the cigarettes contained in the packet to the outer environment; if the cigarettes contained in the packet are not consumed rapidly after the first opening of the packet, the organoleptic characteristics of the tobacco contained in the remaining cigarettes can be noticeably deteriorated.

[0006] In order to remedy the aforementioned drawback, rigid packets of cigarettes have been proposed of the type disclosed in international patent applications WO2010/026020A1 and WO02/30790A2.

[0007] WO2010/026020A1 and WO02/30790A2 disclose rigid packets of cigarettes comprising an outer container which houses two separate groups of cigarettes. Such packets are provided with an airtight inner package, which is heat-sealed and comprises a sheet of heat-sealable material which forms an airtight barrier. In the packets disclosed in international patent applications WO2010/026020A1 and WO02/30790A2, commonly known as "sealed twin packets", the inner package has two extraction openings of the cigarettes, one for each separate group of cigarettes, which are closed by respective reclosable adhesive panels. Inside the inner package, a rigid inner frame is further arranged. The rigid inner frame encloses the group of cigarettes, has a front wall, a pair of lateral walls and a folded central portion, and has the function of protecting the cigarettes during the folding and heat-sealing of the inner package sheet of heat-sealable material and, by the folded central portion, of separating the two groups of cigarettes.

[0008] The packets disclosed in WO2010/026020A1 and WO02/30790A2 enable a first group of cigarettes to be consumed, and then the remaining group of cigarettes, thereby preserving better over time the organoleptic characteristics of the tobacco contained in the group of cigarettes consumed subsequently.

[0009] Nevertheless, such packets are unsuitable for housing a group of cigarettes of reduced dimensions, i.e. a group of cigarettes of reduced diameter of the "slim" or "super-slim" type. Such cigarettes would in fact form, for the same number of cigarettes as for cigarettes of standard dimensions, groups having a transverse dimension that was less than a transverse dimension of the inner package. This would enable the groups of cigarettes to "shake" inside the packet of cigarettes; the movements of the groups of cigarettes during handling (both in the production step and in the distribution and sale step) of the packet of cigarettes would subject the cigarettes to mechanical stress that could easily cause emptying of the tips (i.e. loss of tobacco fibres from the free ends of the cigarettes).

DESCRIPTION OF THE INVENTION

[0010] The object of the present invention is to provide a packet of smoke articles which is free from the drawbacks described above, i.e. which is at the same time easy and inexpensive to manufacture.

[0011] According to the present invention a packet of smoke articles is provided as claimed in the appended claims.

BRIEF DESCRIPION OF THE DRAWINGS

[0012] The present invention will now be disclosed with reference to the accompanying drawings which illustrate some embodiments thereof by way of non-limiting example in which:

- Figure 1 is a front perspective view and in a closed configuration of a packet of cigarettes made according to the present invention;
- Figure 2 is a rear perspective view of the packet of cigarettes of Figure 1 in a closed configuration;
- Figure 3 is a front perspective view of the packet of cigarettes of Figure 1 in an open configuration;
- Figure 4 is a front perspective view of the packet of

cigarettes of Figure 1 in an open configuration and devoid of an inner package and of the group of cigarettes;

- Figure 5 is a front perspective view of the inner package included in the packet of cigarettes of Figure 1;
- Figure 6 is a front perspective view of a stiffener and of a supporting element included in the packet of cigarettes of Figure 1;
- Figure 7 is a front perspective view of the stiffener included in the packet of cigarettes of Figure 1;
- Figure 8 is a front perspective view of the supporting element included in the packet of cigarettes of Figure 1;
- Figure 9 is a rear perspective view of the supporting element included in the packet of cigarettes of Figure 1;
- Figure 10 is a cross section of the stiffener and of the supporting element of the packet of cigarettes of Figure 1;
- Figure 11 is a view of a blank used to make an outer container of the packet of cigarettes of Figure 1;
- Figure 12 is a view of a blank used to make the stiffener of the packet of cigarettes of Figure 1;
- Figure 13 is a view of a blank used to make the supporting element of the packet of cigarettes of Figure 1;
- Figure 14 is a view of a package sheet used to make an inner package of the packet of cigarettes of Figure 1 provided with two reclosable adhesive panels;
- Figures 15 and 16 are front perspective views of a version of the stiffener of the packet of cigarettes of Figure 1;
- Figure 17 is a cross section of the stiffener of Figures 15 and 16;
- Figure 18 is a view of a blank used to make the stiffener of Figures 15 and 16;
- Figures 19 and 20 are front perspective views of another version of the stiffener of the packet of cigarettes of Figure 1;
- Figure 21 is a cross section of the stiffener of Figures 19 and 20;
- Figure 22 is a view of a blank used to make the stiffener of Figures 19 and 20;
- Figure 23 is a cross section of a further version of the stiffener of the packet of cigarettes of Figure 1;
- Figure 24 is a view of a blank used to make the stiffener of Figure 23;
- Figure 25 is a cross section of another version of the stiffener and of the supporting element of the packet of cigarettes of Figure 1;
- Figure 26 is a view of a blank used to make the stiffener of Figure 25;
- Figure 27 is a view of a blank used to make the supporting element of Figure 25;
- Figure 28 is a cross section of a further version of the stiffener of the packet of cigarettes of Figure 1;
- Figure 29 is a view of a blank used to make the stiffener of Figure 28;
- Figure 30 is a cross section of another version of the stiffener of the packet of cigarettes of Figure 1;
- Figure 31 is a view of a blank used to make the stiffener of Figure 30.

PREFERRED EMBODIMENTS OF THE INVENTION

[0013] In this description, similar elements that are common to the illustrated embodiments are indicated by the same numbering.

[0014] Number 1 in Figures 1 to 3 indicates as a whole a rigid packet of cigarettes extending along a longitudinal axis A parallel to a main extension longitudinal axis of the cigarettes.

[0015] The packet 1 of cigarettes comprises a container 2, a lid 3, which is rearly hinged to the container 2 along a hinge 4 to rotate between a closed position (illustrated in Figures 1 and 2) and an open position (illustrated in Figure 3), and an inner package 5, which encloses a group of cigarettes and is housed in the container 2.

[0016] The container 2 is of rigid type, i.e. it is formed of a rigid package material, is cup-shaped, has a parallelpiped shape and has an open top end 6, a bottom wall 7 opposite the open top end, a front wall 8 and a rear wall 9 which are mutually parallel and opposite, and a first lateral wall 10 and a second lateral wall 11 which are parallel to one another and interposed between the walls 8 and 9.

[0017] In the container 2, between the respectively front and rear walls 8 and 9 and the lateral walls 10, 11 four longitudinal edges are defined which are arranged parallel to the cigarettes of the group of cigarettes. In the container 2, between the walls 8, 9, 10 and 11 and the bottom wall 7 four transverse edges are defined that are arranged perpendicularly to the cigarettes of the group of cigarettes.

[0018] The lid 3 is cup-shaped, has a parallelpiped shape, and has a top wall 12, parallel to and opposite the bottom wall 7 of the container 2 when the lid 3 is arranged in the closed position, a front wall 13, which is coplanar with the front wall 8 of the container 2 when the lid 3 is arranged in the closed position, a rear wall 14, hinged by the hinge 4 to the rear wall 9 of the container 2 and which is coplanar with the rear wall 9 of the container 2 when the lid 3 is arranged in the closed position, a first lateral wall 15, which is coplanar with the first lateral wall 10 of the container 2 when the lid 3 is arranged in the closed position, and a second lateral wall 16, which is coplanar with the second lateral wall 11 of the container 2 when the lid 3 is arranged in the closed position.

[0019] In the lid 3, between the respectively front and rear walls 13 and 14 and the lateral walls 15, 16 four longitudinal edges are defined which are arranged parallel to the cigarettes of the group of cigarettes. In the lid 3, between the walls 13, 14, 15 and 16 and the top wall 12 four transverse edges are defined which are arranged perpendicularly to the cigarettes of the group of ciga-

rettes.

[0020] In the embodiments illustrated in the attached Figures all the edges are sharp; according to other embodiments which are not illustrated and are perfectly equivalent part of the longitudinal and/or transverse edges can be chamfered or rounded.

[0021] According to what is illustrated in Figure 5, the inner package 5, in particular of the sealed type, has a parallelpiped shape and has a top wall 17 and a bottom wall 18 which are mutually parallel and opposite each of which face respectively, when the lid 3 is arranged in the closed position, an inner surface of the top wall 12 of the lid 3 and an inner surface of the bottom wall 7 of the container 2, a front wall 19 and a rear wall 20 which are mutually parallel and opposite each of which face respectively, when the lid 3 is arranged in the closed position, inner surfaces of the front walls 8, 13 respectively of the container 2 and of the lid 3 and an inner surface of the rear wall 9 of the container 2, and a first lateral wall 21 and a second lateral wall 22 which are parallel to one another and interposed between the walls 19 and 20 each of which face respectively, when the lid 3 is arranged in the closed position, an inner surface of the first lateral wall 10 of the container 2 and an inner surface of the second lateral wall 11 of the container 2.

[0022] The inner package 5 is made by folding a package sheet 23, illustrated in Figure 14, of metal foil, i.e. of heat-sealable soft package material devoid of rigidity, around the group of cigarettes (so as to be in direct contact with the cigarettes) and stabilized by heat-sealing. The inner package 5 further comprises two extraction openings for extracting the cigarettes, illustrated with a dashed line in Figures 3 and 5, which are adjacent to and separate from one another, arranged at the top wall 17 and at the front wall 19 of the package 5, and each bounded by a respective separating line 25, illustrated with a dashed line in Figures 3 and 5. The separating line 25 can be separated right from the start from the remaining part of the inner package 5 or can be tearable, typically a perforated line, to be completely torn at the first opening of the packet 1 of cigarettes. Generally, it is preferable for the separating line 25 to be tearable to simplify handling of the package sheet 23 used to form the inner package 5.

[0023] According to what is illustrated in Figure 10, the inner package 5 (illustrated with a dashed and dotted line) has a greater transverse dimension than a transverse dimension of the group of cigarettes so as to form a cavity 26 inside the package 5. In the present description "transverse dimension" is defined as a dimension measured along an axis contained on a plane that is perpendicular to the longitudinal axis A, and perpendicular, for example, to the front wall 19 of the inner package 5. In other words, the group of cigarettes is less deep, i.e. is less thick, than the inner package 5, i.e. the depth (the thickness) of the group of cigarettes is less than the depth (the thickness) of the inner package 5.

[0024] According to what is illustrated in Figures 3 and 5, the packet 1 of cigarettes comprises two reclosable adhesive panels 27, i.e. of the "open and close" type, which each cover a respective extraction opening 24 of the inner package 5 and are superimposed on the rear wall 20, on the top wall 17 and on the front wall 19 of the inner package 5. Each adhesive panel 27 comprises a repositionable adhesive which does not dry (i.e. always remains sticky), i.e. an adhesive which enables the parts to be separated and then rejoined even after a long time; in this manner, each adhesive panel 27 adheres normally to the inner package 5 to close (seal) the respective extraction opening 24 and can be temporarily lifted from the inner package 5 to free the respective extraction opening 24 and thus enable a cigarette to be extracted through the respective extraction opening 24.

[0025] Each adhesive panel 27 further comprises a permanent adhesive which causes permanent gluing, i. e. even in use it is never separated, of the portion of the inner package 5 enclosed inside the respective separating line 25, i.e. at the respective extraction opening 24, at the corresponding adhesive panel 27; thus when an adhesive panel 27 is lifted from the inner package 5 the portion of the inner package 5 enclosed inside the respective separating line 25, i.e. at the extraction opening 24, lifts together with the adhesive panel 27 to free the extraction opening 24. Further, the presence of the repositionable adhesive that does not dry between the adhesive panels 27 and the inner package 5 causes temporary gluing (i.e. which is separated in use) between the portions of the inner package 5 that surround the separating lines 25, i.e. that surround the extraction openings 24, and the adhesive panels 27 so as to maintain the adhesive panels 27 normally in contact with the inner package 5 to close (seal) the extraction openings 24.

[0026] The reclosable adhesive panels 27 are connected together at the rear wall 20 of the inner package 5 and separated, by a through incision, at the top wall and front wall 17 and 19 of the inner package 5. This enables, in use, both the adhesive panels 27 to be effectively manoeuvrable and handling in the packaging machine to be facilitated.

[0027] In one version of the invention, which is not illustrated, two distinct adhesive panels are provided, i.e. which are completely separated from one another.

[0028] Also, each adhesive panel 27 is provided with a grip tab 28, which is devoid of adhesive. Each tab 28 is arranged substantially coplanar with the portion of the respective adhesive panel 27 which faces an outer surface of the front wall 19 of the inner package 5. The grip tabs 28 are suitable for facilitating the gripping of the respective adhesive panel 27 at the moment of lifting the adhesive panel 27; in other words, to lift an adhesive panel 27 a user can easily grip the respective grip tab 28, which is in no way fixed to the inner package 5, unlike the rest of the respective adhesive panel 27.

[0029] According to what is illustrated in Figures 4, 6, 7 and 10, the packet 1 of cigarettes comprises a stiffener 29, commonly known as "inner stiffener", of rigid type,

which embraces at the front the inner package 5, consists of rigid cardboard or card, is "U"-shaped and is arranged inside the inner package 5 in direct contact with the group of cigarettes. The stiffener 29 has a front wall 30 facing the front wall 19 of the inner package 5, a first lateral wall 31 facing the first lateral wall 21 of the inner package 5, and a second lateral wall 32 facing the second lateral wall 22 of the inner package 5. Further, the stiffener 29 comprises a bottom wall 33 which faces the bottom wall 18 of the inner package 5, a first stiffener flap 34 connected to a top end of the first lateral wall 31 of the stiffener 29, arranged perpendicular to the first lateral wall 31 and opposite the bottom wall 33 of the stiffener 29, i.e. parallel to and facing an inner surface of the top wall 17 of the inner package 5, and a second stiffener flap connected to a top end of the second lateral wall 32 of the stiffener 29, arranged perpendicular to the second lateral wall 32 and opposite the bottom wall 33 of the stiffener 29, i.e. parallel to and facing the inner surface of the top wall 17 of the inner package 5. Further, the stiffener 29 comprises a pair of "U"-shaped recesses 36, obtained in the front wall 30 to facilitate extracting of the cigarettes. In use, the function of the stiffener 29 is to protect the cigarettes during folding and welding of the package sheet 23 of heat-sealable material and to act as an abutment for the adhesive panels 27.

[0030] According to what is illustrated in Figures 4, 6, and 8 to 10, the packet 1 of cigarettes further comprises a supporting element 37, of rigid type, which embraces the inner package 5 at the rear, consists of rigid cardboard or card, and is arranged inside the inner package 5 in direct contact with the group of cigarettes.

[0031] The supporting element 37 has a first rear wall 38A and a second rear wall 38B, which are adjacent to one another, coplanar and face the rear wall 20 of the inner package 5, a first lateral wall 39 facing an inner surface of the first lateral wall 31 of the stiffener 29, and a second lateral wall 40 facing an inner surface of the second lateral wall 32 of the stiffener 29.

[0032] In use, the function of the supporting element 37 is to protect the cigarettes during folding and welding of the package sheet 23 of heat-sealable material.

[0033] The packet 1 of cigarettes further comprises a separating element 41, i.e. a divider, forming a single body with the supporting element 37, which is housed inside the inner package 5 and divides the inner volume of the inner package 5 so as to form several partitions of the group of cigarettes. In particular, the separating element 41 comprises a separating wall 42 which separates the inner volume of the inner package 5 into two chambers 43A, 43B, each arranged for housing a partition, i.e. a subgroup, of the group of cigarettes. In other words, the separating element 41 is inside the inner package 5 in direct contact with the group of cigarettes and divides, by the separating wall 42, the inner volume of the inner package 5 into the chambers 43A, 43B which are longitudinally alongside along the longitudinal axis A of the packet 1; consequently the separating wall 42 separates the two chambers 43A, 43B from one another and constitutes the border between the two chambers 43A, 43B. In the embodiment shown, each chamber 43A, 43B contains a subgroup of cigarettes consisting of ten cigarettes.

[0034] According to a preferred embodiment, the separating wall 42 of the separating element 41 finishes higher than the rear walls 38A, 38B of the supporting element 37, "higher" meaning the fact of being further from the bottom wall 18 of the inner package 5. In other words, the distance between a bottom edge of the separating wall 42 of the separating element 41 and the bottom wall 18 of the inner package 5 is greater than the distance between the bottom edges of the rear walls 38A, 38B of the supporting element 37 and the bottom wall 18 of the inner package 5.

[0035] In the embodiment illustrated in Figures 4, 6, 8-10, the separating wall 42 extends parallel to the longitudinal axis A and is arranged transversely, in particular perpendicular, to the front wall 19 and to the rear wall 20 of the inner package 5, i.e. to the front wall 30 of the stiffener 29 and to the rear walls 38A, 38B of the supporting element 37.

[0036] Also, the separating wall 42 extends substantially over the entire distance which separates the front wall 30 of the stiffener 29 and the rear walls 38A, 38B of the supporting element 37.

[0037] In the embodiment illustrated in Figures 4, 6, 8-10, the separating wall 42 is formed by a first separating panel 44 and by a second separating panel 45 facing one another and connected by a folding line which, in use, faces and makes contact with a central portion of an inner surface of the front wall 30 of the stiffener 29. In particular, the first separating panel 44 and the second separating panel 45 originate by folding to the inside of the packet 1 of cigarettes respective adjacent portions of the rear walls 38A, 38B of the supporting element 37 and are each connected and arranged perpendicular to the corresponding rear wall 38A, 38B from which they originate. More precisely, the first separating panel 44 and the second separating panel 45 folded reciprocally by 180° along the common line of longitudinal folding.

[0038] According to what is illustrated in the aforesaid Figures, the supporting element 37 further comprises a first supporting flap 46 connected to a top end of the first separating panel 44, arranged perpendicular to the first separating panel 44 and facing the top wall 17 of the inner package 5; and a second supporting flap 47 connected to a top end of the second separating panel 45, arranged perpendicular to the second separating panel 45, facing the top wall 17 of the inner package 5, and which is coplanar with the first supporting flap 46. In use, the function of the first supporting flap 46 and of the second supporting flap 47 is to protect the cigarettes during folding and welding of the package sheet 23 of heat-sealable material.

[0039] Also, the supporting element 37 comprises a first supporting appendage 48 which extends from a bottom end of the first separating panel 44 and rests on the bottom wall 33, if present, of the stiffener 29, or on the

bottom wall 18 of the inner package 5, and a second supporting appendage 49, connected to the first supporting appendage 48 by the same folding line that connects the first separating panel 44 to the second separating panel 45, which second supporting appendage 49 extends from a bottom end of the second separating panel 45 and rests on the bottom wall 33, if present, of the stiffener 29, or on the bottom wall 18 of the inner package 5.

[0040] The packet 1 of cigarettes further comprises a filling element 50, forming a single body with the supporting element 37 and thus with the separating element 41, which is housed within the cavity 26 inside the inner package 5 so as to retain securely the group of cigarettes in the inner package 5.

[0041] The filling element 50 comprises a resting wall 51 for supporting the group of cigarettes, which extends substantially parallel to the front wall 19 and to the rear wall 20 of the inner package 5 on a "more inner" plane than a plane defined by the rear wall 20 of the inner package 5. In the present description "more inner" means closer the front wall 19 of the inner package 5. In particular, a distance between the front wall 19 of the inner package 5 and the resting wall 51 of the filling element 50 is less than a distance between the front wall 19 and the rear wall 20 of the package 5 so as to compensate for the lesser "thickness" of the group of cigarettes with respect to the "thickness" of the inner package 5.

[0042] The resting wall 51 comprises a first resting panel 52 and a second resting panel 53 for each supporting a respective partition of the group of cigarettes. The first resting panel 52 and the second resting panel 53 are adjacent and substantially coplanar.

[0043] Also, the first resting panel 52 originates from the and is connect by a folding line to the first separating panel 44, and is arranged perpendicular to the first separating panel 44 and parallel to the first rear wall 38A of the supporting element 37, and the second resting panel 53 originates from the and is connected by a folding line to the second separating panel 45, and is arranged perpendicular to the second separating panel 45 and parallel to the second rear wall 38B of the supporting element 37.

[0044] The filling element 50 further comprises a first portion 54 of the first rear wall 38A of the supporting element 37, which first portion 54 is connected, by respective folding lines, to the first resting panel 52 and to the first lateral wall 39 of the supporting element 37, faces the first lateral wall 39 of the supporting element 37 and is arranged perpendicular to the first resting panel 52; and a second portion 55 of the second rear wall 38B of the supporting element 37, which second portion 55 is connected, by respective folding lines, to the second resting panel 53 and to the second lateral wall 40 of the supporting element 37, faces the second lateral wall 40 of the supporting element 37, and is arranged perpendicular to the second resting panel 53.

[0045] The first resting panel 52 with the first portion 54, and the second resting panel 53 with the second portion 55, are obtained by a pair of through incisions made respectively through the first rear wall 38A and the second rear wall 38B of the supporting element 37.

[0046] In this manner, in use, the aforesaid chambers 43A, 43B have, in cross section, a rectangular shape, in which the chamber 43A is bounded at the front by an inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the first resting panel 52, and laterally by an inner surface of the first lateral wall 39 of the supporting element 37 and by an inner surface of the first separating panel 44 of the separating element 41, whereas the chamber 43B is bounded at the front by the inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the second resting panel 53, and laterally by an inner surface of the second lateral wall 40 of the supporting element 37 and by an inner surface of the second separating panel 45 of the separating element 41.

[0047] The container 2 and the lid 3 are obtained by folding around the inner package 5 (inside which the stiffener 29 and the supporting element 37 were previously folded around the group of cigarettes) a blank 56, illustrated in Figure 11, comprising a plurality of panels which will be marked with accented reference numbers which are the same as the reference numbers that mark the corresponding parts of the container 2 and of the lid 3.

[0048] According to what is illustrated in Figure 11, the blank 56 has two longitudinal folding lines 57 (which define the longitudinal edges of the container 2 and of the lid 3) and a plurality of transverse folding lines 58 which define, between the two longitudinal folding lines 57, a panel 8' which constitutes the front wall 8 of the container 2, a panel 7' which constitutes the bottom wall 7 of the container 2 and is directly connected to the panel 8' along a transverse folding line 58, a panel 9' which constitutes the rear wall 9 of the container 2 and is directly connected to the panel 7' along a transverse folding line 58, a panel 14' which constitutes the rear wall 14 of the lid 3 and is directly connected to the panel 9' along a transverse folding line 58, a panel 12' which constitutes the top wall 12 of the lid 3 and is directly connected to the panel 14' along a transverse folding line 58, a panel 13' which constitutes the front wall 13 of the lid 3 and is directly connected to the panel 12' along a transverse folding line 58.

[0049] The blank 56 comprises a reinforcing flap 59, which is connected to the panel 13' along a transverse folding line 58, is folded 180° onto the panel 13', and is glued internally to the panel 13'.

[0050] The blank 56 further comprises a pair of flaps 10', 11' which are arranged on opposite sides of the panel 8', are connected to the panel 8' along the two longitudinal folding lines 57, and constitute part of the lateral walls 10, 11 of the container 2.

[0051] Also, the blank 56 comprises a pair of flaps 10", 11" which are arranged on opposite sides of the panel 9', are connected to the panel 9' along the two longitudinal folding lines 57, constitute part of the lateral walls 10, 11 of the container 2, and are glued to and superimposed on the corresponding flaps 10', 11'. Each flap 10", 11"

comprises a tab 60 that is folded 90° with respect to the respective flap 10", 11" and is superimposed on and glued to the panel 7'.

[0052] The blank 56 further comprises a pair of flaps 15', 16' which are arranged on opposite sides of the panel 13', are connected to the panel 13' along the two longitudinal folding lines 57, and constitute part of the lateral walls 15, 16 of the lid 3.

[0053] The blank 56 further comprises a pair of flaps 15", 16" which are arranged on opposite sides of the panel 14', are connected to the panel 14' along the two longitudinal folding lines 57, constitute part of the lateral walls 15, 16 of the lid 3, and are glued to and superimposed on the corresponding flaps 15', 16'. Each flap 15", 16" comprises a tab 61 that is folded 90° with respect to the respective flap 15", 16" and is superimposed on and glued to the panel 12'.

[0054] The stiffener 29 is obtained by folding around the group of cigarettes a blank 62, illustrated in Figure 12, comprising a plurality of panels which will be marked with accented reference numbers which are the same as the reference numbers that distinguish the corresponding walls of the stiffener 29.

[0055] According to what is illustrated in Figure 12, the blank 62 comprises a panel 30' which constitutes the front wall 30 of the stiffener 29 and a panel 33' which constitutes the bottom wall 33 of the stiffener 29 and is directly connected to the panel 30' along a transverse folding line.

[0056] The blank 62 comprises a pair of flaps 31', 32' that are arranged on opposite sides of the panel 30', are connected to the panel 30' along two longitudinal folding lines, and constitute the lateral walls 31, 32 of the stiffener 29.

[0057] The flaps 31', 32', (i.e. the lateral walls 31, 32 of the stiffener 29) comprise respective tabs 34', 35' which constitute respectively the first stiffener flap 34 and the second stiffener flap 35 of the stiffener 29. In particular, the tabs 34', 35' are each folded 90° with respect to the corresponding flap 31', 32' (i.e. to the corresponding lateral wall 31, 32 of the stiffener 29).

[0058] The supporting element 37 is obtained by folding around the group of cigarettes a blank 63, illustrated in Figure 13, comprising a plurality of panels that will be marked with accented reference numbers which are the same as the reference numbers that distinguish the corresponding walls of the supporting element 37.

[0059] According to what is illustrated in Figure 13, the blank 63 comprises a pair of panels 38A', 38B' which constitute the rear walls 38A, 38B of the supporting element 37, and two panels 44', 45', which are connected together by a longitudinal folding line (which extends substantially at the central portion of the blank 63) which constitute the first 44 and the second 45 separating panel of the separating element 41, which are interposed between the panels 38A', 38B' and are directly connected to the panels 38A', 38B' along respective longitudinal folding lines. In particular, the panel 44' is connected to the panel 38A' along a longitudinal folding line and is folded 90° with respect to the panel 38A', and the panel 45' is connected to the panel 38B' along a longitudinal folding line and is folded 90° with respect to the panel 38B'.

[0060] The panels 44', 45' each comprise a respective tab 46', 47', which constitute respectively the first supporting flap 46 and the second supporting flap 47 of the supporting element 37. In particular, the tabs 46', 47' are each folded 90° with respect to the corresponding panel 44', 45'.

[0061] The blank 63 further comprises a pair of panels 52', 53' which constitute the first 52 and the second resting panel 53 of the filling element 50, each delimited transversely by a pair of transverse incision lines made on either side respectively of the panels 38A'- 44' and 38B'- 45', and longitudinally by a pair of longitudinal folding lines.

[0062] The blank 63 further comprises flaps 39', 40' which extend to the outside of the panels 38A', 38B' are connected to the panels 38A', 38B' along respective longitudinal folding lines, and constitute the first 39 and the second lateral wall 40 of the supporting element 37.

[0063] Also, the blank 63 comprises two panels 54', 55' arranged respectively between the panels 39'- 52' and 40'- 53', each delimited transversely by a pair of transverse incision lines made in the panels 38A', 38B' and longitudinally by a pair of longitudinal folding lines, which constitute the first 54 and the second 55 portion of the filling element 50. In particular, the panels 54', 55' are each folded 90° with respect to the corresponding flap 39', 40'.

[0064] The blank 63, illustrated in Figure 13, has a substantially rectangular shape. The tabs 46', 47' are obtained in a cantilevered manner from a top edge of the blank 63. Also, a bottom edge of the blank 63 has at two supporting appendages 48', 49', respective recesses of a shape which is complementary to the tabs 46', 47'. This configuration of the blank 63 is particularly advantageous when the blank 63 is obtained by cutting a continuous web of rigid package material, because it avoids waste being produced.

[0065] In Figures 15 to 17 a version is shown of the stiffener 29 disclosed previously with reference to Figures 4, 6 and 7.

[0066] In this version, the filling element 50 and the separating element 41 are formed as a single body with the stiffener 29. The packet of cigarettes containing this version thus differs from the packet 1 of cigarettes disclosed with reference to Figures 4 to 10 by the fact of being devoid of the supporting element 37.

[0067] According to the version illustrated in Figures 15 to 17, the first resting panel 52 originates from the first lateral wall 31 of the stiffener 29 and is arranged perpendicular to the first lateral wall 31, and the second resting panel 53 originates from the second lateral wall 32 of the stiffener 29 and is arranged perpendicular to the second lateral wall 32.

[0068] Further, in this version, the first separating panel 44 is connected and arranged perpendicular to the first resting panel 52, originates from the front wall 30 of the stiffener 29 and is arranged perpendicular to the front wall 30, and the second separating panel 45 is connected and arranged perpendicular to the second resting panel 53, originates from the front wall 30 of the stiffener 29 and is arranged perpendicular to the front wall 30.

[0069] The first separating panel 44 and the second separating panel 45 are connected along a folding line which extends parallel to the axis A and is arranged in a central portion of the front wall 30 of the stiffener 29.

[0070] Also, according to the version illustrated in Figures 15 to 17, the filling element 50 further comprises a first portion 64 of the first lateral wall 31 of the stiffener 29 connected to the first resting panel 52, and a second portion 65 of the second lateral wall 32 of the stiffener 29 connected to the second resting panel 53.

[0071] In this version, further, the first resting panel 52 is staggered, along the longitudinal axis A, with respect to the second resting panel 53, i.e. is further from a bottom edge of the front wall 30 of the stiffener 29, just as the first separating panel 44, is staggered, along the longitudinal axis A, with respect to the second separating panel 45, i.e. is further from a bottom edge of the front wall 30 of the stiffener 29. This configuration confers good rigidity to the stiffener 29.

[0072] Also according to the version illustrated in Figures 15 to 17, the chambers 43A, 43B have, in cross section, a rectangular shape, in which the chamber 43A is delimited at the front by an inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the first resting panel 52, and laterally by an inner surface of the first lateral wall 31 of the stiffener 29 and by an inner surface of the first separating panel 44 of the separating element 41, whereas the chamber 43B is delimited at the front by the inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the second resting panel 53, and laterally by an inner surface of the second lateral wall 32 of the stiffener 29 and by an inner surface of the second separating panel 45 of the separating element 41.

[0073] Lastly, in this version, the first separating panel 44 has a first abutting appendage 66A for abutting on the rear wall 20 of the inner package 5, which first abutting appendage 66A protrudes from the first separating panel 44 coming out the plane defined by the corresponding first resting panel 52, and the second separating panel 45 has a second abutting appendage 66B for abutting on the rear wall 20 of the inner package 5, which second abutting appendage 66B is staggered, along the longitudinal axis A, with respect to the first abutting appendage 66A, i.e. is further from a bottom edge of the front wall 30 of the stiffener 29, and protrudes from the second separating panel 45 coming out the plane defined by the corresponding second resting panel 53. More precisely, in use, the first abutting appendage 66A and the second abutting appendage 66B are coplanar and not superimposed.

[0074] Also, in use, the rear wall 20 of the inner package 5 rests on the longitudinal edges of the first 66A and of the second abutting appendage 66B and on the free longitudinal edges of the first 31 and of the second 32 lateral wall 40 of the stiffener 29.

[0075] The packet 1 of cigarettes comprising the stiffener 29 according to the version illustrated in Figures 15 to 17, comprises a container 2 and a lid 3 obtained by folding around the inner package 5 (inside which the stiffener 29 was previously folded around the group of cigarettes) the blank 56 disclosed above.

[0076] The stiffener 29 according to the version illustrated in Figures 15 to 17 is obtained by folding around the group of cigarettes a blank 67, illustrated in Figure 18, comprising a plurality of panels that will be marked with accented reference numbers which are the same as the reference numbers which distinguish the corresponding walls of the stiffener 29 according to this version.

[0077] According to what is illustrated in Figure 18, the blank 67 comprises a panel 30' which constitutes the front wall 30 of the stiffener 29 and a panel 33' which constitutes the bottom wall 33 of the stiffener 29 and is directly connected to the panel 30' along a transverse folding line.

[0078] The blank 67 comprises a pair of flaps 31', 32' which are arranged on opposite sides of the panel 30', are connected to the panel 30' along two longitudinal folding lines, and constitute the lateral walls 31, 32 of the stiffener 29.

[0079] The flaps 31', 32', (i.e. the lateral walls 31, 32 of the stiffener 29) each comprise a respective tab 34', 35' which constitute respectively the first stiffener flap 34 and the second stiffener flap 35 of the stiffener 29. In particular, the tabs 34', 35' are each folded 90° with respect to the corresponding flap 31', 32' (i.e. to the corresponding lateral wall 31, 32 of the stiffener 29).

[0080] According to what is illustrated in Figure 18, the blank 67 further comprises two panels 44', 45' which constitute the first 44 and the second 45 separating panel of the separating element 41, each delimited transversely by a respective pair of transverse incision lines made on the panel 30', and longitudinally by a pair of longitudinal folding lines. In particular, the panels 44', 45', have in common a part of the respective longitudinal folding line which extends substantially at the central portion of the panel 30' and are each folded 90° with respect to the panel 30'.

[0081] The blank 67 further comprises two panels 66A', 66B' which constitute respectively the first 66A and the second abutting appendage 66B, originate from a corresponding panel 44', 45', and are bounded by a "U"-shaped incision line.

[0082] Also, the blank 67 comprises two panels 52', 53' which constitute the first 52 and the second resting panel 53 of the filling element 50, each delimited transversely by a pair of incision lines made on either side respectively of the panels 30'- 31' and 30'- 32', and lon-

gitudinally by a pair of longitudinal folding lines, one of which is in common with a panel 64, 65 and the other with a panel 44', 45'.

[0083] In Figures 19 to 21 a version is shown of the stiffener 29 disclosed previously with reference to Figures 15 to 17.

[0084] This version differs from the one disclosed with reference to Figures 15 to 17 by the fact that the stiffener 29 further comprises a first rear wall 68 connected to the first lateral wall 31 and opposite the front wall 30 of the stiffener 29, and a second rear wall 69 connected to the second lateral wall 32, opposite the front wall 30 of the stiffener 29, and partially superimposed on the first rear wall 68.

[0085] In this version, moreover, the first abutting appendage 66A and the second abutting appendage 66B abut on the first rear wall 68 of the stiffener 29.

[0086] The stiffener 29 according to the version illustrated in Figures 19 to 21 is obtained by folding around the group of cigarettes a blank 70, illustrated in Figure 22, comprising a plurality of panels that will be marked with accented reference numbers which are the same as the reference numbers which distinguish the corresponding walls of the stiffener 29 according to this version.

[0087] The blank 70 differs from the blank 67 by the fact that it comprises a pair of flaps 68', 69' which constitute respectively the first 68 and the second 69 rear wall of the stiffener 29, extend to the outside of the panels 31', 32' and are connected to the panels 31', 32' along respective longitudinal folding lines.

[0088] In Figure 23, a version of the stiffener 29 disclosed previously with reference to Figures 4, 6 and 7 is shown in cross section.

[0089] In this version, the filling element 50 and the separating element 41 are formed as a single body with the stiffener 29, which is shaped in such a manner as also to incorporate the functions of the supporting element 37. The packet of cigarettes containing this version thus differs from the packet 1 of cigarettes disclosed with reference to Figures 4 to 10 by the fact of being devoid of a separate supporting element 37.

[0090] In this version, the stiffener 29 is made, in particular pre-glued, before being inserted into the packaging machine.

[0091] The stiffener 29 according to the version illustrated in Figure 23, has:

a front wall 30 facing the front wall 19 of the inner package 5;

a first lateral wall 31 facing the first lateral wall 21 of the inner package 5;

a second lateral wall 32 facing the second lateral wall 22 of the inner package 5;

a rear wall 71 connected to the second lateral wall 32 and facing the rear wall 20 of the inner package 5;

a bottom wall 33, which is not illustrated in Figure 23, connected to the rear wall 71 and facing the bottom wall 18 of the inner package 5;

an outer lateral wall 72 connected to the rear wall 71 and facing, in particular glued to, an outer surface of the first lateral wall 31;

a first stiffener flap 34, which is not illustrated in Figure 23, connected to a top end of the outer lateral wall 72 of the stiffener 29, arranged perpendicular to the lateral wall 72 and opposite the bottom wall 33 of the stiffener 29, i.e. parallel to and facing an inner surface of the top wall 17 of the inner package 5; and

a second stiffener flap 35, which is not illustrated in Figure 23, connected to a top end of the second lateral wall 32 of the stiffener 29, arranged perpendicular to the second lateral wall 32 and opposite the bottom wall 33 of the stiffener 29, i.e. parallel to and facing the inner surface of the top wall 17 of the inner package 5, and substantially coplanar with the first stiffener flap 34.

[0092] Further, the stiffener 29 comprises a pair of "U"-shaped recesses 36, obtained in the front wall 30 to facilitate extracting of the cigarettes.

[0093] According to the version of Figure 23, the filling element 50 comprises a resting wall 51 for supporting the group of smoke articles, which is parallel to and opposite the rear wall 71 of the stiffener 29 and is interposed between the latter and the front wall 30 of the stiffener 29. In this version, the resting wall 51 is formed by a single resting panel 73, strengthened by longitudinal creases.

[0094] Also, in the version of Figure 23, the filling element 50 comprises a top wall 74, which is not illustrated in Figure 23, interposed between the resting panel 73 and the rear wall 71 of the stiffener 29 and arranged parallel to and opposite the bottom wall 33 of the stiffener 29. The filling element 50 further comprises a bottom wall 75, which is not illustrated in Figure 23, connected to a bottom edge of the resting panel 73, and glued to an inner surface of the bottom wall 33 of the stiffener 29 such that the respective free edges of the bottom wall 75 of the filling element 50 and of the bottom wall 33 of the stiffener 29 are substantially superimposed. In this manner, between the panel 73 the rear wall 71 of the stiffener 29 there is defined a gap having a thickness substantially the same as a thickness of the cavity 26.

[0095] Further, the filling element 50 comprises a first supporting element 76 and a second supporting element 77 for supporting the resting panel 73, obtained by respective "U"-shaped through incisions, made in the resting panel 73. The first supporting element 76 comprises a first panel 78, connected to the resting panel 73 and arranged parallel to and opposite the bottom wall 33 of the stiffener 29, and a second panel 79, connected to the first panel 78, arranged perpendicular to the first panel 78 and glued to an inner surface of the rear wall 71 of the stiffener 29.

[0096] Similarly, the second supporting element 77 comprises a first panel 80, connected to the resting panel

73 and arranged parallel to and opposite the bottom wall 33 of the stiffener 29, and a second panel 81, connected to the first panel 80, arranged perpendicular to the first panel 80 and glued to the inner surface of the rear wall 71 of the stiffener 29. The first panel 78 of the first supporting element 76 and the first panel 80 of the second supporting element 77 have the same transverse dimension as the top wall 74 of the filling element 50. According to the version of Figure 23, the separating element 41 comprises a separating wall 42 formed by a single separating panel 82 obtained by a "U"-shaped through incision and is made through the front wall 30 of the stiffener 29. The separating panel 82 is arranged perpendicular to the front wall 30 of the stiffener 29.

[0097] Further, the separating element 41 comprises a slot 83 obtained in a central portion of the resting panel 73. The slot 83 extends parallel to the longitudinal axis A and is substantially equidistant from the first 76 and from the second supporting element 77. In use, the separating panel 82 engages with the slot 83 (which thus has the functions of maintaining the panel 82 substantially perpendicular to the front wall 30 of the stiffener 29) and rests, with a free edge thereof, on an inner surface of the rear wall 71 of the stiffener 29.

[0098] In the version of Figure 23 the chambers 43A, 43B have, in cross section, a rectangular shape, in which the chamber 43A is delimited at the front by an inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the resting panel 73, and laterally by an inner surface of the first lateral wall 31 of the stiffener 29 and by a first surface of the separating panel 82 of the separating element 41, whereas the chamber 43B is delimited at the front by the inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the resting panel 73, and laterally by an inner surface of the second lateral wall 32 of the stiffener 29 and by a second surface, opposite the first surface, of the separating panel 82 of the separating element 41.

[0099] The packet 1 of cigarettes comprising the stiffener 29 according to the version illustrated in Figure 23, comprises a container 2 and a lid 3 obtained by folding around the inner package 5 the blank 56 disclosed above.

[0100] The stiffener 29 according to the version of Figure 23 is obtained by folding and pre-gluing a blank 84, illustrated in Figure 24, which is "L"-shaped, and comprises a plurality of panels which will be marked with accented reference numbers which are the same as the reference numbers which distinguish the corresponding walls of the stiffener 29 according to this version.

[0101] According to what is illustrated in Figure 24, the blank 84 comprises a panel 30' which constitutes the front wall 30 of the stiffener 29, a pair of panels 31', 32' which are arranged on opposite sides of the panel 30', are connected to the panel 30' along two longitudinal folding lines, and constitute the lateral walls 31, 32 of the stiffener 29, a panel 71' which constitutes the rear wall 71 of the stiffener 29 and is connected to the panel 32' along a longitudinal folding line, a panel 72' which constitutes the outer lateral wall 72 of the stiffener 29 and is connected to the panel 71 along a longitudinal folding line on an opposite side of the panel 32', and a panel 33' which constitutes the bottom wall 33 of the stiffener 29 and is directly connected to the panel 71' along a transverse folding line.

[0102] The panels 72', 32' each comprise respective tabs 34', 35' which constitute respectively the first stiffener flap 34 and the second stiffener flap 35 of the stiffener 29. In particular, the tabs 34', 35' are each folded 90° with respect to the corresponding panel 72', 32'.

[0103] According to what is illustrated in Figure 24, the blank 84 further comprises a panel 82' which constitutes the separating panel 82, is connected to the panel 30' by a longitudinal folding line, and is obtained by a "U"-shaped through incision made in the panel 30', a panel 74' which constitutes the top wall 74 of the filling element 50 and is directly connected to the panel 71' along a transverse folding line on an opposite side of the panel 33', a panel 73' which constitutes the resting panel 73 and is directly connected to the panel 74' along a transverse folding line, and a flap 75' which constitutes the bottom wall 75 of the filling element 50 and is directly connected to the panel 73' along a transverse folding line.

[0104] Also, the blank 84 comprises a panel 78' which constitutes the first panel 78 of the first supporting element 76 and is connected, by a transverse folding line, to the panel 73', a panel 79' which constitutes the second panel 79 of the first supporting element 76, is connected to the panel 78' by a transverse folding line and is obtained by a "U"-shaped through incision made in the panel 73', a panel 80' which constitutes the second panel 80 of the second supporting element 77 and is connected, by a transverse folding line to the panel 73', and a panel 81' which constitutes the second panel 81 of the second supporting element 77 , is connected to the panel 80' by a transverse folding line and is obtained by a "U"-shaped through incision made in the panel 73'.

[0105] In Figure 25 a version of the supporting element 37 is shown in cross section disclosed previously with reference to Figures 4, 6, 8 and 9.

[0106] In the packet 1 of cigarettes which comprises this version, the stiffener is identical to the stiffener 29 disclosed with reference to Figure 7.

[0107] The supporting element 37 according to this version is of rigid type, embraces at the rear the inner package 5, consists of rigid cardboard or card, and is arranged inside the inner package 5 in direct contact with the group of cigarettes.

[0108] This supporting element 37 has a first rear wall 38A and a second rear wall 38B , that are adjacent to one another, coplanar and face the rear wall 20 of the inner package 5, a first lateral wall 39 facing an inner surface of the first lateral wall 31 of the stiffener 29, and a second lateral wall 40 facing an inner surface of the second lateral wall 32 of the stiffener 29.

[0109] Also in this version, in use, the function of the supporting element 37 is to protect the cigarettes during

folding and welding of the package sheet 23 of heat-sealable material.

[0110] According to the version illustrated in Figure 25, the separating element 41 forms a single body with the supporting element 37, is housed inside the inner package 5 and divides the inner volume of the inner package 5 into two chambers 43A, 43B each arranged for housing a partition, i.e. a subgroup, of the group of cigarettes. In the embodiment shown, each chamber 43A, 43B contains a subgroup of cigarettes consisting of ten cigarettes.

[0111] In the version illustrated in Figure 25, the separating wall 42 extends parallel to the longitudinal axis A and is arranged transversely, in particular perpendicularly, to the front wall 19 and to the rear wall 20 of the inner package 5, i.e. to the front wall 30 of the stiffener 29 and to the rear walls 38A, 38B of the supporting element 37.

[0112] Also, the separating wall 42 extends substantially over the entire distance that separates the front wall 30 of the stiffener 29 and the rear walls 38A, 38B of the supporting element 37.

[0113] In the embodiment illustrated in Figure 25, the separating wall 42 is formed by a first separating panel 44 and by a second separating panel 45 facing one another and connected by a folding line which, in use, faces and contacts a central portion of an inner surface of the front wall 30 of the stiffener 29. In particular, the first separating panel 44 and the second separating panel 45 originate by folding to the inside of the packet 1 of cigarettes respective adjacent portions of the rear walls 38A, 38B of the supporting element 37 and are each connected and arranged perpendicular to the corresponding rear wall 38A, 38B. According to this version, the supporting element 37 further comprises a first supporting flap 46, which is not illustrated in Figure 25, connected to a top end of the first separating panel 44, arranged perpendicular to the first separating panel 44 and facing the top wall 17 of the inner package 5; and a second supporting flap 47, which is not illustrated in Figure 25, connected to a top end of the second separating panel 45, arranged perpendicular to the second separating panel 45, facing the top wall 17 of the inner package 5, and which is coplanar with the first supporting flap 46. In use, the function of the first supporting flap 46 and of the second supporting flap 47 is to protect the cigarettes during folding and welding of the package sheet 23 of heat-sealable material.

[0114] Also, the supporting element 37 according to the version of Figure 25 comprises two bottom walls 85A, 85B, which are not illustrated in Figure 25, each connected to a respective bottom edge of a corresponding rear wall 38A, 38B of the supporting element 37 and facing the bottom wall 18 of the inner package 5.

[0115] Also according to the version illustrated in Figure 25, the filling element 50 forms a single body with the supporting element 37 and thus with the separating element 41, and is housed in the cavity 26 inside the inner package 5 so as to retain securely the group of cigarettes in the inner package 5.

[0116] The resting wall 51 according to this version extends substantially parallel to the front wall 19 and to the rear wall 20 of the inner package 5 on a "more inner" plane than a plane defined by the rear wall 20 of the inner package 5.

[0117] The resting wall 51 comprises a first resting panel 52 and a second resting panel 53 for each supporting a respective partition of the group of cigarettes. The first resting panel 52 and the second resting panel 53 are adjacent, substantially coplanar, and interposed between the respective rear walls 38A, 38B of the supporting element 37 and the front wall 30 of the stiffener 29. Also in this version, the first 52 and the second resting panel 53 are strengthened by longitudinal creases.

[0118] Also, in the version of Figure 25, the filling element 50 comprises two top walls 86A, 86B, which are not illustrated in Figure 25, each interposed between the respective resting panel 52, 53 and the respective rear wall 38A, 38B of the stiffener 29 and arranged parallel to and opposite the respective bottom wall 85A, 85B of the stiffener 29.

[0119] The filling element 50 further comprises two bottom walls 87A, 87B, which are not illustrated in Figure 25, each connected to a bottom edge of the respective resting panel 52, 53, and glued to an inner surface of the respective bottom wall 85A, 85B of the supporting element 37 such that respective free edges of the bottom walls 87A, 87B of the filling element 50 and of the bottom walls 85A, 85B of the supporting element 37 are substantially superimposed.

[0120] Further, the filling element 50 comprises two first supporting elements 88 and two second supporting elements 89 for supporting respectively the supporting panels 52, 53, obtained by respective through incisions made on either side of the panels 39-38A, 44-38A, 40-38B and 45-38B.

[0121] The two first supporting elements 88 are positioned symmetrically with respect to a central portion of the first rear wall 38A of the supporting element 37, originate from the first rear wall 38A, have, in cross section, an "L" shape, and are each formed by a first panel 90, connected to the rear wall 38A of the supporting element 37 and arranged perpendicular to the rear wall 38A, and by a second panel 91, connected to the respective first panel 90 and to the first lateral wall 39 of the supporting element 37, arranged perpendicular to the first panel 90 and parallel to the first resting panel 52 of the filling element 50. In use, the first resting panel 52 of the filling element 50 rests against the second panels 91 of the first supporting elements 88.

[0122] Similarly, the two second supporting elements 89 are positioned symmetrically with respect to a central portion of the second rear wall 38B of the supporting element 37, originate from the second rear wall 38B , have, in cross section, an "L" shape, and are each formed by a first panel 92, connected to the rear wall 38B of the supporting element 37 and arranged perpendicular to the rear wall 38B and by a second panel 93, connected to

the respective first panel 92 and to the second lateral wall 40 of the supporting element 37, arranged perpendicular to the first panel 92 and parallel to the second resting panel 53 of the filling element 50. In use, the second resting panel 53 of the filling element 50 rests against the second panels 93 of the second supporting elements 89.

[0123] It should be noted that the first panels 90 of the first supporting element 88 and the first panels 92 of the second supporting element 89 have the same transverse dimension as the respective top walls 86A, 86B of the filling element 50.

[0124] According to the version of Figure 25, the supporting element 37 further comprises a third supporting flap 94 connected to a top end of the first lateral wall 39 of the supporting element 37, arranged perpendicular to the first lateral wall 39 and facing the first stiffener flap 34, and a fourth supporting flap 95 connected to a top end of the second lateral wall 40 of the supporting element 37, arranged perpendicular to the second lateral wall 40 and facing the second stiffener flap 35; the third supporting flap 95 and the fourth supporting flap 96 are coplanar to one another and coplanar to the first supporting flap 46 and to the second supporting flap 47. In use, the function of the third supporting flap 94 and of the fourth supporting flap 95 is to protect the cigarettes during folding and welding of the package sheet 23 of heat-sealable material.

[0125] In the version of Figure 25, the chambers 43A, 43B have, in cross section, a rectangular shape, in which the chamber 43A is delimited at the front by an inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the first resting panel 52, and laterally by an inner surface of the first lateral wall 39 of the supporting element 37 and by an inner surface of the first separating panel 44 of the separating element 41, whereas the chamber 43B is delimited at the front by the inner surface of the front wall 30 of the stiffener 29, behind by an inner surface of the second resting panel 53, and laterally by an inner surface of the second lateral wall 40 of the supporting element 37 and by an inner surface of the second separating panel 45 of the separating element 41.

[0126] The packet 1 of cigarettes comprising the supporting element 37 according to the version illustrated in Figure 25, comprises a container 2 and a lid 3 obtained by folding around the inner package 5 the blank 56 disclosed above, and a stiffener 29 obtained by folding the blank 62 around the group of cigarettes.

[0127] The supporting element 37 according to the version of Figure 25 is obtained by folding and pre-gluing a blank 96, illustrated in Figure 27, which has a prevalently longitudinal extent, and comprises a plurality of panels which will be marked with accented reference numbers which are the same as the reference numbers which distinguish the corresponding walls of the supporting element 37 according to this version.

[0128] According to what is illustrated in Figure 27, the blank 96 comprises a pair of panels 38A', 38B' which constitute the rear walls 38A, 38B of the supporting element 37, and two panels 44', 45', which are connected together by a longitudinal folding line (which extends substantially at the central portion of the blank 96) which constitute the first 44 and the second 45 separating panel of the separating element 41, which are interposed between the panels 38A', 38B' and are directly connected to the panels 38A', 38B' along respective longitudinal folding lines. In particular, the panel 44' is connected to the panel 38A' along a longitudinal folding line and is folded 90° with respect to the panel 38A', and the panel 45' is connected to the panel 38B' along a longitudinal folding line and is folded 90° with respect to the panel 38B'.

[0129] The panels 44', 45' each comprise a respective tab 46', 47', which constitute respectively the first supporting flap 46 and the second supporting flap 47 of the supporting element 37. In particular, the tabs 46', 47' are each folded 90° with respect to the corresponding panel 44', 45'.

[0130] The blank 96 further comprises two panels 85A', 85B' which constitute the bottom walls 85A, 85B of the supporting element 37 and are directly connected to the respective panels 38A', 38B' along respective transverse folding lines, two panels 86A', 86B' which constitute the top walls 86A, 86B of the filling element 50 and are directly connected to the panels 38A', 38B' along respective transverse folding lines on the opposite side of the panels 85A', 85B', two panels 52', 53' which constitute the supporting panels 52, 53 of the filling element 50 and are directly connected to the panels 86A', 86B' along respective transverse folding lines, and two panels 87A', 87B' which constitute the bottom walls 87A, 87B of the filling element 50 and are directly connected to the panels 52', 53' along respective transverse folding lines.

[0131] The blank 96 further comprises flaps 39', 40' which extend to the outside of the panels 38A', 38B', are connected to the panels 38A', 38B' along respective longitudinal folding lines, and constitute the first 39 and the second lateral wall 40 of the supporting element 37.

[0132] The flaps 39', 40' each comprise a respective tab 94', 95', which constitute respectively the third supporting flap 94 and the fourth supporting flap 95 of the supporting element 37. In particular, the tabs 94', 95' are each folded 90° with respect to the corresponding panel 39', 40'.

[0133] Also, the blank 96 comprises pairs of panels 90', 91' arranged between the panels 38A'-39' and 38A'-44', each pair of panels 90', 91' is bounded transversely by a pair of transverse incision lines made on either side of the panels 38A'- 39' and 38A'- 44' and longitudinally by a pair of longitudinal folding lines, which panels 90', 91' constitute the first panels 90 and the second panels 91 of the first supporting elements 88. In particular, the panels 90' are each folded 90° with respect to the panel 38A'.

[0134] Lastly, the blank 96 comprises pairs of panels 92', 93' arranged between the panels 38B'-40' and 38B'-

45', each pair of panels 92', 93' is bounded transversely by a pair of transverse incision lines made on either side of the panels 38B'- 40' and 38B'- 45' and longitudinally by a pair of longitudinal folding lines, which panels 92', 93' constitute the first panels 92 and the second panels 93 of the second supporting elements 89. In particular, the panels 92' are each folded 90° with respect to the panel 38B'.

[0135] In Figure 28 a version is shown of the stiffener 29 disclosed above.

[0136] In this version, the filling element 50 and the separating element 41 are formed as a single body with the stiffener 29, which is shaped in such a manner as to incorporate also the functions of the supporting element 37. The packet of cigarettes containing this version thus differs from the packet 1 of cigarettes disclosed with reference to Figures 4 to 10 by the fact of being devoid of a separate supporting element 37.

[0137] In this version, the stiffener 29 is made, in particular pre-glued, before being inserted into the packaging machine.

[0138] According to the version illustrated in Figure 28, the stiffener 29 has:

a first front wall 30A and a second front wall 30B, that are adjacent to one another, coplanar and face the front wall 19 of the inner package 5;
a first lateral wall 31 facing the first lateral wall 21 of the inner package 5;
and a second lateral wall 32 facing the second lateral wall 22 of the inner package 5;
a rear wall 71 connected to and interposed between the first lateral wall 31 and the second lateral wall 32, and facing the rear wall 20 of the inner package 5;
a bottom wall 33, which is not illustrated in Figure 28, connected to the rear wall 71 and facing the bottom wall 18 of the inner package 5;
a first stiffener flap 34, which is not illustrated in Figure 28, connected to a top end of the first lateral wall 31 of the stiffener 29, arranged perpendicular to the first lateral wall 31 and opposite the bottom wall 33 of the stiffener 29, i.e. parallel to and facing an inner surface of the top wall 17 of the inner package 5; and
a second stiffener flap 35, which is not illustrated in Figure 28, connected to a top end of the second lateral wall 32 of the stiffener 29, arranged perpendicular to the second lateral wall 32 and opposite the bottom wall 33 of the stiffener 29, i.e. parallel to and facing the inner surface of the top wall 17 of the inner package 5, and substantially coplanar with the first stiffener flap 34.

[0139] Further, the stiffener 29 comprises a pair of "U"-shaped recesses 36, each obtained in a respective front wall 30A, 30B to facilitate extracting of the cigarettes.

[0140] According to the version of Figure 28, the filling element 50 comprises a resting wall 71 for supporting the group of smoke articles, which consists of the rear wall of the stiffener 29; the resting wall 71 is interposed between the rear wall 20 of the inner package 5 and the front wall 30 of the stiffener 29. More precisely, in this version, the distance between the front walls 30A, 30B of the stiffener 29 and the rear wall 71 thereof (which, as said, constitutes the resting wall of the filling element 50) is equal to the transverse dimension of the group of cigarettes. Also in this version, the resting wall 71 is formed by a single resting panel 73.

[0141] Also, according to the version of Figure 28, the separating element 41 comprises a separating wall 42 which extends substantially for the entire distance which separates the front walls 30A, 30B of the stiffener 29 and the rear wall 71 thereof (i.e. the resting wall of the filling element 50).

[0142] In the embodiment illustrated in Figure 28, the separating wall 42 is formed by a first separating panel 44 and by a second separating panel 45 facing one another and glued (as disclosed better below). In particular, the first separating panel 44 and the second separating panel 45 originate by folding to the inside of the packet 1 of cigarettes respective outer portions respectively of the front walls 30A, 30B of the stiffener 29 and are each connected and arranged perpendicular to the corresponding front wall 30A, 30B. According to this version, the stiffener 29 further comprises a first supporting flap 46, which is not illustrated in Figure 28, connected to a top end of the first separating panel 44, arranged perpendicular to the first separating panel 44 and facing the top wall 17 of the inner package 5; and a second supporting flap 47, which is not illustrated in Figure 28, connected to a top end of the second separating panel 45, arranged perpendicular to the second separating panel 45, facing the top wall 17 of the inner package 5, and which is coplanar with the first supporting flap 46. In use, the function of the first supporting flap 46 and of the second supporting flap 47 is to protect the cigarettes during folding and welding of the package sheet 23 of heat-sealable material.

[0143] Also, in this version, the first separating panel 44 has a first abutting appendage 66A for abutting on the rear wall 20 of the inner package 5, which first abutting appendage 66A protrudes from the first separating panel 44 exiting from the plane defined by the resting panel 73, and a second abutting appendage 66B for abutting on the rear wall 20 of the inner package 5, which second abutting appendage 66B is positioned lower, along the longitudinal axis A, with respect to the first abutting appendage 66A, i.e. is less far away from a bottom edge of the first front wall 30A of the stiffener 29, and protrudes from the first separating panel 44 exiting from the plane defined by the resting panel 73.

[0144] Further, the stiffener 29 comprises a first slot 83A and a second slot 83B, which are not illustrated in Figure 28, which are obtained in a central portion of the resting panel 73. The first slot 83A and the second slot 83B extend parallel to the longitudinal axis A, the second slot 83B being positioned lower, along the longitudinal

axis A, with respect to the first slot 83A. In use, the first abutting appendage 66A and the second abutting appendage 66B engage respectively with the first slot 83A and with the second slot 83B (which thus have the function of maintaining the first separating panel 44, and the second separating panel 45 glued thereto, substantially perpendicular to the front walls 30A, 30B of the stiffener 29) and rest, with respective free edges, on an inner surface of the rear wall 20 of the inner package 5.

[0145] Further, in this version, the first lateral wall 31 of the stiffener 29 has two third abutting appendages 97A, 97B for abutting on the rear wall 20 of the inner package 5, which are obtained by respective "U"-shaped through incisions made in the resting panel 73, protrude from the first lateral wall 31 exiting from the plane defined by the resting panel 73, and are positioned in succession parallel to the longitudinal axis A.

[0146] Similarly, the second lateral wall 32 of the stiffener 29 has two fourth abutting appendages 98A, 98B for abutting on the rear wall 20 of the inner package 5, which are obtained by respective "U"-shaped through incisions made in the resting panel 73, protrude from the second lateral wall 32 exiting from the plane defined by the resting panel 73, and are positioned in succession parallel to the longitudinal axis A.

[0147] In use, the rear wall 20 of the inner package 5 rests on the longitudinal edges of the first abutting appendage 66A, of the second abutting appendage 66B, of the third abutting appendages 97A, 97B and of the fourth abutting appendages 98A, 98B. The appendages 66A, 97A and 98A are aligned on one another along a transverse direction, thus like the appendages 66B, 97B and 98B.

[0148] Also, in the version of Figure 28, the second separating panel 45 has a connecting appendage 99, which protrudes from a central portion of the second separating panel 45, is folded 180° onto an outer surface of the second separating panel 45 and is glued to an outer surface of the first separating panel 44 so as to fix the latter to the second separating panel 45.

[0149] In the version of Figure 28 the chambers 43A, 43B have, in cross section, a rectangular shape, in which the chamber 43A is delimited at the front by an inner surface of the first front wall 30A of the stiffener 29, behind by an inner surface of the resting panel 73, and laterally by an inner surface of the first lateral wall 31 of the stiffener 29 and by an inner surface of the first separating panel 44 of the separating element 41, whereas the chamber 43B is delimited at the front by the inner surface of the second front wall 30B of the stiffener 29, behind by an inner surface of the resting panel 73, and laterally by an inner surface of the second lateral wall 32 of the stiffener 29 and by an inner surface of the second separating panel 45 of the separating element 41.

[0150] The packet 1 of cigarettes comprising the stiffener 29 according to the version illustrated in Figure 28, comprises a container 2 and a lid 3 obtained by folding around the inner package 5 the blank 56 disclosed above.

[0151] The stiffener 29 according to the version illustrated in Figure 28 is obtained by folding around the group of cigarettes a blank 100, illustrated in Figure 29, which has a prevalently transverse extent, and comprises a plurality of panels which will be marked with accented reference numbers which are the same as the reference numbers which distinguish the corresponding walls of the stiffener 29 according to this version.

[0152] According to what is illustrated in Figure 29, the blank 100 comprises a panel 73' which constitutes the resting panel 73 of the filling element 50, a panel 33' which constitutes the bottom wall 33 of the stiffener 29 and is directly connected to the panel 73' along a transverse folding line, a pair of panels 31', 32' which are arranged on opposite sides of the panel 73', are connected to the panel 73' along two longitudinal folding lines, and constitute the lateral walls 31, 32 of the stiffener 29;

a panel 30A' which is arranged outside the panel 31', is connected to the panel 31' along a longitudinal folding line, and constitutes the first front wall 30A of the stiffener 29;

a panel 30B' which is arranged outside the panel 32', is connected to the panel 32' along a longitudinal folding line, and constitutes the second front wall 30B of the stiffener 29;

a flap 44' which is arranged outside the panel 30A', is connected to the panel 30A' along a longitudinal folding line, and constitutes the first separating panel 44 of the separating element 41; and

a flap 45' which is arranged outside the panel 30B', is connected to the panel 30B' along a longitudinal folding line, and constitutes the second separating panel 45 of the separating element 41.

[0153] The panels 31', 32', (i.e. the lateral walls 31, 32 of the stiffener 29) each comprise a respective tab 34', 35' which constitute respectively the first stiffener flap 34 and the second stiffener flap 35 of the stiffener 29. In particular, the tabs 34', 35' are each folded 90° with respect to the corresponding panel 31', 32' (i.e. to the corresponding lateral wall 31, 32 of the stiffener 29).

[0154] Also, the panels 31', 32' each comprise a pair of tabs 97A', 97B' and 98A', 98B', which constitute respectively the third 97A, 97B abutting appendages and the fourth 98A, 98B abutting appendages.

[0155] Further, the flaps 44', 45', (i.e. the separating walls 44, 45 of the separating element 41) each comprise a respective tab 46', 47' which constitute respectively the first supporting flap 46 and the second supporting flap 47. In particular, the tabs 46', 47' are each folded 90° with respect to the corresponding flap 44', 45'.

[0156] Also, the flap 44' comprises two tabs 66A', 66B' which constitute respectively the first abutting appendage 66A and the second abutting appendage 66B, whereas the flap 45' comprises a tab 99' which constitutes the connecting appendage 99.

[0157] The utility of the connecting appendage 99 is clear in cases in which the blank 100, already pre-glued and partially pre-folded, is supplied by a card supplier.

In fact, the blank 100 is supplied to the packaging machine with the panels 30A' and 30B' folded 180° onto the respective adjacent panels 31' and 32' with the tab 99'coplanar to the panel 45' and glued to the panel 44'. This pre-glued and partially pre-folded blank 100 is then inserted into the packaging machine, which opens the blank 100 and completes folding thereof.

[0158] In Figure 30 a version is shown of the stiffener 29 disclosed above.

[0159] In this version, the filling element 50 and the separating element 41 are formed as a single body with the stiffener 29, which is shaped in such a manner as to incorporate also the functions of the supporting element 37. The packet of cigarettes containing this version thus differs from the packet 1 of cigarettes disclosed with reference to Figures 4 to 10 by the fact of being devoid of a separate supporting element 37.

[0160] In this version, the stiffener 29 is made, in particular pre-glued, before being inserted into the packaging machine.

[0161] According to what is illustrated in Figure 30, the stiffener 29 is of rigid type, embraces on four sides the inner package 5, and is arranged inside the inner package 5 in direct contact with the group of cigarettes.

[0162] The stiffener 29 has a front wall 30 facing the front wall 19 of the inner package 5, a first lateral wall 31 facing the first lateral wall 21 of the inner package 5, and a second lateral wall 32 facing the second lateral wall 22 of the inner package 5. Further, the stiffener 29 comprises a bottom wall 33 which faces the bottom wall 18 of the inner package 5, and a pair of "U"-shaped recesses 36, obtained in the front wall 30 to facilitate extracting of the cigarettes.

[0163] Further, in this version, the filling element 50 comprises a first lateral wall 101, which is connected, by a folding line, to the first lateral wall 31 of the stiffener 29, is arranged perpendicular to the front wall 30 of the stiffener 29, and contacts and faces the first lateral wall 31, and a second lateral wall 102, which is connected, by a folding line, to the second lateral wall 32 of the stiffener 29, is arranged perpendicular to the front wall 30 of the stiffener 29, and contacts and faces the second lateral wall 32.

[0164] In the version of Figure 30, the first resting panel 52 of the resting wall 51 of the filling element 50 is connected to the first lateral wall 101 of the filling element 50 and is arranged perpendicular to the first lateral wall 101, whereas the second resting panel 53 of the resting wall 51 of the filling element 50 is connected to the second lateral wall 102 of the filling element 50 and is arranged perpendicular to the second lateral wall 102.

[0165] According to this version, the first separating panel 44 of the separating wall 42 of the separating element 41 is connected to the first resting panel 52, is arranged perpendicular to the first resting panel 52, and is opposite an inner surface of the first lateral wall 31 of the stiffener 29, whereas the second separating panel 45 of the separating wall 42 of the separating element 41 is connected to the second resting panel 53, is arranged perpendicular to the second resting panel 53 is opposite, and is opposite an inner surface of the second lateral wall 32 of the stiffener 29.

[0166] Further, in this version, the first separating panel 44 of the separating element 41 has two first abutting appendages 103A, 103B for abutting on the rear wall 20 of the inner package 5, which are obtained by respective "U"-shaped through incisions made in the first resting panel 52, protrude from the first separating panel 44 exiting from the plane defined by the first resting panel 52, and are positioned in succession parallel to the longitudinal axis A.

[0167] Similarly, the second separating panel 45 of the separating element 41 has two second abutting appendages 104A, 104B for abutting on the rear wall 20 of the inner package 5, which are obtained by respective "U"-shaped through incisions made in the second resting panel 53, protrude from the second separating panel 45 exiting from the plane defined by the second resting panel 53, are positioned in succession parallel to the longitudinal axis A and each face a respective first abutting appendage 103A, 103B.

[0168] In use, the rear wall 20 of the inner package 5 rests on the longitudinal edges of the first abutting appendages 103A, 103B, of the second abutting appendages 104A, 104B, and on the folding lines which connect the first lateral wall 101 of the filling element 50 and the first lateral wall 31 of the stiffener 29 and which connect the second lateral wall 102 of the filling element 50 and the second lateral wall 32 of the stiffener 29.

[0169] Lastly, in this version, the separating element 41 comprises a first connecting wall 105, connected to the first separating panel 44, arranged perpendicular to the first separating panel 44 and glued to an inner surface of the front wall 30 of the stiffener 29, and a second connecting wall 106, connected to the second separating panel 45, arranged perpendicular to the second separating panel 45 and glued to an inner surface of the front wall 30 of the stiffener 29.

[0170] In the version of Figure 30 the chambers 43A, 43B have, in cross section, a rectangular shape, in which the chamber 43A is delimited at the front by an inner surface of the first connecting wall 105 of the separating element 41, behind by an inner surface of the first resting panel 52 of the filling element 50, and laterally by an inner surface of the first lateral wall 31 of the stiffener 29 and by an inner surface of the first separating panel 44 of the separating element 41, whereas the chamber 43B is delimited at the front by an inner surface of the second connecting wall 106 of the separating element 41, behind by an inner surface of the second resting panel 53 of the filling element 50, and laterally by an inner surface of the second lateral wall 32 of the stiffener 29 and by an inner surface of the second separating panel 45 of the separating element 41.

[0171] The packet 1 of cigarettes comprising the stiffener 29 according to the version illustrated in Figure 30,

comprises a container 2 and a lid 3 obtained by folding around the inner package 5 the blank 56 disclosed above.

[0172] The stiffener 29 according to the version illustrated in Figure 30 is obtained by folding a blank 107 around the group of cigarettes, illustrated in Figure 31, which has a prevalently transverse extent, and comprises a plurality of panels which will be marked with accented reference numbers which are the same as the reference numbers which distinguish the corresponding walls of the stiffener 29 according to this version.

[0173] According to what is illustrated in Figure 31, the blank 107 comprises:

a panel 30' which constitutes the front wall 30 of the stiffener 29;
a panel 33' which constitutes the bottom wall 33 of the stiffener 29 and is directly connected to the panel 30' along a transverse folding line;
a pair of panels 31', 32' which are arranged on opposite sides of the panel 30', are connected to the panel 30' along two longitudinal folding lines, and constitute the lateral walls 31, 32 of the stiffener 29;
a panel 101' which is arranged outside the panel 31', is connected to the panel 31' along a longitudinal folding line, and constitutes the first lateral wall 101 of the filling element 50; a panel 102' which is arranged outside the panel 32', is connected to the panel 32' along a longitudinal folding line, and constitutes the second lateral wall 102 of the filling element 50;
a panel 44' which is arranged outside the panel 52', is connected to the panel 52' along a longitudinal folding line, and constitutes the first separating panel 44 of the separating element 41;
a panel 45' which is arranged outside the panel 53', is connected to the panel 53' along a longitudinal folding line, and constitutes the second separating panel 45 of the separating element 41;
a flap 105', which is arranged outside the panel 44', is connected to the panel 44' along a longitudinal folding line, and constitutes the first connecting wall 105 of the separating element 41; and
a flap 106', which is arranged outside the panel 45', is connected to the panel 45' along a longitudinal folding line, and constitutes the second connecting wall 106 of the separating element 41.

[0174] The panels 44', 45' each comprise a pair of tabs 103A', 103B' and 104A', 104B', which constitute respectively the first abutting appendages 103A, 103B and the second abutting appendages 104A, 104B.

[0175] The packet 1 of cigarettes disclosed above has numerous advantages.

[0176] Firstly, the packet 1 of cigarettes disclosed above ensures in all conditions suitable locking of the group of cigarettes, i.e. is always able to prevent effectively the group of cigarettes "shaking" inside the inner package 5. This result is obtained owing to the presence of the filling element 50 which retains securely the group of cigarettes and thus enables the group of cigarettes to be contained better.

[0177] The packet 1 of cigarettes disclosed above uses, with particular reference to the version of Figures 15 to 17, a relatively small amount of package material, i.e. only slightly more than the amount of package material used in a rigid hinged-lid packet of standard type, with a consequent low impact on the economical and environmental costs of production and disposal, after use, of the packet 1 of cigarettes.

[0178] Lastly, the packet 1 of cigarettes disclosed above is, in particular with reference to versions of Figures 10, 17, 21, easy to produce also in a packaging machine of standard type, which has to be subjected to few modifications, which are not invasive.

Claims

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

a soft package (5), which encloses a group of smoke articles, has a parallelepiped shape, and has a front wall (19), a rear wall (20), a top wall (17), a bottom wall (18), a first lateral wall (21), a second lateral wall (22) and at least one extraction opening (24) of the smoke articles;
at least one reclosable adhesive panel (27), which covers the at least one extraction opening (24);
a stiffener (29), which is housed inside the package (5) in contact with the group of smoke articles and has a front wall (30) facing the front wall (19) of the package (5), a first lateral wall (31) facing the first lateral wall (21) of the package (5) and a second lateral wall (32) facing the second lateral wall (22) of the package (5); and
a separating element (41), which is housed inside the package (5) and divides the inner volume of the package (5) so as to form several partitions of the group of smoke articles;
the packet (1) is **characterized in that** the soft package (5) has a transverse dimension that is greater than the transverse dimension of the group of smoke articles so as to form a cavity (26) inside the package (5), and **in that** it comprises a filling element (50) housed within the cavity (26) to securely retain the group of smoke articles in the package (5).

2. Packet (1) of smoke articles according to claim 1, wherein the filling element (50) is formed as a single body with the separating element (41).

3. Packet (1) of smoke articles according to claim 1, or 2, wherein the filling element (50) comprises a resting wall (51) for supporting the group of smoke arti-

cles, which extends substantially parallel to the front wall (19) and the rear wall (20) of the package (5).

4. Packet (1) of smoke articles according to any one of claims 1 to 3, wherein a distance between the front wall (19) of the package (5) and the resting wall (51) of the filling element (50) is less than a distance between the front wall (19) and the rear wall (20) of the package (5) so as to compensate for the lesser thickness of the group of smoke articles with respect to the thickness of the package (5).

5. Packet (1) of smoke articles according to claim 3, or 4, wherein:

the separating element (41) divides the inner volume of the package into two partitions;
the resting wall (51) comprises a first resting panel (52) and a second resting panel (53) each of which supporting a respective partition of the group of smoke articles; and
the first resting panel (52) and the second resting panel (53) are adjacent and substantially coplanar.

6. Packet (1) of smoke articles according to any one of claims 1 to 5, wherein:

the separating element (41) comprises a separating wall (42) that separates the inner volume of the package into two chambers (43A, 43B), each containing a respective partition of the group of smoke articles; and
the separating wall (42) extends parallel to a main extension longitudinal axis of the packet (1) and is arranged transversely, in particular perpendicularly, with respect to the front wall (19) and the rear wall (20) of the package (5).

7. Packet (1) of smoke articles according to claim 5, or 6, wherein the separating wall (42) comprises a first separating panel (44) and a second separating panel (45) connected to and facing one another.

8. Packet (1) of smoke articles according to claim to 7, as claim 6 is appended to claim 5, wherein:

the filling element (50) and the separating element (41) are formed in a single body with the stiffener (29);
the first resting panel (52) originates from the first lateral wall (31) of the stiffener (29) and is arranged perpendicular to the first lateral wall (31);
the second resting panel (53) originates from the second lateral wall (32) of the stiffener (29) and is arranged perpendicular to the second lateral wall (32);
the first separating panel (44) is connected and arranged perpendicular to the first resting panel (52), originates from the front wall (30) of the stiffener (29) and is arranged perpendicular to the front wall (30); and
the second separating panel (45) is connected and arranged perpendicular to the second resting panel (53), originates from the front wall (30) of the stiffener (29) and is arranged perpendicular to the front wall (30).

9. Packet (1) of smoke articles according to any one of claims 5 to 8, wherein the filling element (50) further comprises a first portion (64) of the first lateral wall (31) of the stiffener (29) connected to the first resting panel (52), and a second portion (65) of the second lateral wall (32) of the stiffener (29) connected to the second resting panel (53).

10. Packet (1) of smoke articles according to any one of claims 7 to 9, as claim 6 is appended to claim 5, wherein:

the first resting panel (52) is staggered, along a main extension axis of the packet (1), with respect to the second resting panel (53); and
the first separating panel (44), is staggered, along the main extension axis of the packet (1), with respect to the second separating panel (45).

11. Packet (1) of smoke articles according to any one of claims 7 to 10, as claim 6 is appended to claim 5, wherein:

the first separating panel (44) has a first abutting appendage (66A) for abutting on the rear wall (20) of the package (5), which first abutting appendage (66A) protrudes from the first separating panel (44) coming out the plane defined by the corresponding first resting panel (52); and
the second separating panel (45) has a second abutting appendage (66B) for abutting on the rear wall (20) of the package (5), which second abutting appendage (66B) is staggered, along a main extension axis of the packet (1), with respect to the first abutting appendage (66A), and protrudes from the second separating panel (45) coming out the plane defined by the corresponding second resting panel (53).

12. Packet (1) of smoke articles according to any one of claims 7 to 10, as claim 6 is appended to claim 5, wherein:

the stiffener (29) comprises a first rear wall (68) connected to the first lateral wall (31) and opposite the front wall (30) of the stiffener (29), and a second rear wall (69) connected to the second

lateral wall (32), opposite the front wall (30) of the stiffener (29), and partially overlapping the first rear wall (68);
the first separating panel (44) has a first abutting appendage (66A) for abutting on the first rear wall (68) of the stiffener (29), which first abutting appendage (66A) protrudes from the first separating panel (44) coming out the plane defined by the corresponding first resting panel (52); and
the second separating panel (45) has a second abutting appendage (66B) for abutting on the first rear wall (68) of the stiffener (29), which second abutting appendage (66B) is staggered, along a main extension axis of the packet (1), with respect to the first abutting appendage (66A), and protrudes from the second separating panel (45) coming out the plane defined by the corresponding second resting panel (53).

13. Packet (1) of smoke articles according to any one of claims 1 to 7, and further comprising a supporting element (37), which is housed inside the package (5) in contact with the group of smoke articles and has a rear wall (38A, 38B) facing the rear wall (20) of the package (5), a first lateral wall (39) facing the first lateral wall (31) of the stiffener (29), and a second lateral wall (40) facing the second lateral wall (32) of the stiffener (29).

14. Packet (1) of smoke articles according to claim 13, as claim 6 is appended to claim 5, wherein:

the rear wall (38A, 38B) of the supporting element (37) comprises a first rear wall (38A) and a second wall (38B) arranged side by side and substantially coplanar;
the first separating panel (44) originates from the first rear wall (38A) of the supporting element (37) and is arranged perpendicular to the first rear wall (38A);
the second separating panel (45) originates from the second rear wall (38B) of the supporting element (37) and is arranged perpendicular to the second rear wall (38B);
a folding line connecting the first separating panel (44) to the second separating panel (45) faces and contacts an inner surface of the front wall (30) of the stiffener (29);
the first resting panel (52) originates from the first separating panel (44) and is arranged perpendicular to the first separating panel (44) and parallel to the first rear wall (38A) of the supporting element (37); and
the second resting panel (53) originates from the second separating panel (45) and is arranged perpendicular to the second separating panel (45) and parallel to the second rear wall (38B) of the supporting element (37).

15. Packet (1) of smoke articles according to claim 13, or 14, as claim 6 is appended to claim 5, wherein the filling element (50) further comprises:

a first portion (54) of the first rear wall (66A) of the supporting element (37), which first portion (54) is connected to the first resting panel (52) and to the first lateral wall (39) of the supporting element (37), faces the first lateral wall (39) of the supporting element (37) and is arranged perpendicular to the first resting panel (52); and
a second portion (55) of the second rear wall (66B) of the supporting element (37), which second portion (55) is connected to the second resting panel (53) and to the second lateral wall (40) of the supporting element (37), faces the second lateral wall (40) of the supporting element (37), and is arranged perpendicular to the second resting panel (53).

16. Packet (1) of smoke articles according to any one of claims 13 to 15, wherein the supporting element (37) comprises:

a first supporting flap (46) connected to a top end of the first separating panel (44), arranged perpendicular to the first separating panel (44) and facing the top wall (17) of the package (5); and/or
a second supporting flap (47) connected to a top end of the second separating panel (45), arranged perpendicular to the second separating panel (45) and facing the top wall (17) of the package (5); and/or
a first supporting appendage (48) protruding from a bottom end of the first separating panel (44) and resting on the bottom wall (18) of the package (5), or on a bottom wall (33) of the stiffener (27); and/or
a second supporting appendage (49), connected to the first supporting appendage (48), protruding from a bottom end of the second separating panel (45) and resting on the bottom wall (18) of the package (5), or on the bottom wall (33) of the stiffener (29).

17. Packet (1) of smoke articles according to any one of claims 1 to 16, wherein:

the stiffener (29) comprises a bottom wall (33) which faces the bottom wall (18) of the package (5), and/or a first stiffener flap (34) connected to a top end of the first lateral wall (31) of the stiffener (29), arranged perpendicular to the first lateral wall (31) of the stiffener (29) and opposite the bottom wall (33) of the stiffener (29), and/or a second stiffener flap (35) connected to a top end of the second lateral wall (32) of the stiffener

(29), arranged perpendicular to the second lateral wall (32) of the stiffener (29) and opposite the bottom wall (33) of the stiffener (29); and/or
the packet (1) comprises a container (2), which has a parallelepiped shape, has an open top end (6), a bottom wall (7), a front wall (8), a rear wall (9), a first lateral wall (10) and a second lateral wall (11), and houses the soft package (5); and/or
a lid (3), which is hinged to the container (2), has a parallelepiped shape and has a top wall (12), a front wall (13), a rear wall (14), a first lateral wall (15) and a second lateral wall (16); and/or
the package (5) is formed by a heat-sealable soft package material folded directly about the group of smoke articles so as to be in direct contact with the smoke articles and stabilized by heat sealing; and/or
the package (5) has two extraction openings (24); and/or
the packet (1) comprises two reclosable adhesive panels (27), each of which covers a respective extraction opening (24), wherein the two reclosable adhesive panels (27) are partially connected one another, or wherein the two reclosable adhesive panels (27) are spaced apart one another; and/or
a grip tab (28) is connected to the at least one reclosable adhesive panel (27), wherein the grip tab (28) is devoid of adhesive to facilitate the handling of the at least one reclosable adhesive panel (27) and faces an outer surface of the front wall (19) of the package (5).

Patentansprüche

1. Eine Packung (1) von Raucherartikeln mit:

einer weichen Verpackung (5), die eine Gruppe von Raucherartikeln umschließt, die eine parallelepipedische Form hat und eine Vorderwand (19), eine Rückwand (20), eine Deckenwand (17), eine Bodenwand (18), eine erste Seitenwand (21), eine zweite Seitenwand (22) und wenigstens eine Entnahmeöffnung (24) für die Raucherartikel aufweist;
wenigstens einem wiederverschließbaren Klebefeld (27), das die wenigstens eine Entnahmeöffnung (24) abdeckt;
einer Aussteifung (29), die innerhalb der Verpackung (5) in Kontakt mit der Gruppe von Raucherartikeln aufgenommen ist und eine Vorderwand (30) aufweist, die der Vorderwand (19) der Verpackung (5) zugewandt ist, sowie eine erste Seitenwand (31), die der ersten Seitenwand (21) der Verpackung (5) zugewandt ist, und eine zweite Seitenwand (32), die der zweiten Seitenwand (22) der Verpackung (5) zugeordnet ist; und
einem Trennelement (41), das innerhalb der Verpackung (5) aufgenommen ist und das Innenvolumen der Verpackung (5) aufteilt, um so mehrere Teile der Gruppe von Raucherartikeln zu bilden;
wobei die Packung (1) **dadurch gekennzeichnet ist, dass** die weiche Verpackung (5) eine Ausdehnung in Querrichtung hat, die größer als die Ausdehnung der Gruppe von Raucherartikeln in Querrichtung ist, um so einen Hohlraum (26) innerhalb der Verpackung (5) zu schaffen, und dass sie ein Füllelement (50) aufweist, dass innerhalb des Hohlraums (26) aufgenommen ist, um die Gruppe von Raucherartikeln in der Verpackung (5) sicher zu halten.

2. Packung (1) von Raucherartikeln nach Anspruch 1, bei der das Füllelement (50) als ein einziger Körper mit dem Trennelement (41) ausgebildet ist.

3. Packung (1) von Raucherartikeln nach Anspruch 1 oder 2, bei der das Füllelement (50) eine Stützwand (51) aufweist, um die Gruppe von Raucherartikeln abzustützen, die sich im Wesentlichen parallel zu der Vorderwand (19) und der Rückwand (20) der Verpackung (5) erstreckt.

4. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 1 bis 3, bei der ein Abstand zwischen der Vorderwand (19) der Verpackung (5) und der Stützwand (51) des Füllelementes (50) geringer ist als ein Abstand zwischen der Vorderwand (19) und der Rückwand (20) der Verpackung (5), um so für die geringere Dicke der Gruppe von Raucherartikeln in Bezug auf die Dicke der Verpackung (5) zu kompensieren.

5. Packung (1) von Raucherartikeln nach Anspruch 3 oder 4, bei der:

das Trennelement (41) das Innenvolumen der Verpackung in zwei Teile trennt;
die Stützwand (51) ein erstes Stützfeld (52) und ein zweites Stützfeld (53) aufweist, die jeweils einen betreffenden Bereich der Gruppe von Raucherartikeln abstützen; und
wobei das erste Stützfeld (52) und das zweite Stützfeld (53) angrenzend und im Wesentlichen koplanar sind.

6. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 1 bis 5, bei der:

das Trennelement (41) eine Trennwand (42) aufweist, die das Innenvolumen der Verpackung in zwei Kammern (43A, 43B) trennt, die jeweils

einen betreffenden Teil der Gruppe von Raucherartikeln aufnehmen; und
die Trennwand (42) sich parallel zu einer Hauptausdehnungs-Längsachse der Packung (1) erstreckt und quer, insbesondere senkrecht in Bezug auf die Vorderwand (19) und die Rückwand (20) der Verpackung (5) angeordnet ist.

7. Packung (1) von Raucherartikeln nach Anspruch 5 oder 6, bei der die Trennwand (42) ein erstes Trennfeld (44) und ein zweites Trennfeld (45) aufweist, die verbunden sind und einander zugewandt sind.

8. Packung (1) von Raucherartikeln nach Anspruch 7, soweit Anspruch 6 abhängig von Anspruch 5 ist, bei der:

das Füllelement (50) und das Trennelement (41) in einem einzigen Körper mit der Aussteifung (29) ausgebildet sind;
das erste Stützfeld (52) von der ersten Seitenwand (31) der Aussteifung (29) ausgeht und senkrecht zu der ersten Seiterwand (31) angeordnet ist;
das zweite Stützfeld (53) von der zweiten Seitenwand (32) der Aussteifung (29) ausgeht und senkrecht zu der zweiten Seitenwand (32) angeordnet ist;
das erste Trennfeld (44) mit dem ersten Stützfeld (52) verbunden und senkrecht dazu angeordnet ist und von der Vorderwand (30) der Aussteifung (29) ausgeht und senkrecht zu der Vorderwand (30) angeordnet ist; und
das zweite Trennfeld (45) mit dem zweiten Stützfeld (53) verbunden ist und dazu senkrecht angeordnet ist und von Vorderwand (30) der Aussteifung (29) ausgeht und senkrecht zu der Vorderwand (30) angeordnet ist.

9. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 5 bis 8, bei der das Füllelement (50) ferner einen ersten Bereich (64) der ersten Seitenwand (31) der Aussteifung (29) aufweist, der mit dem ersten Stützfeld (52) verbunden ist, und einen zweiten Bereich (65) der zweiten Seitenwand (32) der Aussteifung (29) aufweist, der mit dem zweiten Stützfeld (53) verbunden ist.

10. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 7 bis 9, soweit Anspruch 6 von Anspruch 5 abhängig ist, bei der:

das erste Stützfeld (52) versetzt entlang einer Hauptausdehnungsachse der Packung (1) in Bezug auf das zweite Stützfeld (53) angeordnet ist; und
das erste Trennfeld (44) entlang der Hauptausdehnungsachse der Packung (1) in Bezug auf das zweite Trennfeld (45) versetzt angeordnet ist.

11. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 7 bis 10, soweit Anspruch 6 von Anspruch 5 abhängig ist, bei der:

das erste Trennfeld (44) einen ersten anliegenden Fortsatz (66A) zur Anlage der Rückwand (20) der Verpackung (5) aufweist, wobei der erste anliegende Fortsatz (66A) von dem ersten Trennfeld (44) aus der Ebene kommend hervorsteht, die von dem zugeordneten ersten Stützfeld (52) definiert ist; und
das zweite Trennfeld (45) einen zweiten anliegenden Fortsatz (66B) zur Anlage an der Rückwand (20) der Verpackung (5) aufweist, wobei der zweite anliegende Fortsatz (66B) entlang einer Hauptausdehnungsachse der Packung (1) in Bezug auf den ersten anliegenden Fortsatz (66A) versetzt ist und von dem zweiten Trennfeld (45) aus der Ebene kommend hervorsteht, die von dem zugeordneten zweiten Stützfeld (53) definiert ist.

12. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 7 bis 10, soweit Anspruch 6 von Anspruch 5 abhängig ist, wobei:

die Aussteifung (29) eine erste Rückwand (68) aufweist, die mit der ersten Seitenwand (31) verbunden ist und gegenüber der Vorderwand (30) der Aussteifung (29) angeordnet ist, sowie eine zweite Rückwand (69), die mit der zweiten Seitenwand (32) gegenüber der Vorderwand (30) der Aussteifung (29) verbunden ist und teilweise die erste Rückwand (68) überlappt;
wobei das erste Trennfeld (44) einen ersten anliegenden Fortsatz (66A) zur Anlage an der ersten Rückwand (68) der Aussteifung (29) aufweist, wobei der erste anliegende Fortsatz (66A) aus der Ebene kommend hervorsteht, die von dem zugeordneten ersten Stützfeld (52) definiert ist; und
wobei das zweite Trennfeld (45) einen zweiten anliegenden Fortsatz (66B) zur Anlage an der ersten Rückwand (68) der Aussteifung (29) aufweist, wobei der zweite anliegende Fortsatz (66B) entlang einer Hauptausdehnungsachse der Packung (I) in Bezug auf den ersten anliegenden Fortsatz (66A) versetzt ist, und aus der Ebene kommend hervorsteht, die von dem zugeordneten zweiten Stützfeld (53) definiert ist.

13. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 1 bis 7, die ferner ein Aufnahmeelement (37) aufweist, das innerhalb der Verpackung (5) in Kontakt mit der Gruppe von Raucherartikeln

aufgenommen ist und eine Rückwand (38A, 38B) aufweist, die der Rückwand (20) der Verpackung (5) zugewandt ist, sowie eine erste Seitenwand (39), die der ersten Seitenwand (31) der Aussteifung (29) zugewandt ist, sowie eine zweite Seitenwand (40), die der zweiten Seitenwand (32) der Aussteifung (29) zugewandt ist.

14. Packung (1) von Raucherartikeln nach Anspruch 13, soweit Anspruch 6 von Anspruch 5 abhängig ist, bei der:

die Rückwand (38A, 38B) des Aufnahmeelementes (37) eine erste Rückwand (38A) und eine zweite Rückwand (38B) aufweist, die nebeneinander angeordnet sind und im Wesentlichen koplanar sind;
wobei das erste Trennfeld (44) aus der ersten Rückwand (38A) des Aufnahmeelements (37) ausgeht und im Wesentlichen senkrecht zu der ersten Rückwand (38A) angeordnet ist;
wobei das zweite Trennfeld (45) von der zweiten Rückwand (38B) des Aufnahmeelementes (37) ausgeht und senkrecht zu der zweiten Rückwand (38B) angeordnet ist;
wobei eine Faltlinie das erste Trennfeld (44) mit dem zweiten Trennfeld (45) verbindet und einer Innenfläche der Vorderwand (30) der Aussteifung (29) zugewandt ist und diese kontaktiert;
wobei das erste Stützfeld (52) von dem Trennfeld (44) ausgeht und senkrecht zu dem ersten Trennfeld (44) und parallel zu der ersten Rückwand (38A) des Aufnahmeelementes (37) angeordnet ist; und
wobei das zweite Stützfeld (53) von dem zweiten Trennfeld (45) ausgeht und senkrecht zu dem zweiten Trennfeld (45) und parallel zu der zweiten Rückwand (38B) des Aufnahmeelementes (37) angeordnet ist.

15. Packung (1) von Raucherartikeln nach Anspruch 13 oder 14, soweit Anspruch 6 von Anspruch 5 abhängig ist, wobei das Füllelement (50) ferner Folgendes aufweist:

einen ersten Bereich (54) der ersten Rückwand (66A) des Aufnahmeelementes (37), wobei der erste Teil (54), der mit dem ersten Stützfeld (52) und der ersten Seitenwand (39) des Aufnahmeelementes (37) verbunden ist, der ersten Seitenwand (39) des Aufnahmeelementes (37) zugewandt ist und senkrecht zu dem ersten Stützfeld (52) angeordnet ist; und
einen zweiten Bereich (55) der zweiten Rückwand (66B) des Aufnahmeelementes (37), wobei der zweite Bereich (55) mit dem zweiten Stützfeld (53) und mit der zweiten Seitenwand (40) des Aufnahmeelementes (37) verbunden ist und der zweiten Seitenwand (40) des Aufnahmeelementes (37) zugewandt ist und senkrecht zu dem zweiten Stützfeld (53) angeordnet ist.

16. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 13 bis 15, bei der das Aufnahmeelement (37) Folgendes aufweist:

eine erste Stützklappe (46), die mit einem oberen Ende des ersten Trennfeldes (44) verbunden ist und senkrecht zu dem ersten Trennfeld (44) angeordnet ist und der Deckenwand (17) der Verpackung (5) zugewandt ist; und/oder
eine zweite Stützklappe (47), die mit einem oberen Ende des zweiten Trennfeldes (45) verbunden ist, und senkrecht zu dem zweiten Trennfeld (45) angeordnet ist und der Deckenwand (17) der Verpackung (5) zugewandt ist; und/oder
einen ersten Stützfortsatz (48), der von einem Bodenende des ersten Trennfeldes (44) hervorsteht und sich auf der Bodenwand (18) der Verpackung (5) oder auf einer Bodenwand (33) der Aussteifung (27) abstützt; und/oder
einen zweiten Stützfortsatz (49), der mit dem ersten Stützfortsatz (48) verbunden ist, von einem Bodenende des zweiten Trennfeldes (45) hervorsteht und sich auf der Bodenwand (18) der Verpackung (5) oder auf der Bodenwand (33) der Aussteifung (29) abstützt.

17. Packung (1) von Raucherartikeln nach irgendeinem der Ansprüche 1 bis 16, bei der:

die Aussteifung (29) eine Bodenwand (33) aufweist, die der Bodenwand (18) der Verpackung (5), und/oder eine erste Aussteifungsklappe (34) mit einem oberen Ende der ersten Seitenwand (31) der Aussteifung (29) verbunden ist und senkrecht zu der ersten Seitenwand (31) der Aussteifung (29) und gegenüber der Bodenwand (33) der Aussteifung (29) angeordnet ist, und/oder eine zweite Aussteifungsklappe (35) mit einem oberen Ende der zweiten Seitenwand (32) der Aussteifung (29) verbunden ist und senkrecht zu der zweiten Seitenwand (32) der Aussteifung (29) und gegenüber der Bodenwand (33) der Aussteifung (29) angeordnet ist; und/oder
die Packung (1) einen Behälter (2) aufweist, der eine parallelepipedische Form hat, mit einem offenen oberen Ende (6), einer Bodenwand (7), einer Vorderwand (8), einer Rückwand (9), einer ersten Seitenwand (10) und einer zweiten Seitenwand (11), und die weiche Verpackung (5) umschließt; und/oder
ein Deckel (3), der an dem Behälter (2) angelenkt ist, eine parallelepipedische Form aufweist

und eine Deckenwand (12), eine Vorderwand (13), eine Rückwand (14), eine erste Seitenwand (15) und eine zweite Seitenwand (16) aufweist; und/oder
die Verpackung (5) aus einem heißsiegelbaren weichen Verpackungsmaterial gebildet ist, das direkt um die Gruppe von Raucherartikeln gefaltet ist, um so in direktem Kontakt mit den Raucherartikeln zu sein und durch die Heißversiegelung stabilisiert zu sein; und/oder die Verpackung (5) zwei Entnahmeöffnungen (24) aufweist; und/oder
die Packung (1) zwei wiederverschließbare Klebefelder (27) aufweist, von denen jedes eine betreffende Entnahmeöffnung (24) abdeckt, wobei die beiden wiederverschließbaren Klebefelder (27) teilweise miteinander verbunden sind, oder wobei die beiden wiederverschließbaren Klebefelder (27) voneinander beabstandet sind; und/oder
eine Grifflasche (28) mit dem wenigstens einen wiederverschließbaren Klebefeld (27) verbunden ist, wobei die Grifflasche (28) kein Klebemittel aufweist, um die Handhabung des wenigstens einen wiederverschließbaren Klebefeldes (27) zu erleichtern, und einer Außenfläche der Vorderwand (19) der Verpackung (5) zugewandt ist.

Revendications

1. Paquet (1) d'articles à fumer, comprenant :

un conditionnement souple (5), qui enferme un groupe d'articles à fumer, a une forme de parallélépipède et a une paroi avant (19), une paroi arrière (20), une paroi supérieure (17), une paroi inférieure (18), une première paroi latérale (21), une seconde paroi latérale (22) et au moins une ouverture d'extraction (24) des articles à fumer ;
au moins un panneau adhésif refermable (27), qui recouvre la au moins une ouverture d'extraction (24) ;
un raidisseur (29), qui est logé à l'intérieur du conditionnement (5) en contact avec le groupe d'articles à fumer et a une paroi avant (30) faisant face à la paroi avant (19) du conditionnement (5), une première paroi latérale (31) faisant face à la première paroi latérale (21) du conditionnement (5) et une seconde paroi latérale (32) faisant face à la seconde paroi latérale (22) du conditionnement (5) ; et
un élément de séparation (41), qui est logé à l'intérieur du conditionnement (5) et divise le volume intérieur du conditionnement (5) de manière à former plusieurs partitions du groupe d'articles à fumer ;

le paquet (1) est **caractérisé en ce que** le conditionnement souple (5) a une dimension transversale qui est plus grande que la dimension transversale du groupe d'articles à fumer de manière à former une cavité (26) à l'intérieur du conditionnement (5), et **en ce qu'**il comprend un élément de remplissage (50) logé à l'intérieur de la cavité (26) pour retenir fermement le groupe d'articles à fumer dans le conditionnement (5).

2. Paquet (1) d'articles à fumer selon la revendication 1, dans lequel l'élément de remplissage (50) est formé d'un seul tenant avec l'élément de séparation (41) .

3. Paquet (1) d'articles à fumer selon la revendication 1 ou 2, dans lequel l'élément de remplissage (50) comprend une paroi d'appui (51) pour supporter le groupe d'articles à fumer, qui s'étend sensiblement parallèle à la paroi avant (19) et à la paroi arrière (20) du conditionnement (5).

4. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 1 à 3, dans lequel une distance entre la paroi avant (19) du conditionnement (5) et la paroi d'appui (51) de l'élément de remplissage (50) est inférieure à une distance entre la paroi avant (19) et la paroi arrière (20) du conditionnement (5) de manière à compenser l'épaisseur plus petite du groupe d'articles à fumer par rapport à l'épaisseur du conditionnement (5).

5. Paquet (1) d'articles à fumer selon la revendication 3 ou 4, dans lequel :

l'élément de séparation (41) divise le volume intérieur du conditionnement en deux partitions ;
la paroi d'appui (51) comprend un premier panneau d'appui (52) et un second panneau d'appui (53), dont chacun supporte une partition respective du groupe d'articles à fumer ; et
le premier panneau d'appui (52) et le second panneau d'appui (53) sont adjacents et sensiblement coplanaires.

6. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 1 à 5, dans lequel :

l'élément de séparation (41) comprend une paroi de séparation (42) qui sépare le volume intérieur du conditionnement en deux chambres (43A, 43B), chacune contenant une partition respective du groupe d'articles à fumer ; et
la paroi de séparation (42) s'étend parallèle à un axe longitudinal d'extension principal du paquet (1) et est agencée transversalement, en particulier perpendiculairement, par rapport à la

paroi avant (19) et à la paroi arrière (20) du conditionnement (5).

7. Paquet (1) d'articles à fumer selon la revendication 5 ou 6, dans lequel la paroi de séparation (42) comprend un premier panneau de séparation (44) et un second panneau de séparation (45) reliés et se faisant face l'un à l'autre.

8. Paquet (1) d'articles à fumer selon la revendication 7, lorsque la revendication 6 est rattachée à la revendication 5, dans lequel :

l'élément de remplissage (50) et l'élément de séparation (41) sont formés d'un seul tenant avec le raidisseur (29) ;
le premier panneau d'appui (52) provient de la première paroi latérale (31) du raidisseur (29) et est agencé perpendiculairement à la première paroi latérale (31) ;
le second panneau d'appui (53) provient de la seconde paroi latérale (32) du raidisseur (29) et est agencé perpendiculairement à la seconde paroi latérale (32) ;
le premier panneau de séparation (44) est relié et agencé perpendiculairement au premier panneau d'appui (52), provient de la paroi avant (30) du raidisseur (29) et est agencé perpendiculairement à la paroi avant (30) ; et
le second panneau de séparation (45) est relié et agencé perpendiculairement au second panneau d'appui (51), provient de la paroi avant (30) du raidisseur (29) et est agencé perpendiculairement à la paroi avant (30).

9. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 1 à 8, dans lequel l'élément de remplissage (50) comprend en outre une première partie (64) de la première paroi latérale (31) du raidisseur (29) reliée au premier panneau d'appui (52), et une seconde partie (65) de la seconde paroi latérale (32) du raidisseur (29) reliée au second panneau d'appui (53) .

10. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 7 à 9, lorsque la revendication 6 est rattachée à la revendication 5, dans lequel :

le premier panneau d'appui (52) est décalé, le long d'un axe d'extension principal du paquet (1), par rapport au second panneau d'appui (53) ; et
le premier panneau de séparation (44) est décalé, le long de l'axe d'extension principal du paquet (1), par rapport au second panneau de séparation (45).

11. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 7 à 10, lorsque la revendication 6 est rattachée à la revendication 5, dans lequel :

le premier panneau de séparation (44) a un premier appendice de butée (66A) pour venir en butée contre la paroi arrière (20) du conditionnement (5), lequel premier appendice de butée (66A) fait saillie du premier panneau de séparation (44) sortant du plan défini par le premier panneau d'appui (52) correspondant ; et
le second panneau de séparation (45) a un second appendice de butée (66B) pour venir en butée contre la paroi arrière (20) du conditionnement (5), lequel second appendice de butée (66B) est décalé, le long d'un axe d'extension principal du paquet (1), par rapport au premier appendice de butée (66A), et fait saillie du second panneau de séparation (45) sortant du plan défini par le second panneau d'appui (53) correspondant.

12. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 7 à 10, lorsque la revendication 6 est rattachée à la revendication 5, dans lequel :

le raidisseur (29) comprend une première paroi arrière (68) reliée à la première paroi latérale (31) et opposée à la paroi avant (30) du raidisseur (29), et une seconde paroi arrière (69) reliée à la seconde paroi latérale (32), opposée à la paroi avant (30) du raidisseur (29), et chevauchant partiellement la première paroi arrière (68) ;
le premier panneau de séparation (44) a un premier appendice de butée (66A) pour venir en butée contre la première paroi arrière (68) du raidisseur (29), lequel premier appendice de butée (66A) fait saillie du premier panneau de séparation (45) sortant du plan défini par le premier panneau d'appui (52) correspondant ; et
le second panneau de séparation (45) a un second appendice de butée (66B) pour venir en butée contre la première paroi arrière (68) du raidisseur (29), lequel second appendice de butée (66B) est décalé, le long d'un axe d'extension principal du paquet (1), par rapport au premier appendice de butée (66A), et fait saillie du second panneau de séparation (45) sortant du plan défini par le second panneau d'appui (53) correspondant.

13. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 1 à 7, et comprenant en outre un élément de support (37), qui est logé à l'intérieur du conditionnement (5) en contact avec le groupe d'articles à fumer et a une paroi arrière (38A, 38B) faisant face à la paroi arrière (20) du conditionnement (5), une première paroi latérale (39) faisant face à la pre-

mière paroi latérale (31) du raidisseur (29), et une seconde paroi latérale (40) faisant face à la seconde paroi latérale (32) du raidisseur (29).

14. Paquet (1) d'articles à fumer selon la revendication 13, lorsque la revendication 6 est rattachée à la revendication 5, dans lequel :

la paroi arrière (38A, 38B) de l'élément de support (37) comprend une première paroi arrière (38A) et une seconde paroi (38B) agencées côte à côte et sensiblement coplanaires ;
le premier panneau de séparation (44) provient de la première paroi arrière (38A) de l'élément de support (37) et est agencé perpendiculairement à la première paroi arrière (38A) ;
le second panneau de séparation (45) provient de la seconde paroi arrière (38B) de l'élément de support (37) et est agencé perpendiculairement à la seconde paroi arrière (38B) ;
une ligne de pliage reliant le premier panneau de séparation (44) au second panneau de séparation (45) fait face à une surface intérieure de la paroi avant (30) du raidisseur (29) et vient en contact avec celle-ci ;
le premier panneau d'appui (52) provient du premier panneau de séparation (44) et est agencé perpendiculairement au premier panneau de séparation (44) et parallèle à la première paroi arrière (38A) de l'élément de support (37) ; et
le second panneau d'appui (53) provient du second panneau de séparation (45) et est agencé perpendiculairement au second panneau de séparation (45) et parallèle à la seconde paroi arrière (38B) de l'élément de support (37).

15. Paquet (1) d'articles à fumer selon la revendication 13 ou 14, lorsque la revendication 6 est rattachée à la revendication 5, dans lequel l'élément de remplissage (50) comprend en outre :

une première partie (54) de la première paroi arrière (66A) de l'élément de support (37), laquelle première partie (54) est reliée au premier panneau d'appui (52) et à la première paroi latérale (39) de l'élément de support (37), fait face à la première paroi latérale (39) de l'élément de support (37) et est agencée perpendiculairement au premier panneau d'appui (52) ; et
une seconde partie (55) de la seconde paroi arrière (66B) de l'élément de support (37), laquelle seconde partie (55) est reliée au second panneau d'appui (53) et à la seconde paroi latérale (40) de l'élément de support (37), fait face à la seconde paroi latérale (40) de l'élément de support (37), et est agencée perpendiculairement au second panneau d'appui (53).

16. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 13 à 15, dans lequel l'élément de support (37) comprend :

un premier rabat de support (46) relié à une extrémité supérieure du premier panneau de séparation (44), agencé perpendiculairement au premier panneau de séparation (44) et faisant face à la paroi supérieure (17) du conditionnement (5) ; et/ou
un second rabat de support (47) relié à une extrémité supérieure du second panneau de séparation (45), agencé perpendiculairement au second panneau de séparation (45) et faisant face à la paroi supérieure (17) du conditionnement (5) ; et/ou
un premier appendice de support (48) faisant saillie d'une extrémité inférieure du premier panneau de séparation (44) et en appui sur la paroi inférieure (18) du conditionnement (5), ou sur une paroi inférieure (33) du raidisseur (29) ; et/ou
un second appendice de support (49), relié au premier appendice de support (48), faisant saillie d'une extrémité inférieure du second panneau de séparation (45) et en appui sur la paroi inférieure (18) du conditionne-ment (5), ou sur la paroi inférieure (33) du raidisseur (29) .

17. Paquet (1) d'articles à fumer selon l'une quelconque des revendications 1 à 16, dans lequel :

le raidisseur (29) comprend une paroi inférieure (33) qui fait face à la paroi inférieure (18) du conditionnement (5), et/ou un premier rabat de raidisseur (34) relié à une extrémité supérieure de la première paroi latérale (31) du raidisseur (29), agencé perpendiculairement à la première paroi latérale (31) du raidisseur (29) et opposé à la paroi inférieure (33) du raidisseur (29), et/ou un second rabat de raidisseur (35) relié à une extrémité supérieure de la seconde paroi latérale (32) du raidisseur (29), agencé perpendiculairement à la seconde paroi latérale (32) du raidisseur (29) et opposé à la paroi inférieure (33) du raidisseur (29) ; et/ou
le paquet (1) comprend un conteneur (9), qui a une forme de parallélépipède, a une extrémité supérieure ouverte (6), une paroi inférieure (7), une paroi avant (8), une paroi arrière (9), une première paroi latérale (10) et une seconde paroi latérale (11), et loge le conditionnement souple (5) ; et/ou
un couvercle (3), qui est articulé sur le conteneur (2), a une forme de parallélépipède et a une paroi supérieure (12), une paroi avant (13), une paroi arrière (14), une première paroi latérale (15) et une seconde paroi latérale (16) ; et/ou

le conditionnement (5) est formé par un matériau de conditionnement souple thermocollable plié directement autour du groupe d'articles à fumer de manière à être en contact direct avec les articles à fumer et stabilisé par un thermocollage ; et/ou
le conditionnement (5) a deux ouvertures d'extraction (24) ; et/ou
le paquet (1) comprend deux panneaux adhésifs refermables (27), dont chacun recouvre une ouverture d'extraction (24) respective, dans lequel les deux panneaux adhésifs refermables (27) sont partiellement reliés l'un à l'autre, ou dans lequel les deux panneaux adhésifs refermables (27) sont espacés l'un de l'autre ; et/ou
une languette de prise (28) est reliée au au moins un panneau adhésif refermable (27), dans lequel la languette de prise (28) est dépourvue d'adhésif pour faciliter la manipulation du au moins un panneau adhésif refermable (27) et fait face à une surface extérieure de la paroi avant (19) du conditionnement (5).

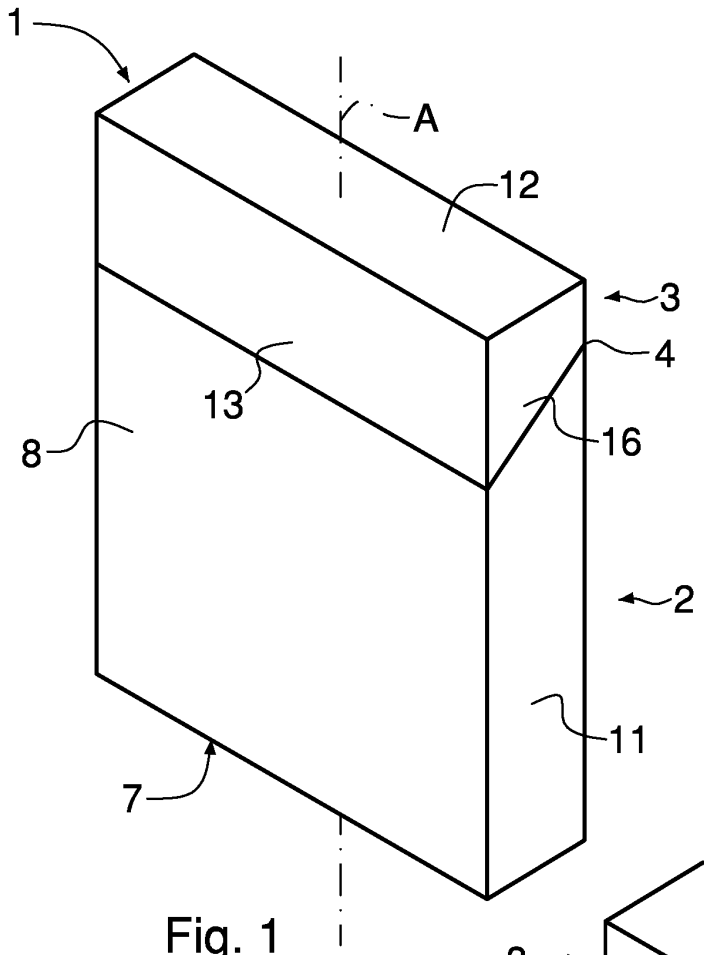


Fig. 1

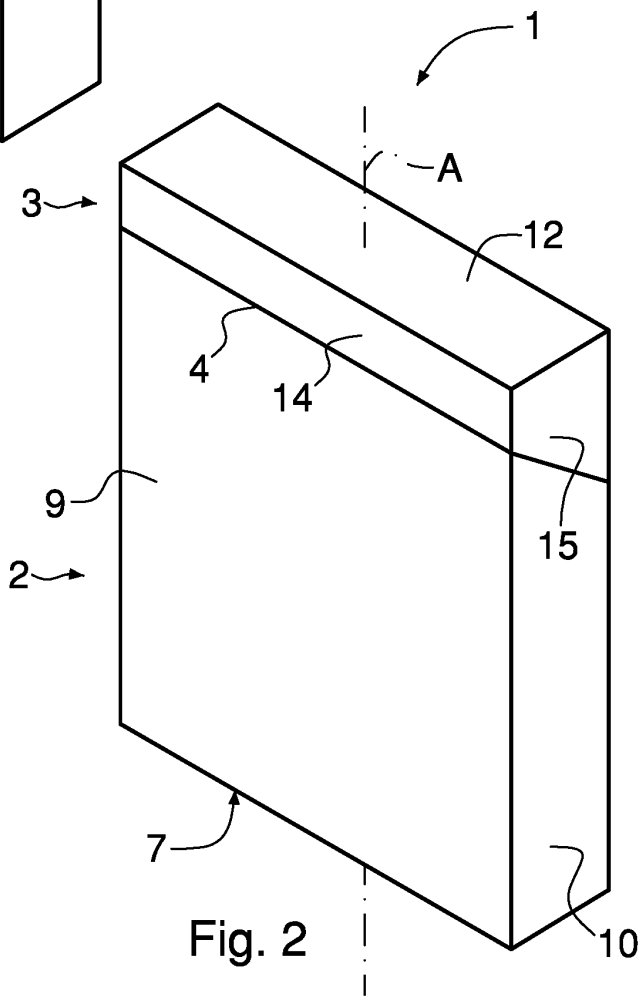
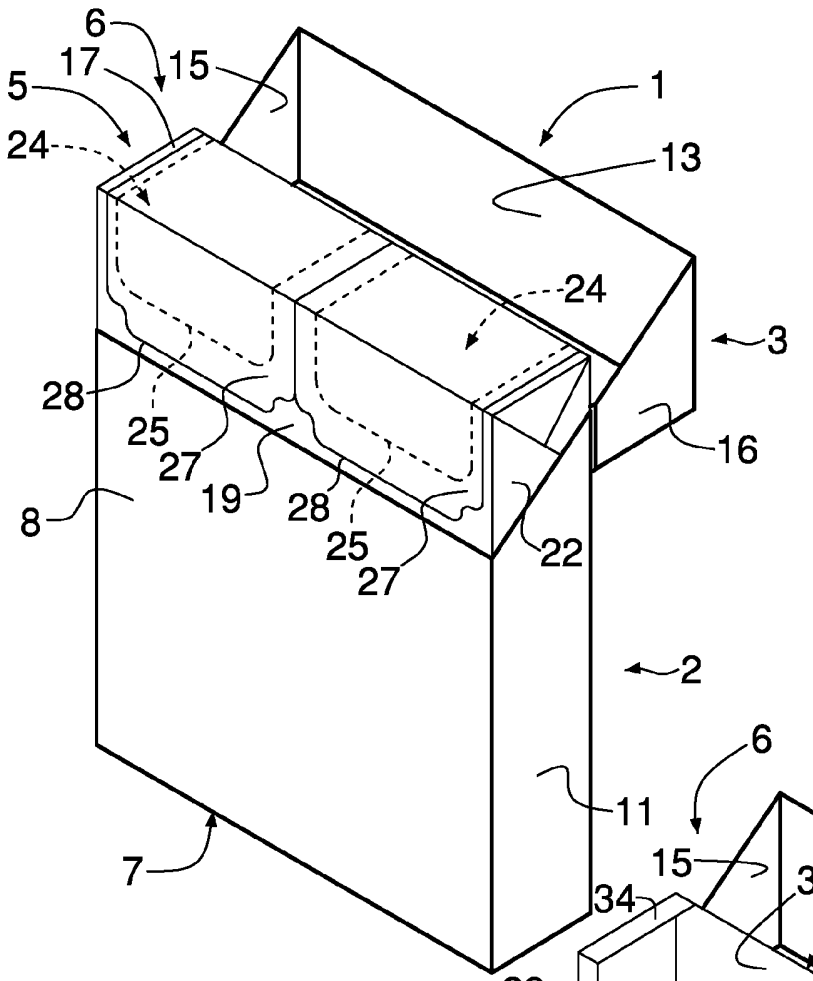


Fig. 2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17
15
5
24
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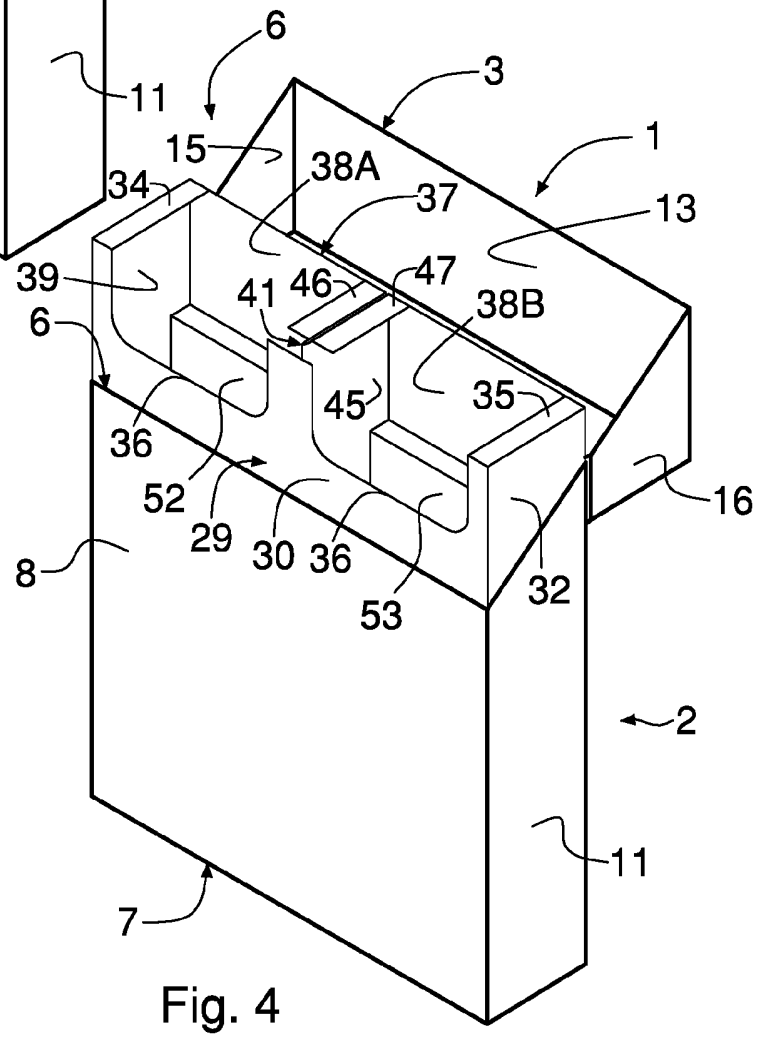
3
28
25
27
19
28
25
27
16
8
22
2
11
7

Fig. 3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38A
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37
13
39
41
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47
38B
6
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52
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36
16
8
53
32
2
11
7

Fig. 4

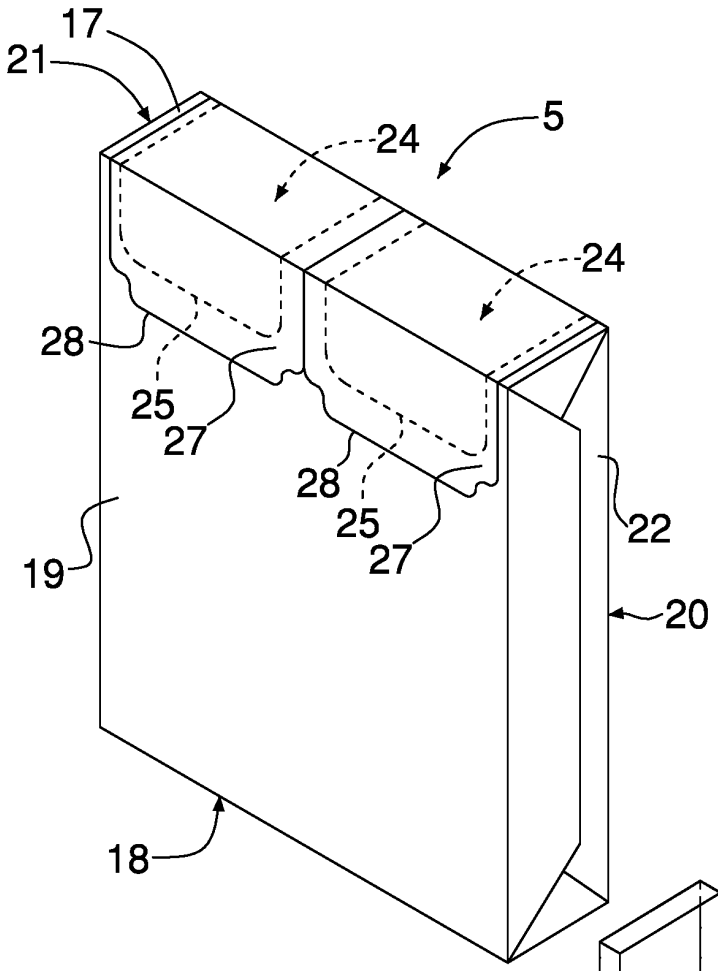

Fig. 5

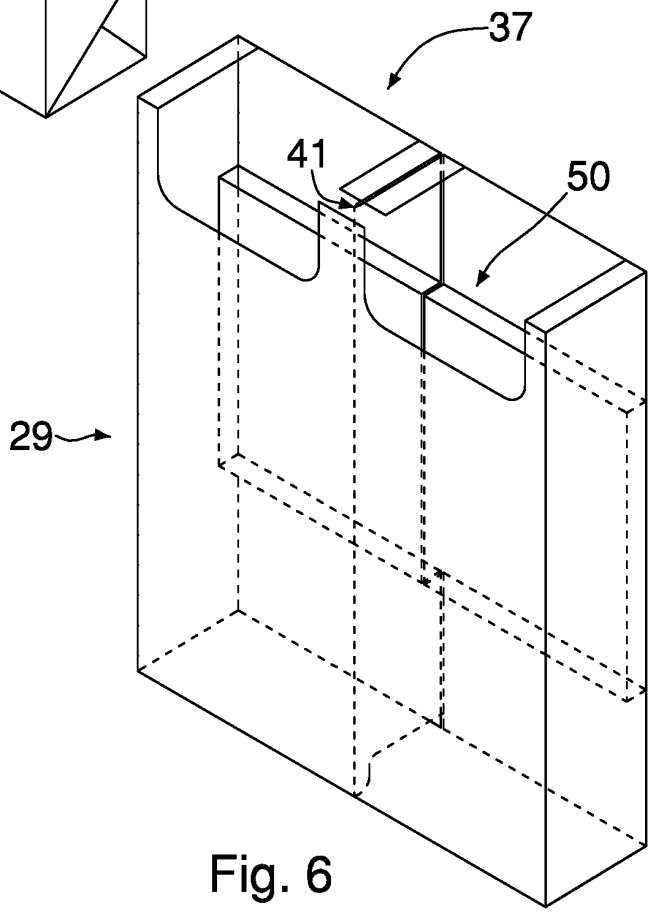

Fig. 6

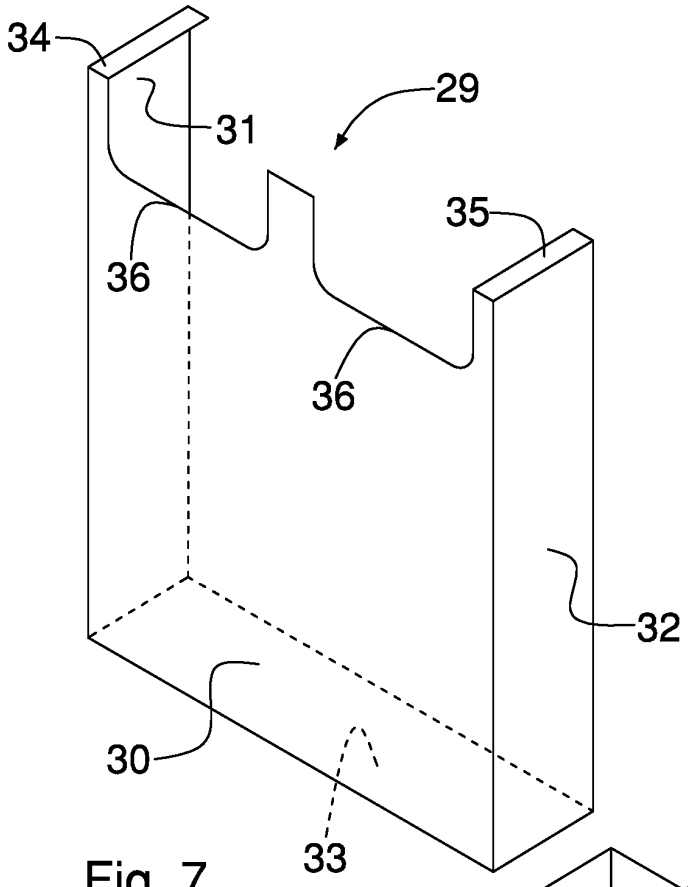
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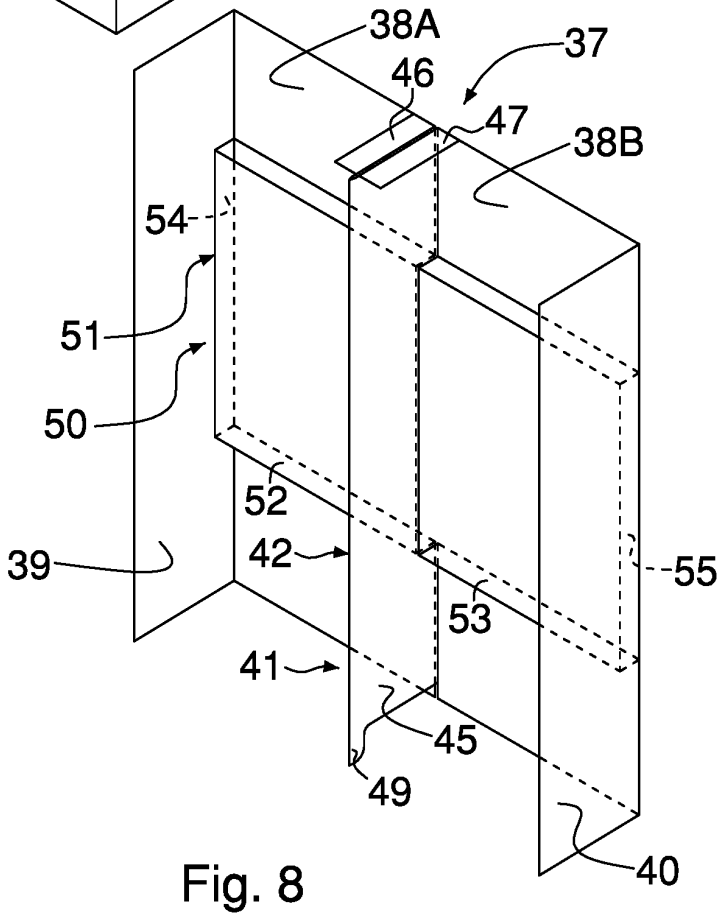
Fig. 7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38B
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51
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39
42
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45
49
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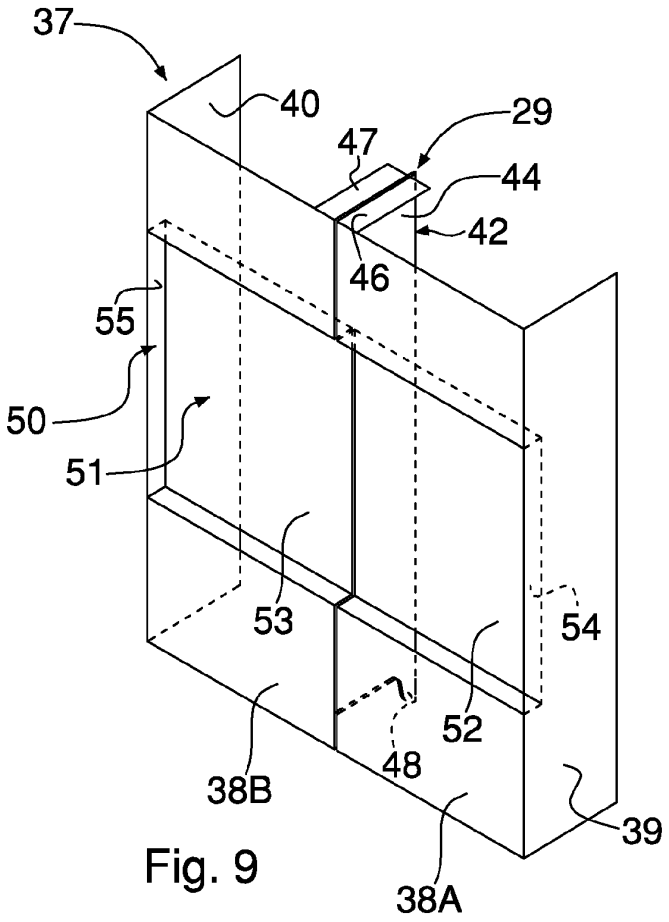
Fig. 8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38B
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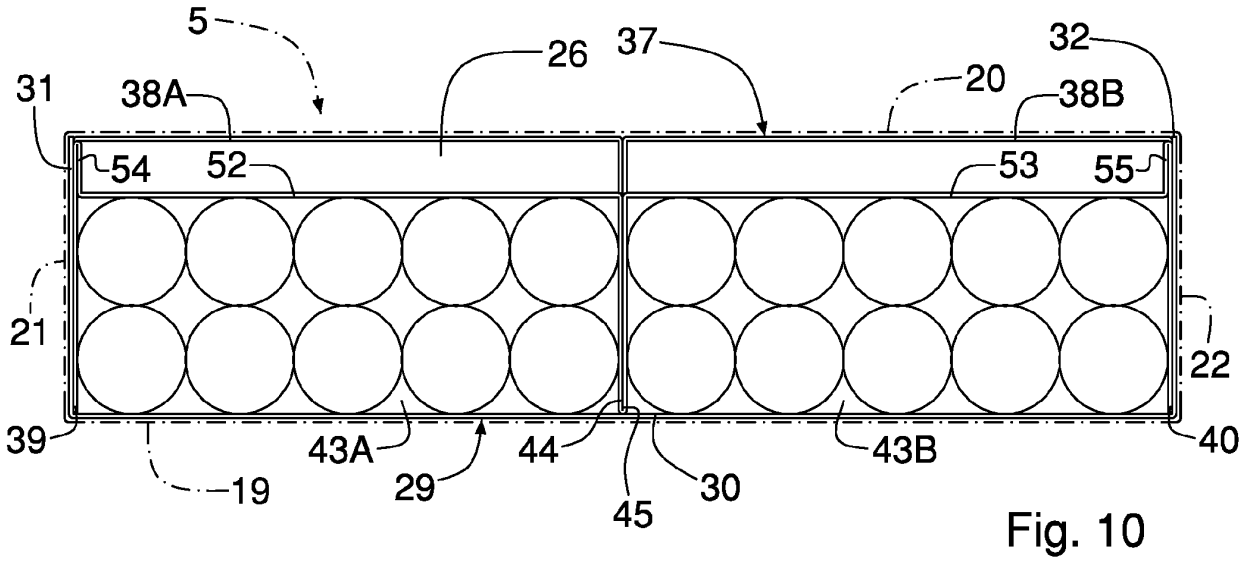
38A

Fig. 9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43B
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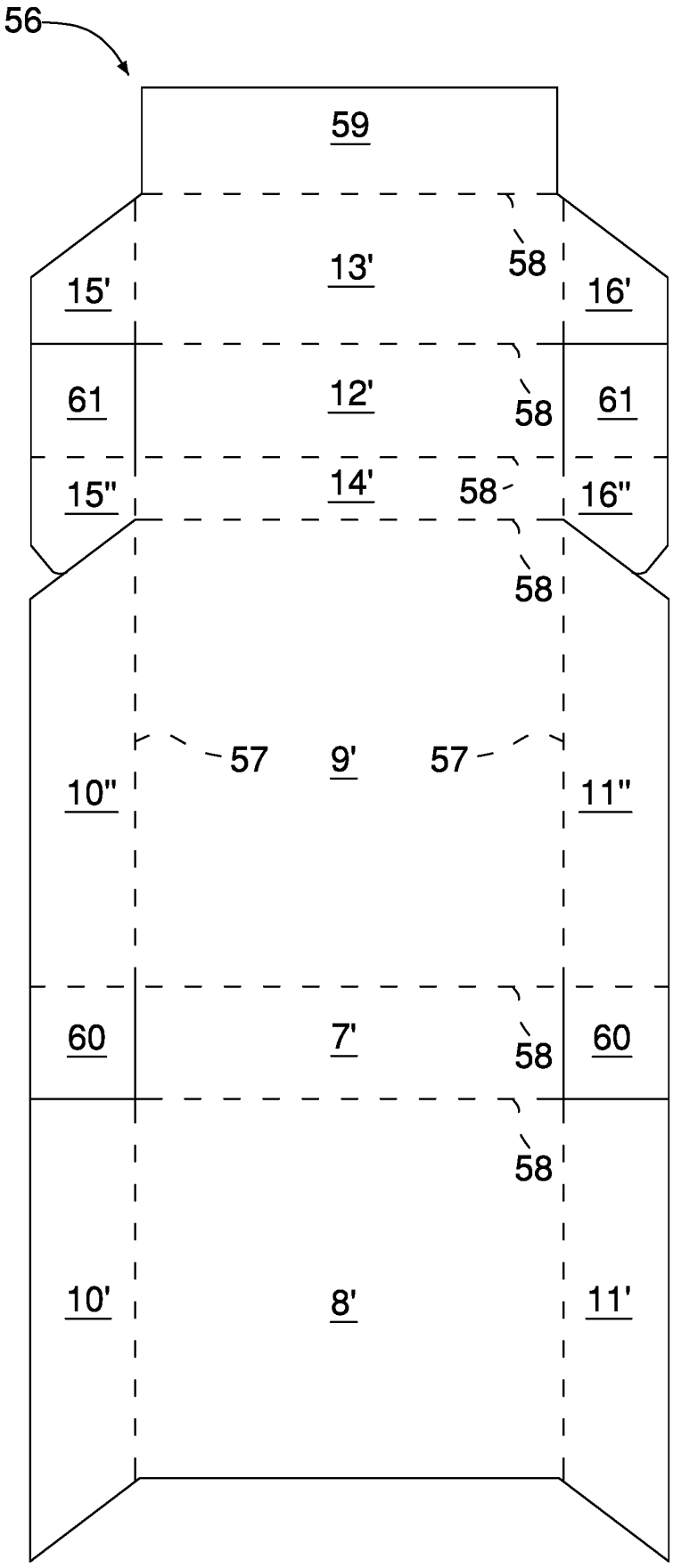
45
30

Fig. 10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59
13'
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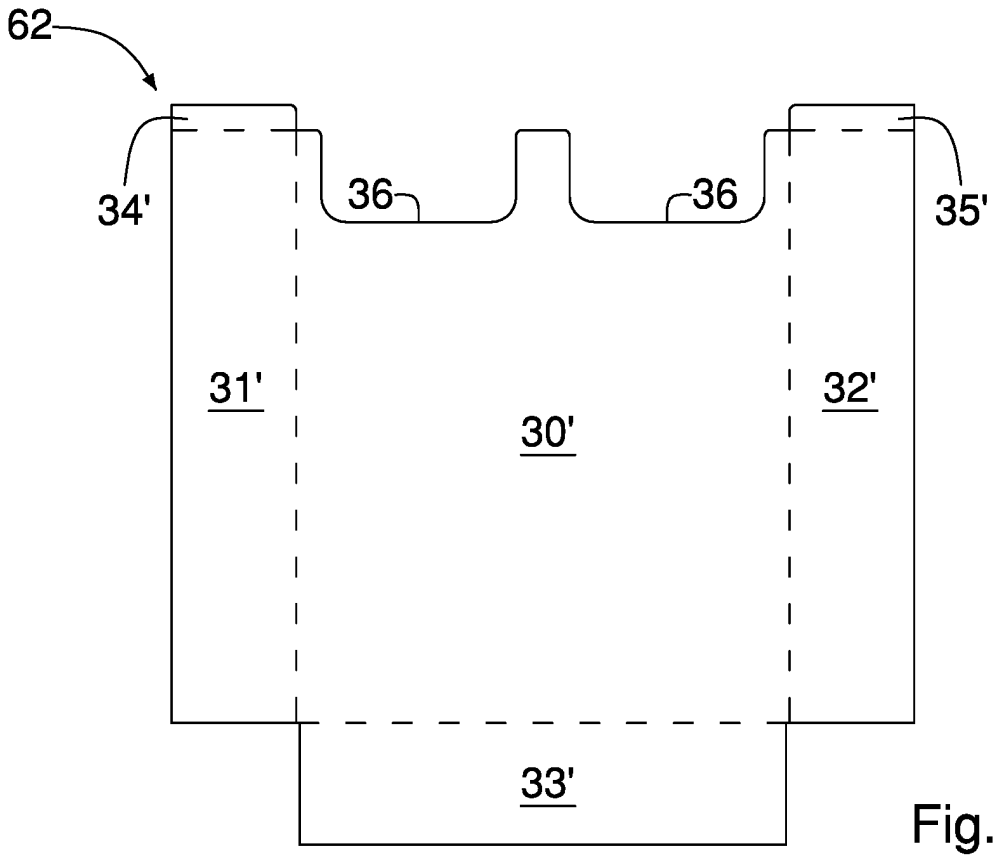
15'
16'
61
12'
58
61
15"
14'
58
16"
58
57
9'
57
10"
11"
60
7'
58
60
58
10'
8'
11'

Fig. 11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36
35'
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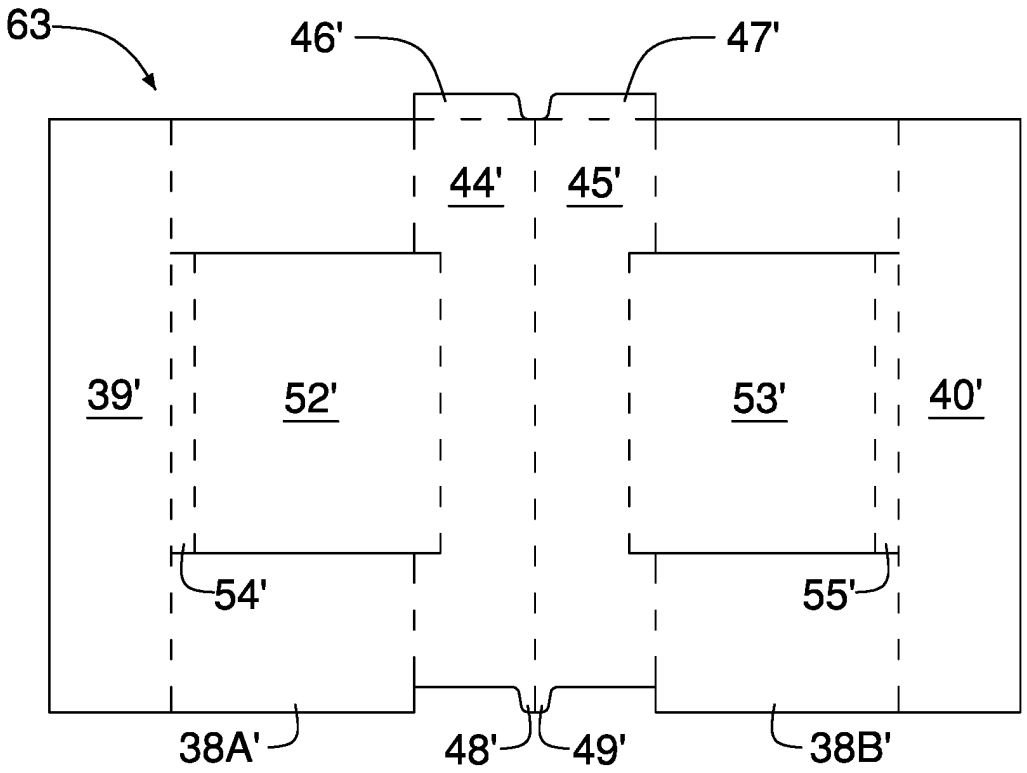
30'
32'
33'

Fig. 12


63
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47'
44'
45'
39'
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53'
40'
54'
55'
38A'
48'
49'
38B'

Fig. 13

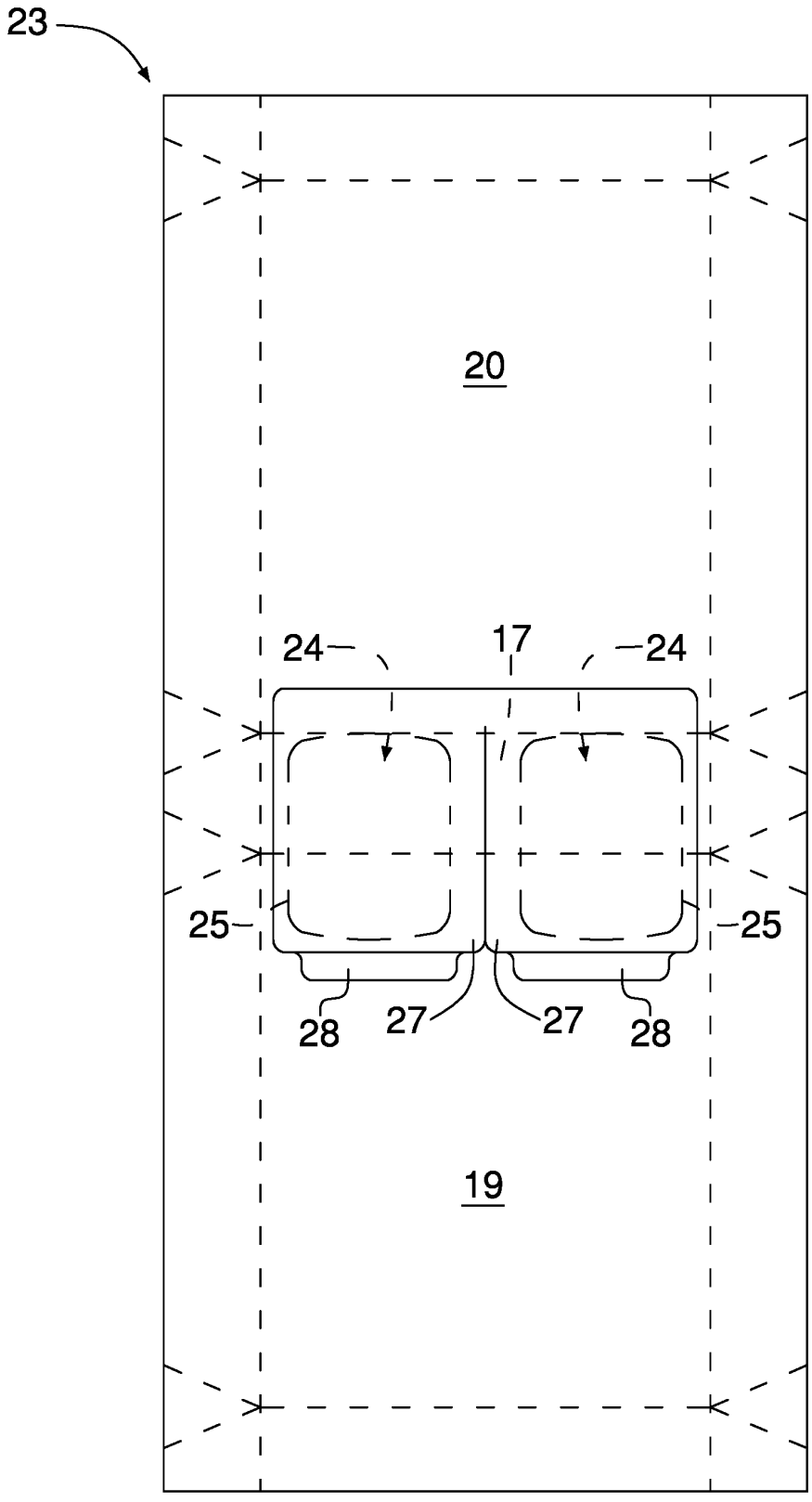

Fig. 14

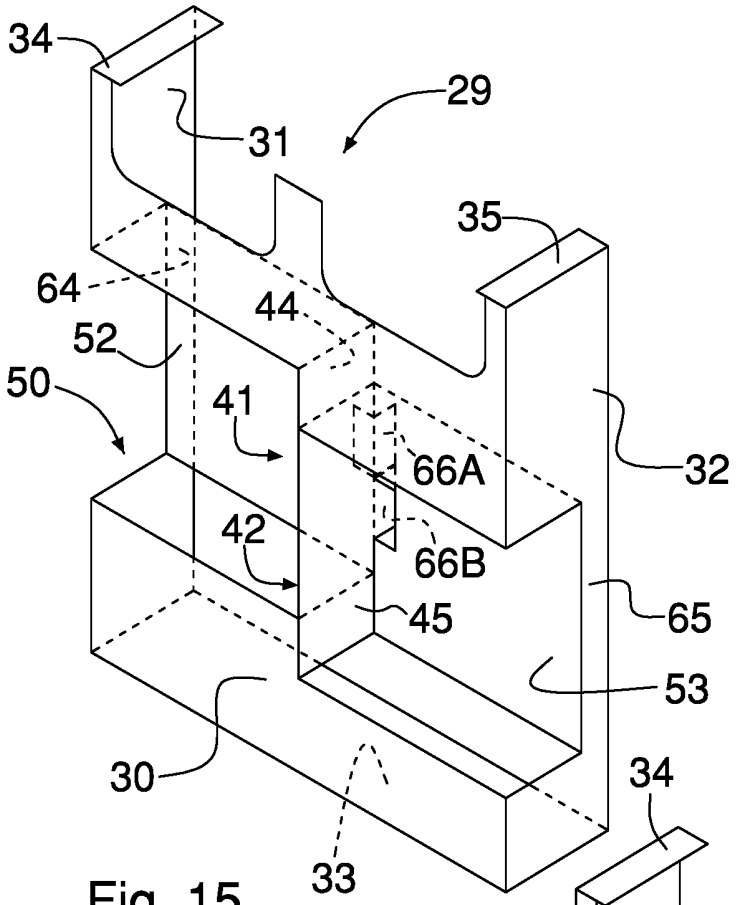
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Fig. 15

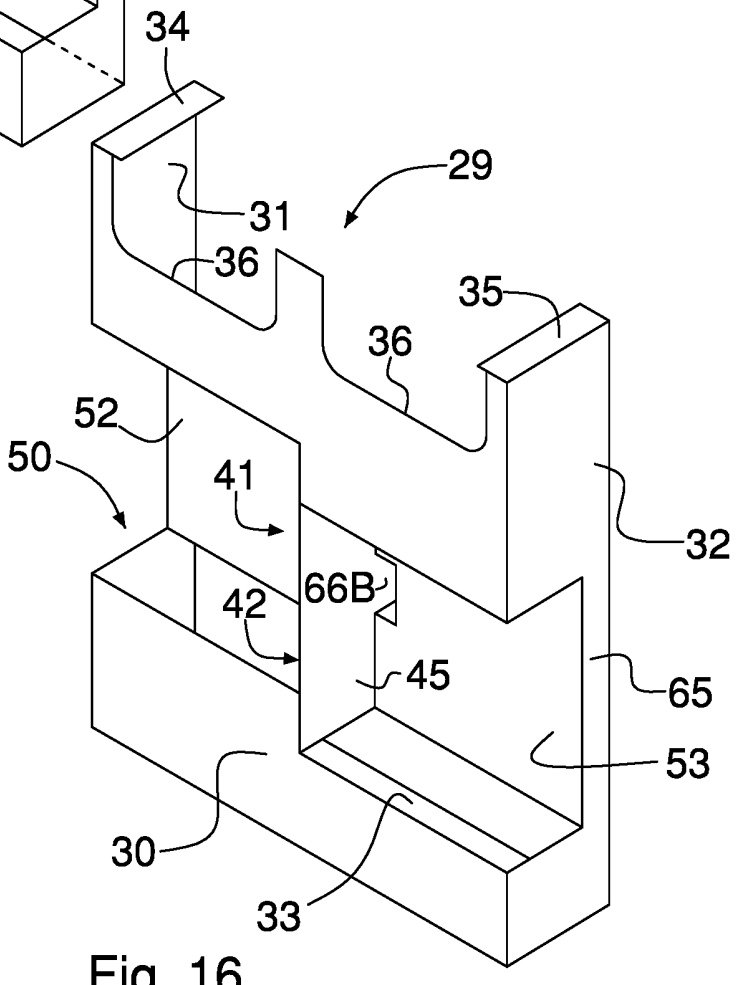
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Fig. 16

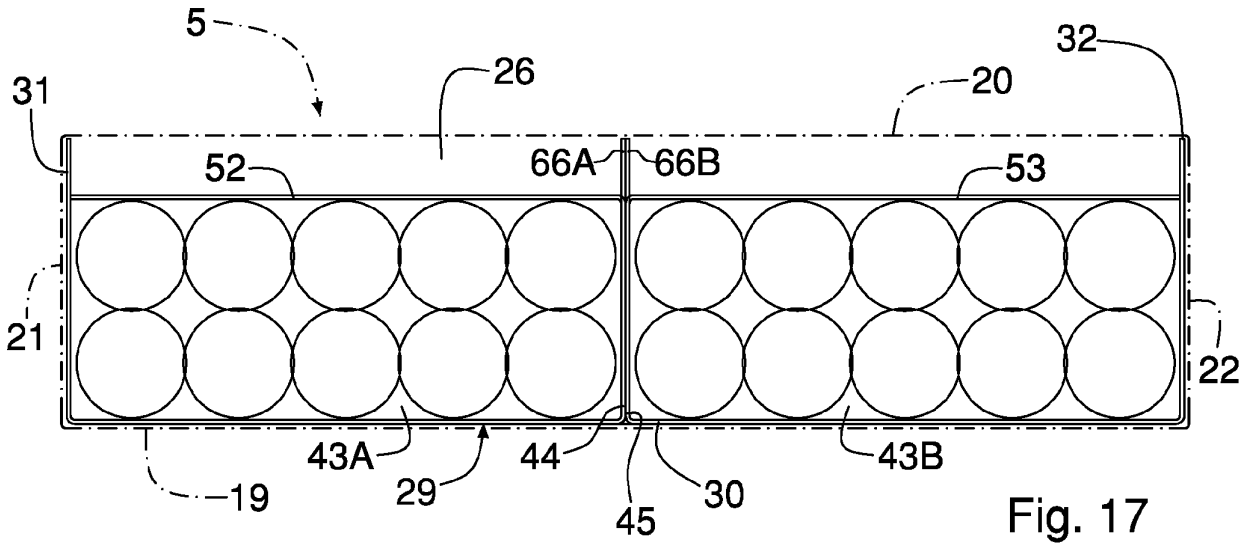
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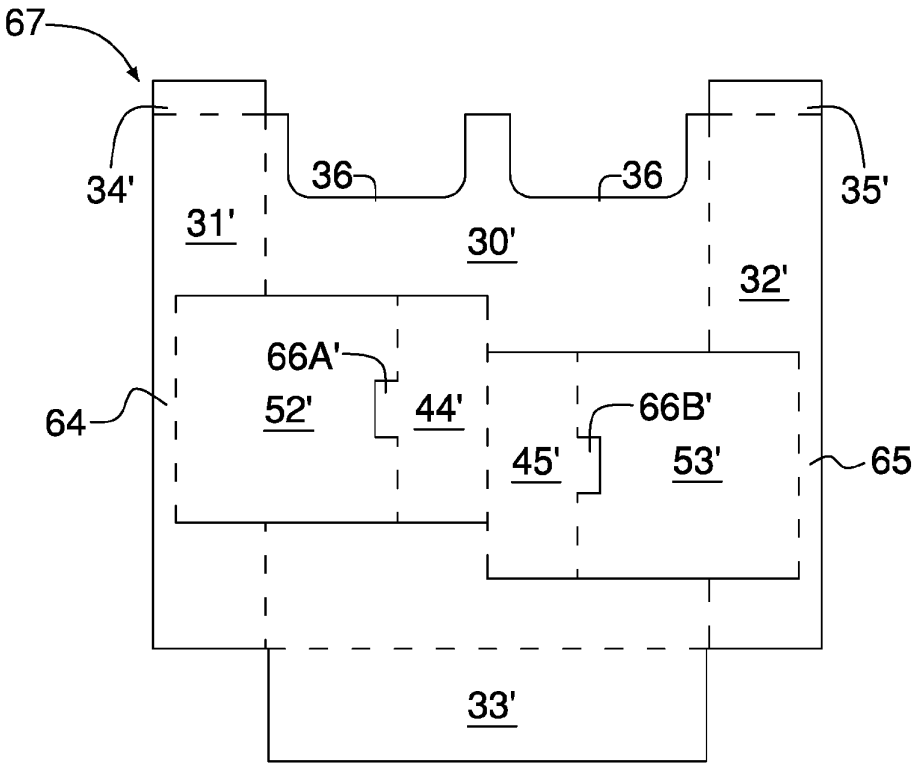
Fig. 17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53'
65
33'

Fig. 18

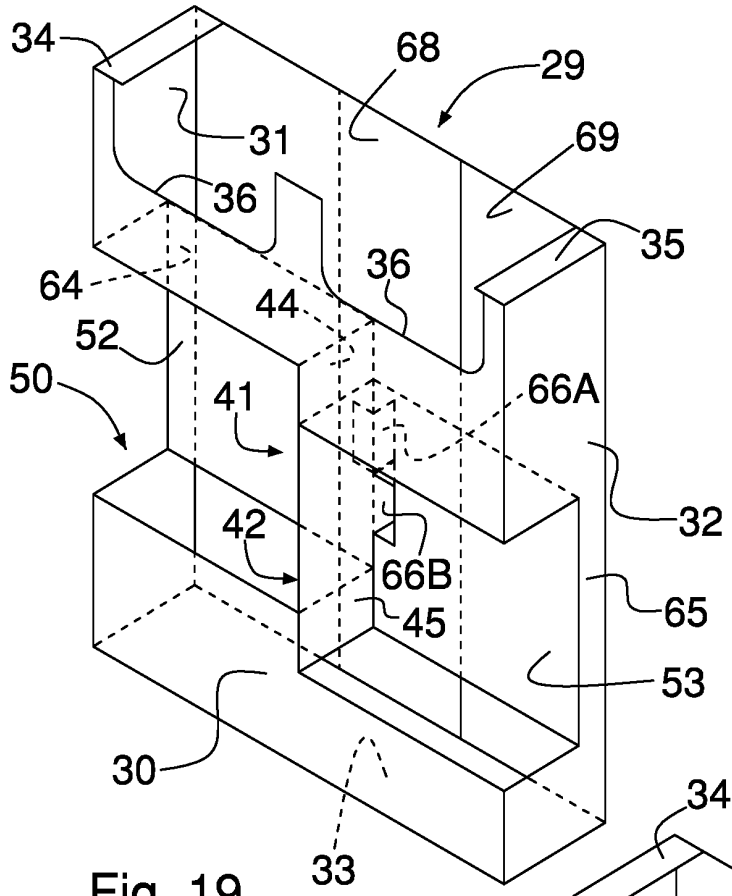
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Fig. 19

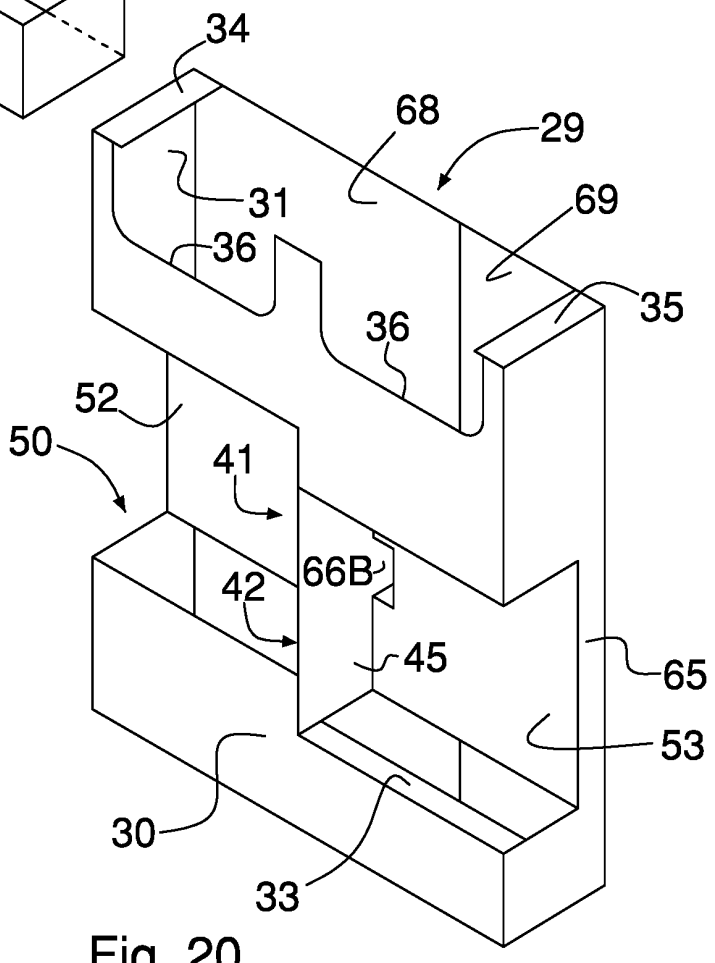
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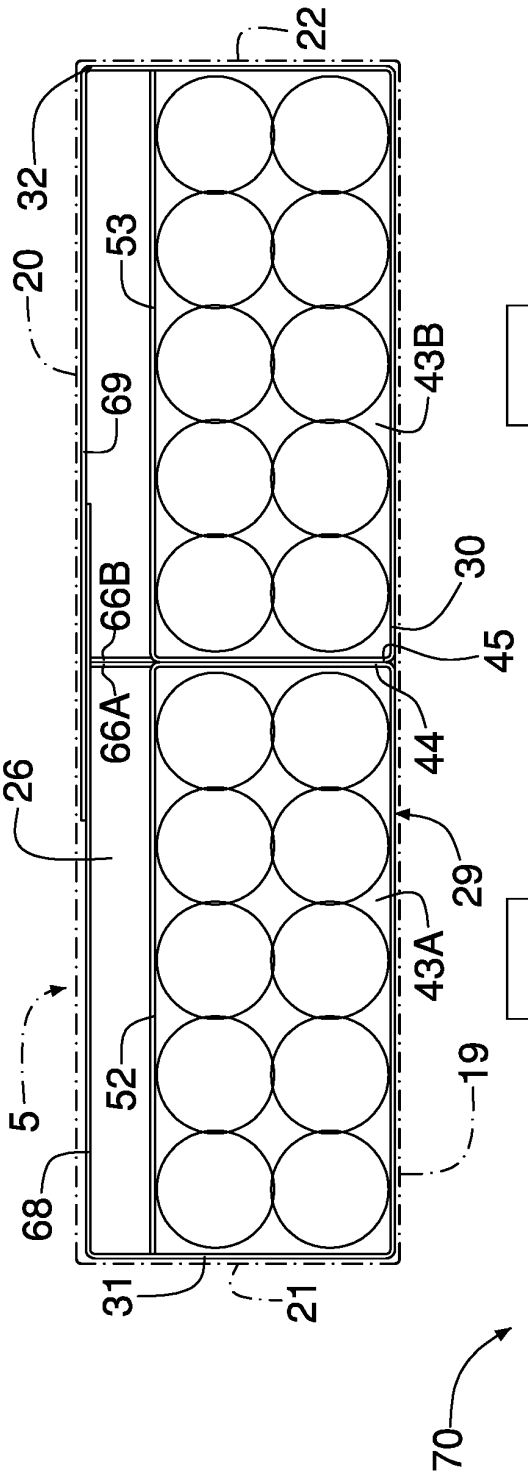
Fig. 20

Fig. 21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43A
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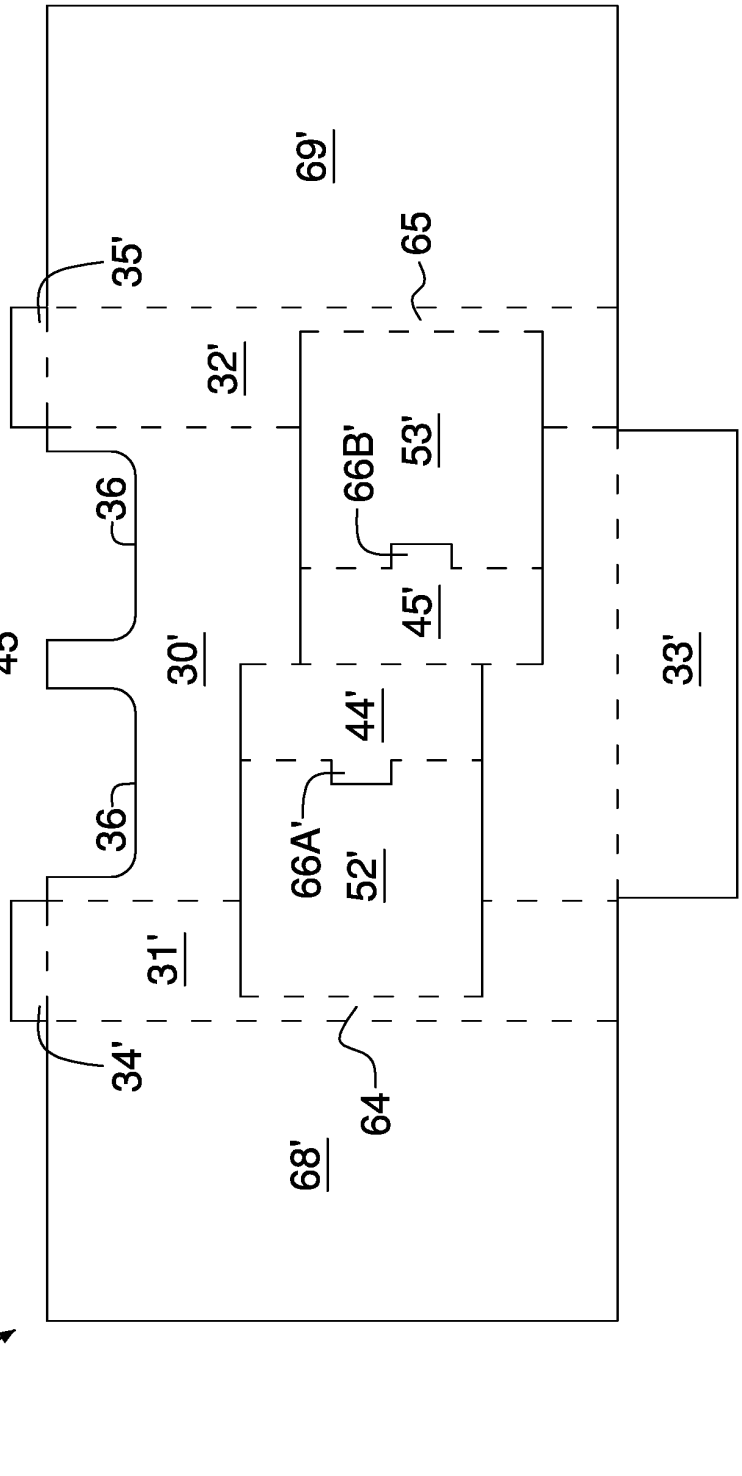
Fig. 22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66A'
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34'
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68'
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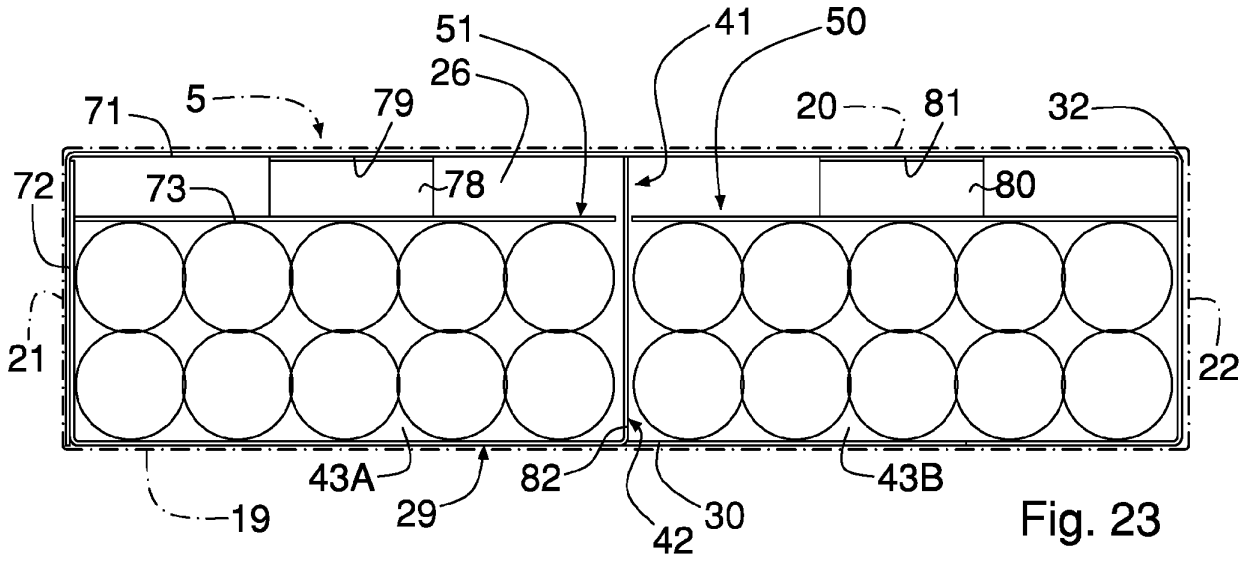
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43B
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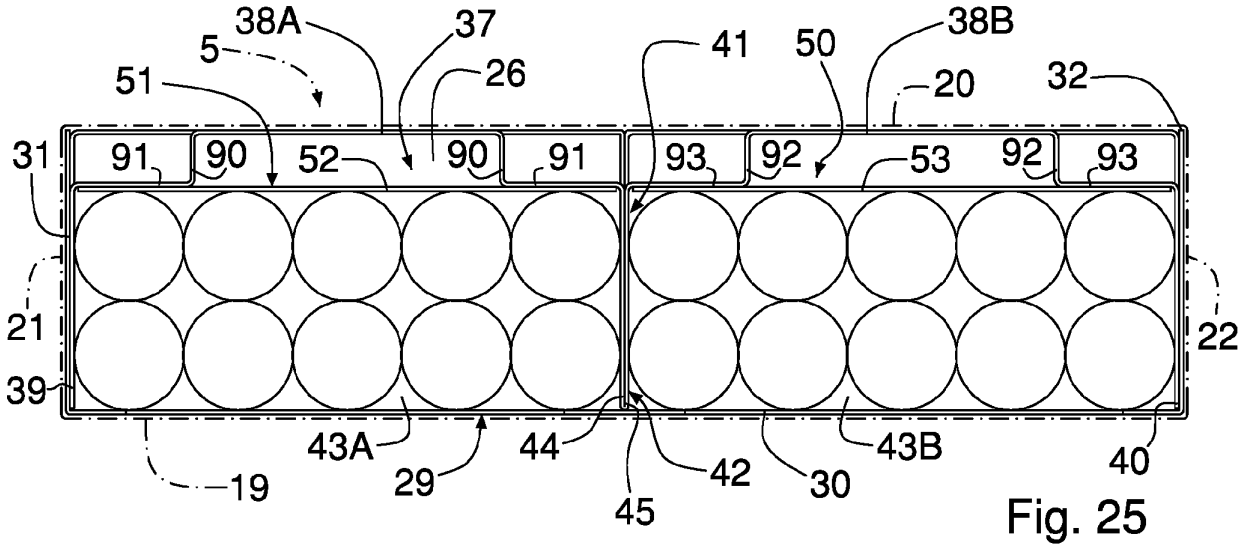
42

Fig. 23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43B
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42
30
45

Fig. 25

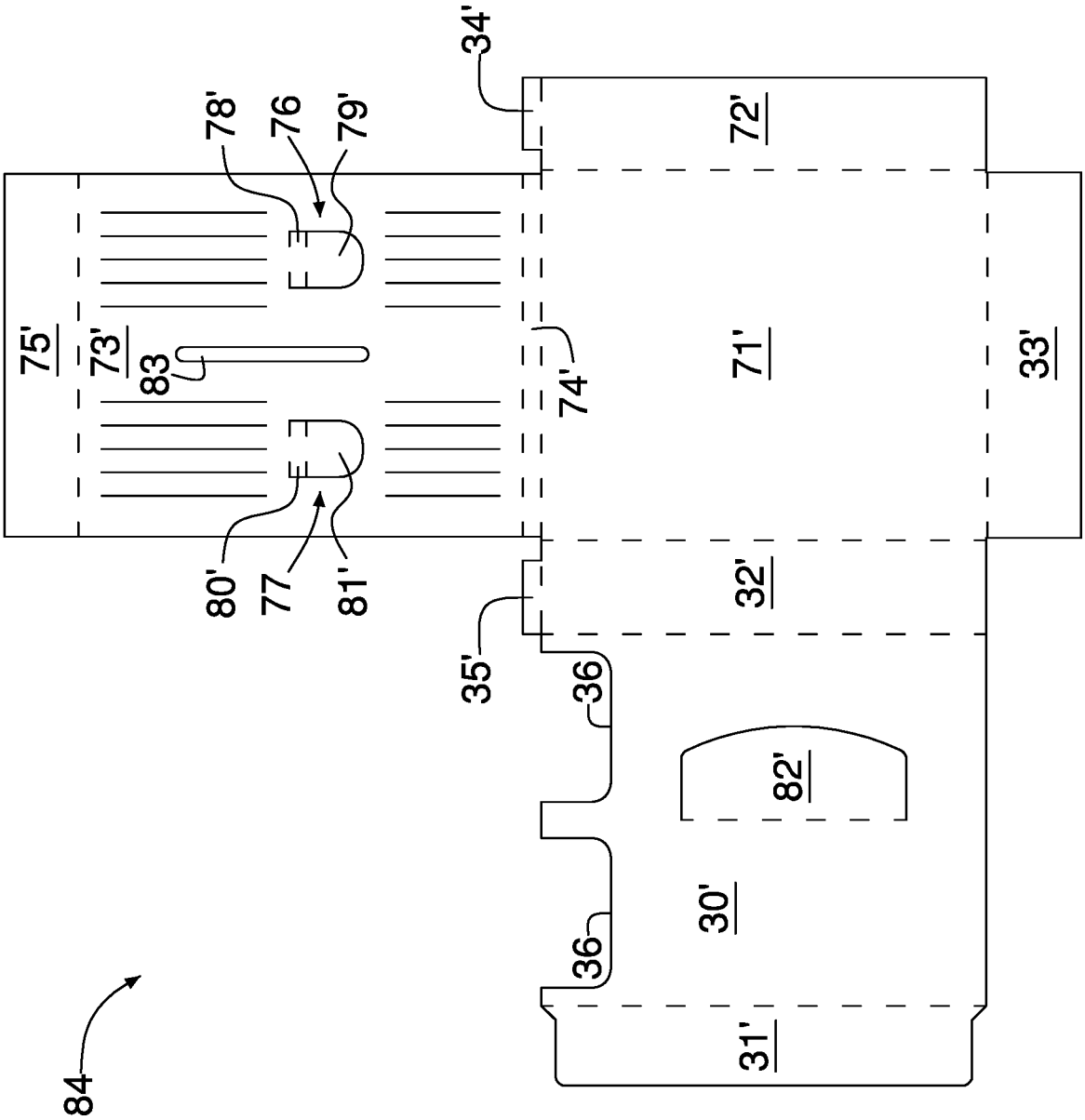
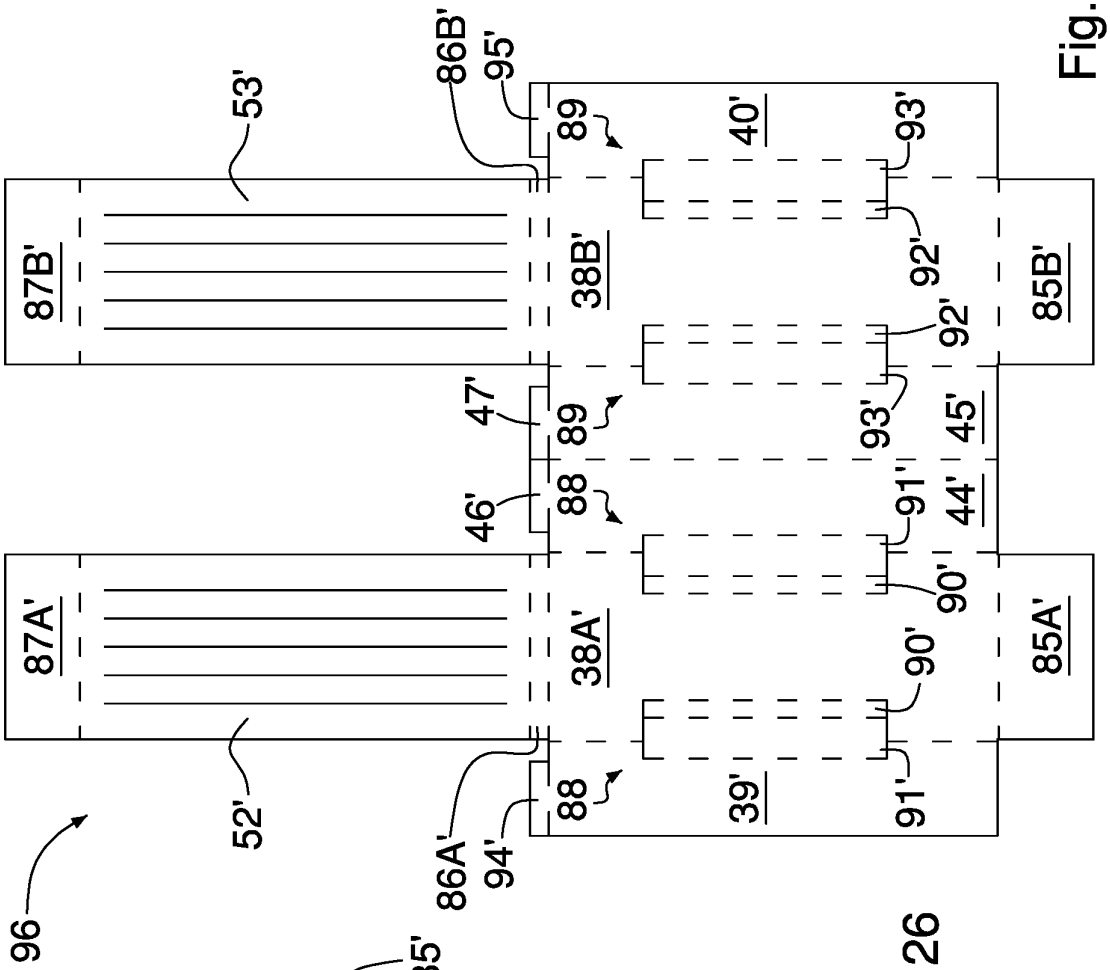


Fig. 24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86A'
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38A'
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92'
93'
91'
91'
90'
90'
45'
44'
85B'
85A'

Fig. 27

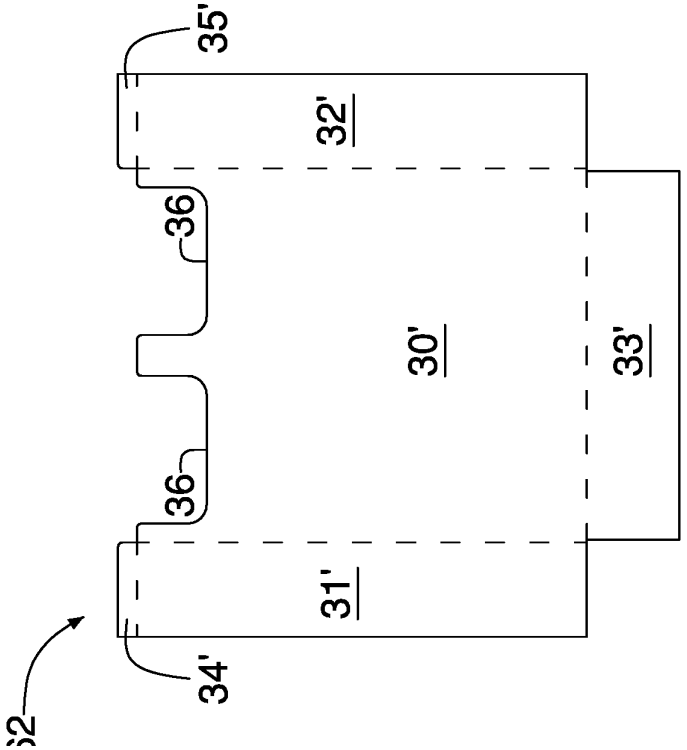
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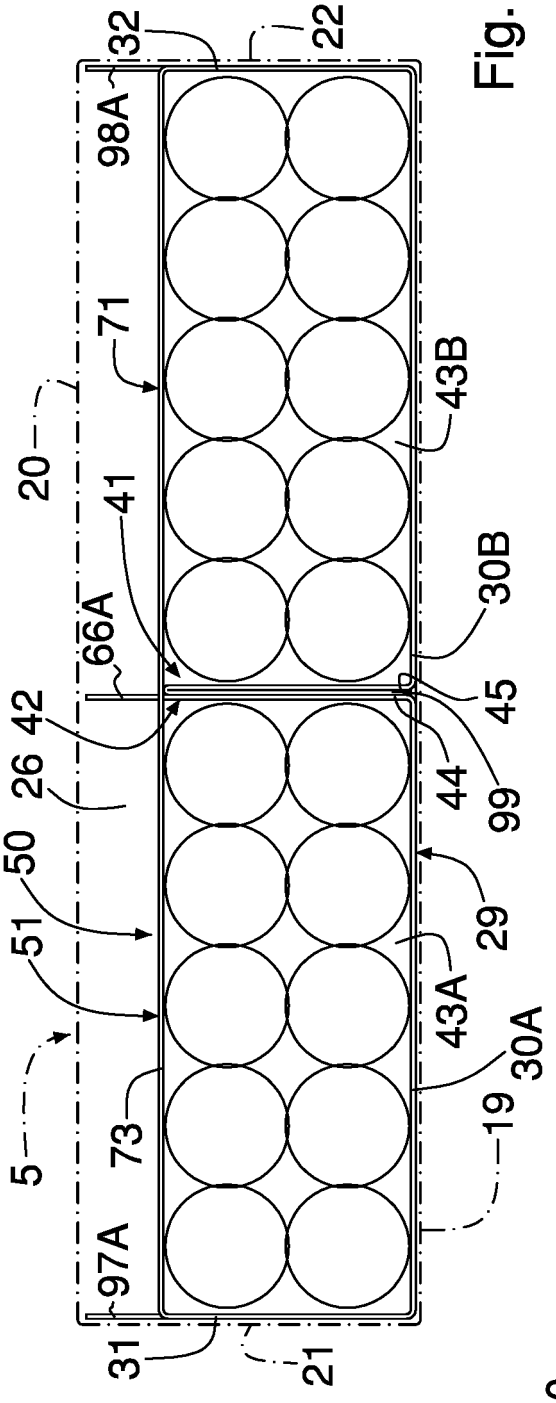
Fig. 26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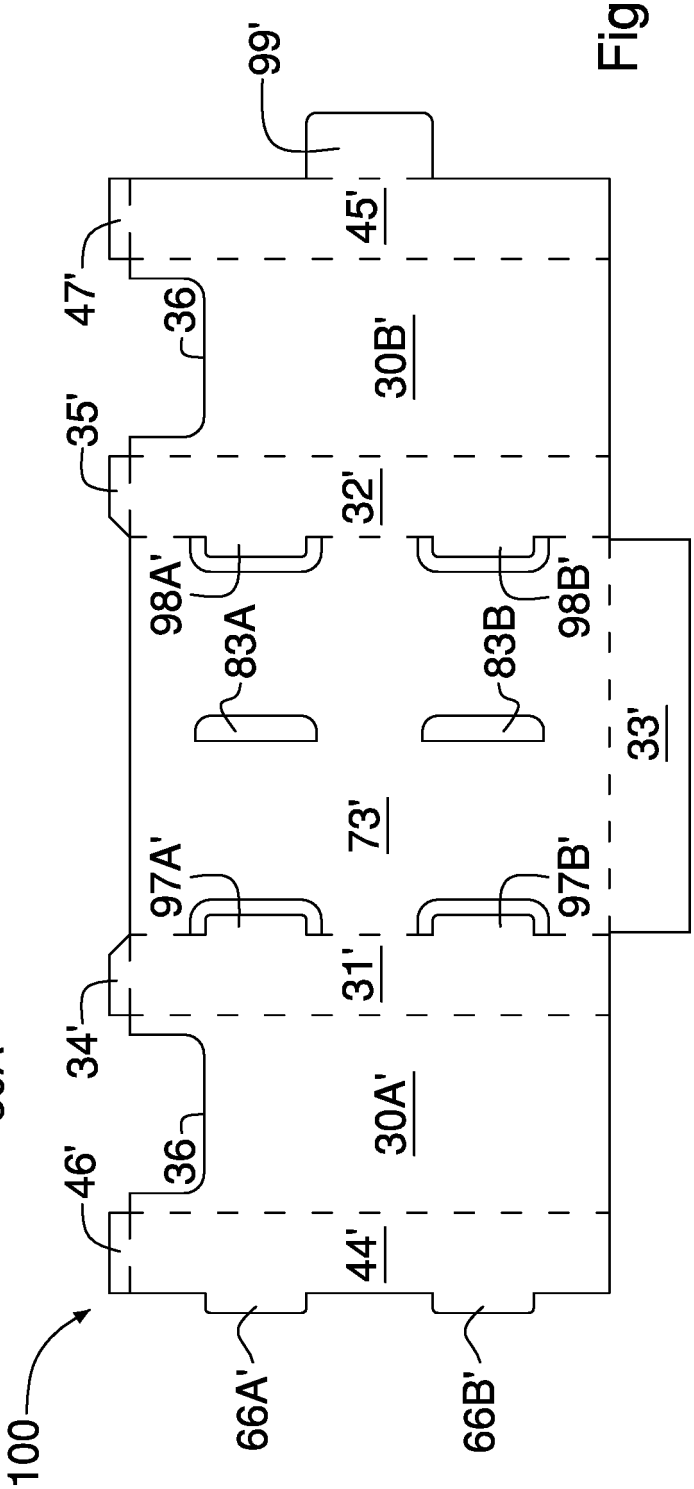
43A
30A
19

Fig. 28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83B
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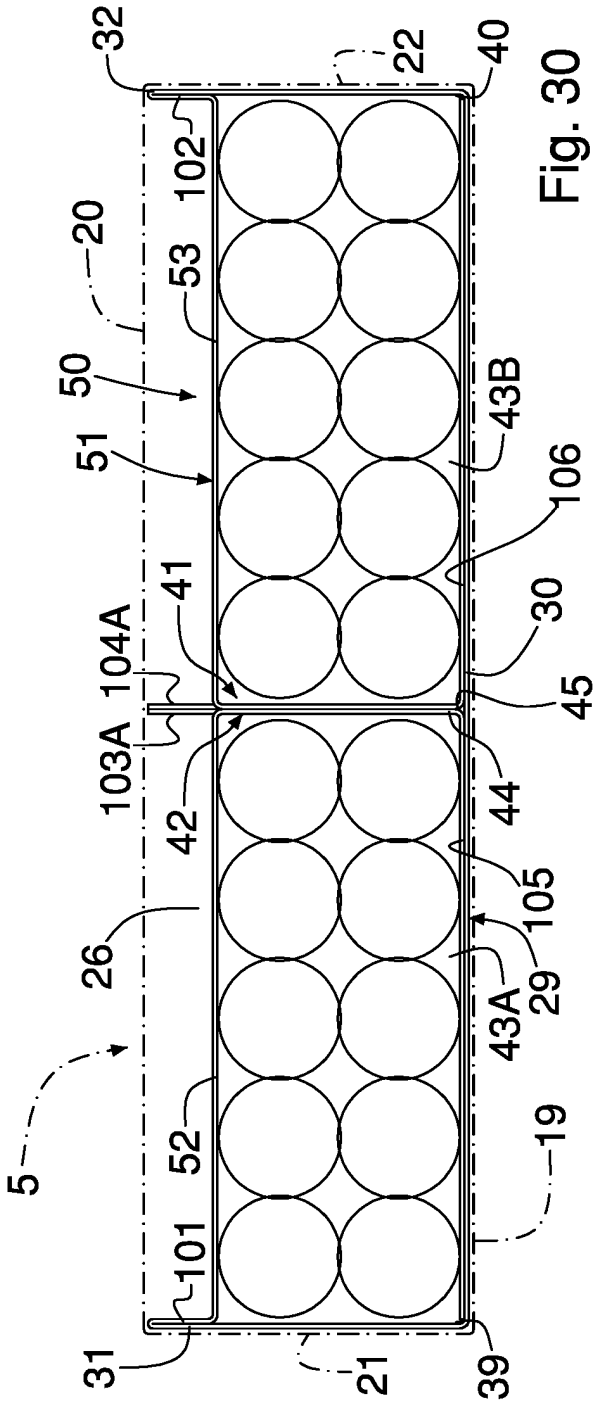
97B'
31'
34'
30A'
36
46'
44'
100
66A'
66B'

Fig. 29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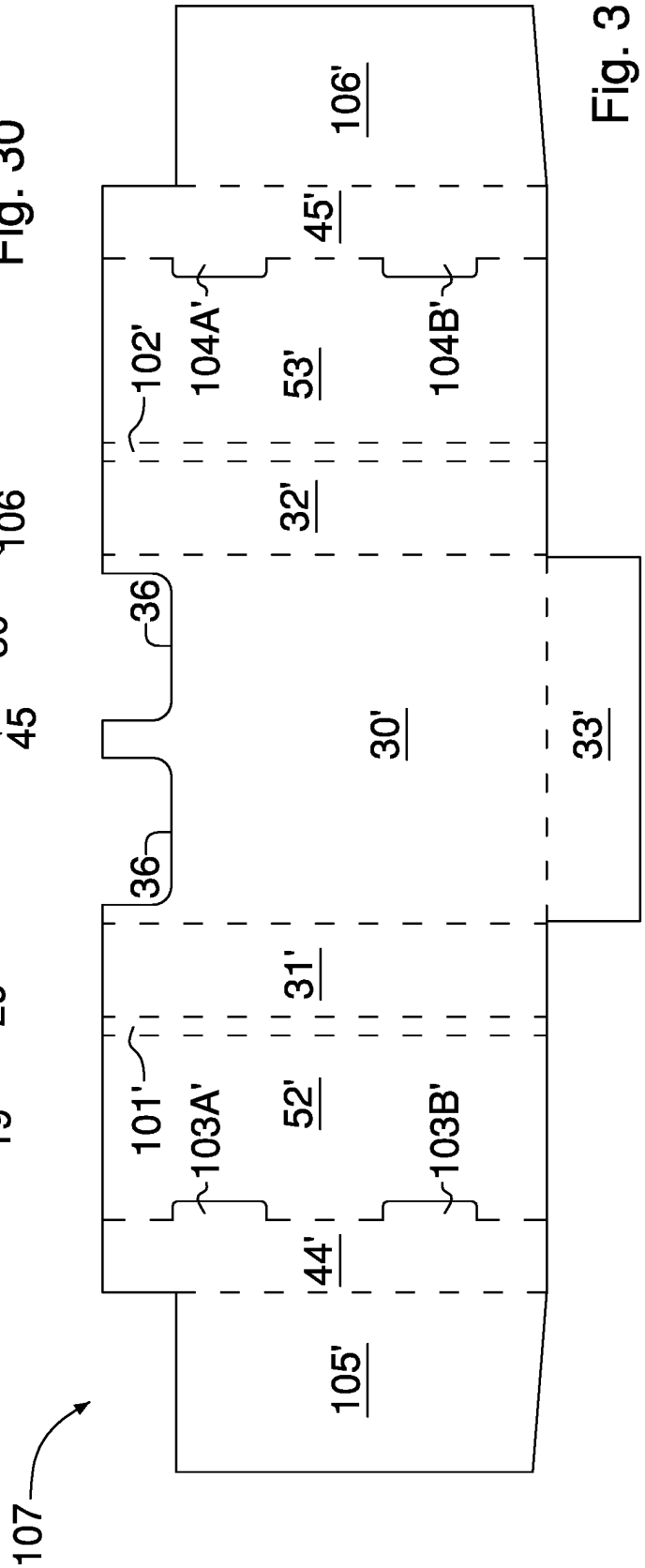
21
39

Fig. 30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104B'
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30'
33'
36
31'
101'
103A'
52'
103B'
44'
105'
107

Fig. 31

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- WO 2010026020 A1 **[0006] [0007] [0008]**
- WO 0230790 A2 **[0006] [0007] [0008]**