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(54) PACKAGE FOR TOBACCO RELATED ARTICLES HAVING SLIDABLE COMPARTMENTS

(57) A package for tobacco related articles comprising at least a first compartment (11) and a second compartment (12) is provided. The at least first compartment and second compartment are coupled to each other and the compartments are slidable with respect to each other between the first position and the second position. In the first position of the compartments at least an access opening of the first compartment is accessible and in the second position of the compartments, at least the access opening of the first compartment is inaccessible.

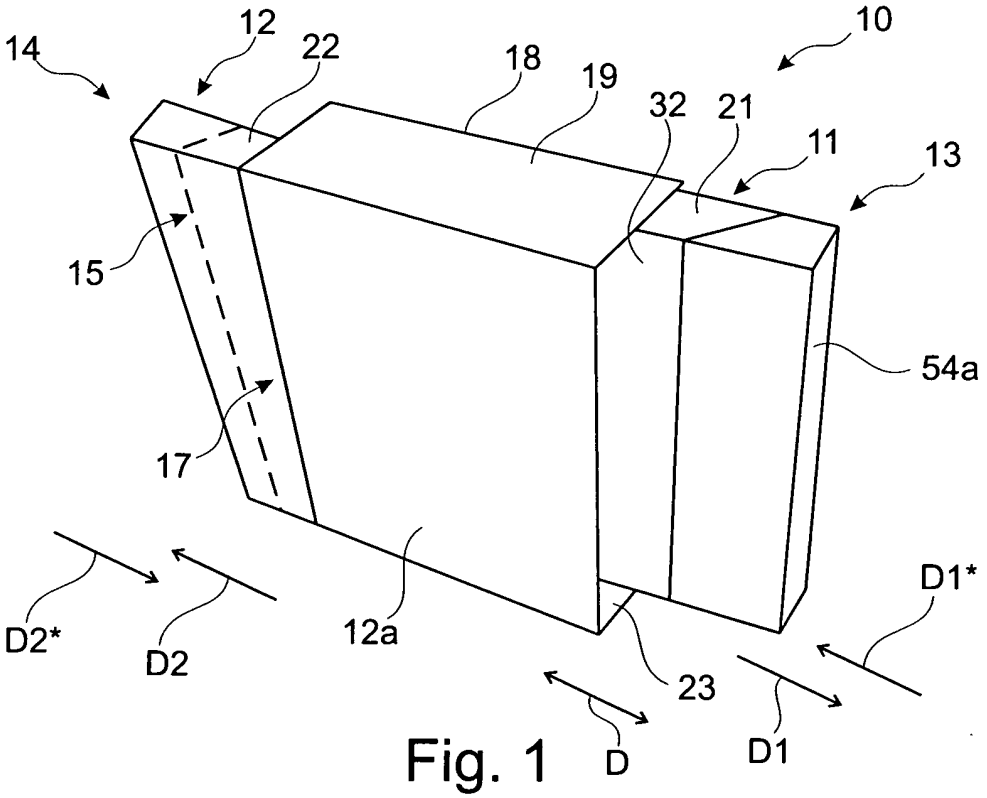

Fig. 1

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Description

FIELD OF THE INVENTION

[0001] The invention relates to a package for tobacco related articles comprising at least a first compartment and a second compartment, wherein the at least first compartment and the second compartment are coupled to each other and are slidable with respect to each other.

BACKGROUND

[0002] Tobacco related articles, preferably smoking articles like cigarettes or cigarillos, are often contained in disposable packages having a substantially cuboid or parallelepiped shape. A widespread type of a cigarette package is the hinged lid package. However, a variety of different packages for tobacco related articles is known, ranging from soft packs to classical cigarette or cigar boxes. Packages for tobacco related articles which depart from the classical hinged lid design are becoming more and more popular, for example, packages having a plurality of containers, boxes or compartments.

[0003] In document CN 2012/76282, there is a cigarette package having two compartments which are connected back to back and are movable with respect to each other. A backside of a first compartment is provided with a sleeve and the backside of a second compartment is provided with a sheet, which is connected to the sleeve and can move relative to this member. However, the package is rather fragile and the two compartments are likely to be detached during use.

[0004] Another multi-compartment cigarette package having movable compartments is disclosed in CN 2013/38814. The compartments are coupled using two L-shaped pieces, which project from the first compartment and penetrate through slits in the second compartment. The package comprises a jack member which causes a hinged lid of one of the compartments to open automatically, when the two compartments are displaced with respect to each other. However, the package has a complex structure.

SUMMARY

[0005] It is an object of the invention to provide an improved multi compartment package for tobacco related articles that is still simple but provides improved properties of opening and closing the package with respect to known packages.

[0006] In one aspect of the invention, a package for tobacco related articles is provided which comprises at least a first compartment and a second compartment, which may be suitable for accommodating the tobacco related articles. The at least first compartment and the second compartment may be coupled to each other. The compartments may be slidable with respect to each other between a first position and a second position. In the first position of the compartments, at least a first access opening of the first compartment may be accessible. In the second position of the compartments, at least the first access opening of the first compartment may be inaccessible. In particular, in the first position, the first access opening of the first compartment and a second access opening of the second compartment may be accessible. Furthermore, in the second position of the compartments, the first access opening of the first compartment and the second access opening of the second compartment may be inaccessible.

[0007] When the compartments are in the second position, the access openings are advantageously inaccessible and a user may not open a compartment accidently. This reduces the probability for unintended loss of the tobacco related articles. Furthermore, the package is easy to handle and provides an attractive technical function. Advantageously, different tobacco related articles or different tobacco products may be stored in the two compartments. For example, different types of tobacco related articles or differently flavored tobacco related articles may be provided in the two compartments. The package provides an appealing visual and haptic experience to its user. Furthermore, in the open state of the package, which may be the first position of the compartments, the surface of the package provides an increased space, which is available for customer information.

[0008] According to an embodiment of the invention, the first compartment and the second compartment each comprise a front wall and a rear wall. The front wall and the rear wall can be opposite to each other with respect to an interior of the compartment. The first compartment and the second compartment may be coupled to each other at their rear walls. The first access opening, which provides access to the interior of the first compartment, may be arranged in the rear wall of the first compartment. Similar, a second access opening for providing access to an interior of the second compartment may be arranged in the rear wall of the second compartment. In particular, at least one of the access openings may be a cutout in the rear wall of the first compartment and / or the second compartment, respectively. In the second position of the compartments, which is a closed position of the package, the rear walls of the compartments almost entirely cover each other. When the two compartments are moved into the first position and the package is opened, a part or a section of the rear walls of the compartments is uncovered and will be accessible to a user. The access opening(s) may be arranged in this exposed part of the rear wall(s). The tobacco related articles inside the compartments are accessible to a user.

[0009] Advantageously, the package may be handled very easily. A sliding movement of the two compartments with respect to each other is sufficient to open or close the package. At the same time, the design or construction of the package is simple and economic. A rear wall of the first compartment closes the second access opening of the second compartment and vice versa, when the

compartments are in the second position. No hinged lid or other sealing is necessary for closing the access openings of the compartments; not withstanding that in other embodiments the compartments may be provided with a hinged lid. The simple design of the package may be advantageous with respect to its production cost.

[0010] Each compartment, i. e. the first compartment and the second compartment, may further comprise: a top wall, a bottom wall and a pair of side walls. The front wall and the rear wall, the top wall and the bottom wall and the pair of side walls may be arranged to be opposite to each other with respect to the interior of the compartment. Depending on the particular design of the first compartment or the second compartment, either one of the side walls may be a part of a hinged lid. Furthermore, a top wall of the package may be a part of a hinged lid. In other words, a hinged lid may be arranged either at a top or at a lateral side of the compartment. Only one of the two compartments or both compartments of the package may have a hinged lid. For example, one compartment may comprise a hinged lid and the other compartment may comprise an access opening in the rear wall.

[0011] In particular, the rear wall of the first package may comprise a slit. The rear wall of the second compartment may comprise a connecting member. The first compartment and the second compartment may be coupled to each other by inserting the connecting member through the slit such that the connecting member is arranged in the interior of the first compartment. The connecting member may be a part of the rear wall of the second compartment. Furthermore, the connecting member may be cutout of the rear wall of the second compartment. A distant portion of the connecting member, which may be arranged at a free end of the connecting member, may be enlarged. The distant portion may have a greater width than a portion or section of the connecting member which is coupled to the rear wall of the compartment. For example, the connecting member may be shaped like an arrow, wherein the arrow head is arranged at the distant portion of the connecting member. This shape of the connecting member facilitates the insertion of the connecting member into the slit. At the same time, the enlarged distant portion serves as a retention member and prevents the connecting member from being pulled out of the slit.

[0012] According to another advantageous aspect of the invention, the package comprises a support structure. The support structure may comprise a deflecting member which may be surrounded by a conveyor belt. The conveyor belt may be coupled to the first compartment and to the second compartment. The first compartment and the second compartment may be slidable with respect to the support structure. A first displacement of the first compartment may be transferred into a second displacement of the second compartment, by help of the conveyor belt. The first displacement may have a first direction and the second displacement may have a second direction. The first direction may be substantially opposite to the second direction. The displacement of the first compartment may be transferred into the second displacement of the second compartment by help of a rotation of the conveyor belt around the deflecting member.

[0013] A movement or displacement of the first compartment is advantageously coupled to a movement or displacement of the second compartment. The package offers a coupled and automatic movement of the two compartments. The user pushes a first compartment and the second compartment will automatically follow, however, in opposite direction. Similar, a displacement of the second compartment causes an opposite displacement of the first compartment.

[0014] A direction of movement of the conveyor belt may be substantially perpendicular to a length extension of the deflecting member. In particular, the direction of movement of the conveyor belt may be substantially perpendicular to a length extension of the package. The first compartment and the second compartment of the package slide sideways, when the package is handled in upright position. There is a surprising and unexpected automatic movement of the compartments.

[0015] According to another advantageous embodiment of the invention, the support structure further comprises a top panel and a bottom panel. The top panel and the bottom panel may project in a plane which is substantially perpendicular to a length extension of the deflecting member. Furthermore, the top panel can at least partially cover the top walls of the compartments, i. e. the top wall of the first compartment and the top wall of the second compartment. Similar, the bottom panel of the support structure can at least partially cover the bottom walls of the compartments. The compartments of the package are protected by the support structure. Furthermore, the support structure guides the sliding movement of the first and the second compartment.

[0016] Advantageously, the support structure may further comprise a front panel and a rear panel. The front, rear, top and bottom panel can form a frame. The frame can at least partially surround the first compartment and the second compartment. This frame protects the front wall(s) of the compartments and increases the mechanical stability of the package. A durable package may be provided, which has an attractive visual appearance and offers a surprising mechanical function. Furthermore, the support structure protects the compartments.

[0017] The deflecting member can project between the top panel and the bottom panel of the frame, i. e. of the support structure. The deflecting member may project inside an interior space which is surrounded by the frame. Furthermore, the deflecting member may project between the top panel and the bottom panel of the supporting structure in a center of the interior space.

[0018] According to still another advantageous embodiment of the invention, the first compartment and the second compartment each comprise a top wall, a bottom wall, a front wall and a rear wall. The front wall and the rear wall may be opposite to each other with respect to

an interior of the compartment. Similar, the top wall and the bottom wall may be opposite to each other with respect to the interior of the compartment. At least one of the two compartments may comprise and access opening for providing access to the interior of the compartment. The access opening may be arranged on a lateral side surface of the compartment. This side surface is adjacent to the top wall, the bottom wall, the front wall and the rear wall. The conveyor belt may be coupled to a respective one of the rear walls of the first compartment and the second compartment.

[0019] Advantageously, the support structure can at least partially contact the front wall, the top wall and the bottom wall of either one of the first compartment and the second compartment. Furthermore, the deflecting member may be adjacent to the rear wall of the first compartment and adjacent to the rear wall of the second compartment. The deflecting member may project between the rear wall of the first compartment and the rear wall of the second compartment. However, according to this embodiment, the deflecting member does not directly contact the rear walls, at least in a section of the deflecting member, which is surrounded by the conveyor belt. In other words, a first section of the conveyor belt may be arranged between the rear wall of the first compartment and a first side of the deflecting member. A second section of the conveyor belt may be arranged between the rear wall of the second compartment and a second side of the deflecting member, which is opposite to the first side. Advantageously, the support structure, in particular the frame and the deflecting member, guide(s) the first compartment and the second compartment during the sliding movement.

[0020] According to still another advantageous embodiment of the invention, the front panel of the support structure at least partially contacts the front wall of the first compartment. The rear panel of the support structure may at least partially contact the front wall of the second compartment. The top panel of the support structure can contact the top walls and the bottom panel of the support structure can contact the bottom walls of the first compartment and the second compartment, respectively. The guidance of the compartments during the sliding action may be improved.

[0021] Furthermore, at least one of the first compartment and the second compartment may comprise a hinged lid for closing the access opening. The lid may be swiveled around a hinge line for opening and closing the access opening. The hinge line may be arranged on the front wall of the compartment. In particular, both, the first compartment and the second compartment may be provided with a hinged lid. A direction of movement of the conveyor belt may be substantially perpendicular to a direction of the hinge line(s).

[0022] Advantageously, the first and the second compartment may be applied for accommodating different types or styles of tobacco related articles, for example differently flavored cigarettes. The first compartment or the second compartment may be pushed out of the frame by applying a force on a lateral wall of the compartment. This causes the pushed compartment to slide partially outwards of the frame. At the same time, the second compartment may move in opposite direction. Advantageously, both compartments are inaccessible to the user, when the compartments are in the second position. In the first position, the compartments are accessible. The user has to push only a single compartment, in order to open or close the package.

[0023] According to still another embodiment of the invention, a displacement of the compartments with respect to each other may be limited at least in one direction of movement. The displacement of the compartments may be restricted to a movement between the first position and the second position. In particular, the displacement of the compartments may be limited by the connecting member, which may be a part of the second compartment.

BRIEF DESCRIPTION OF DRAWINGS

[0024] Further aspects and characteristics of the invention ensue from the following description of preferred embodiments of the invention with reference to the accompanying drawings, wherein

FIG.1 1 is a simplified perspective view of a package according to an embodiment of the invention, wherein the compartments of the package are in a first position and the package is open,

FIG. 2 is a simplified front side view of the package,

FIG. 3 is a simplified top side view of the package,

FIG. 4 is a simplified top side view of the package, wherein the compartments of the package are in a first state and the package is closed,

FIG. 5 is a simplified cross-sectional view along line V-V in FIG. 2 while the package is in an opened state,

FIG. 6 is a simplified cross-sectional view of the closed package,

FIG. 7 is a simplified perspective view of the closed package,

FIG. 8 is another simplified perspective view showing the opened package, wherein a lid of one of the compartments is opened,

FIG.9 is a simplified view showing a blank for manufacturing a support structure for a package according to an embodiment of the invention,

FIG. 10 is a simplified view showing a blank for man-

ufacturing a first compartment or a second compartment for a package according to an embodiment of the invention,

FIG. 11 is a simplified view showing a blank for manufacturing a conveyor belt for a package according to an embodiment of the invention,

FIG. 12 is a simplified view showing a blank for manufacturing an inner frame for a package according to an embodiment of the invention.

FIGs. 13 to 18 illustrate different steps during manufacture of the package according to an embodiment of the invention,

FIG. 19 is a simplified perspective view of a package according to another embodiment of the invention, wherein the package is opened,

FIG. 20 is a simplified perspective top view of the package, wherein a first compartment is omitted,

FIG. 21 is another simplified perspective view showing a package according to still another embodiment of the invention, wherein the package is opened,

FIG. 22 is a simplified top view of the closed package,

FIG. 23 is a simplified view on a rear wall of a first compartment of the package and

FIG. 24 is a simplified view on the rear wall of a second compartment of the package.

DETAILED DESCRIPTION OF EXAMPLE EMBODIMENTS

[0025] FIG. 1 is a simplified perspective view showing a package 10 according to an embodiment of the invention. The package 10 comprises a first compartment 11 and a second compartment 12. The compartments 11, 12 may be configured similar to a classical hinged lid package, however, a first lid 13, which closes an access opening of the first compartment 11 may be arranged at a lateral side of the first compartment 11. Similar, a second lid 14, which closes an access opening of the second compartment 12, may be arranged on a lateral side of this second compartment 12. The lids 13, 14 may be swiveled around hinge lines. In FIG. 1, a second hinge line 15, which is for swiveling the second lid 14 of the second compartment 12, is visible only. The second hinge line 15 may be arranged on a front wall 17 of the second compartment 12. Similar, a first hinge line (not shown) may be arranged on a front wall (not visible) of the first compartment 11. The first lid 13 may be swiveled around this first hinge line.

[0026] In FIG. 1, the compartments 11, 12 of the package 10 are in a first state and the package 10 is open. A simplified perspective view showing a second state of the compartments 11, 12, is shown in FIG. 7. In this second state, the package 10 is closed In the first state, the access openings of the compartments 11, 12 are accessible because the lids 13, 14 are swiveled around their hinge lines 15, 51a to open or close the access openings.

[0027] The package 10 according to the embodiment of FIG. 1 further comprises a support structure 18. The support structure 18 may be configured to be a frame, which at least partially surrounds the first compartment 11 and the second compartment 12. The support structure 18 may comprise a top panel 19 and a bottom panel 23, which may be arranged to be substantially parallel to each other and which may be opposite to each other with respect to an interior space which is surrounded by the frame. The support structure 18 may comprise a front panel 12a and a rear panel (not visible in FIG. 1). The front panel 12a and the rear panel may also be arranged to be substantially parallel to each other and to be opposite to each other with respect to the interior space of the frame.

[0028] The first compartment 11 and the second compartment 12 are slidable with respect to each other between the first position, which is depicted in FIG. 1, and the second position, which is depicted in FIG. 7.

[0029] The first compartment 11 and the second compartment 12 may be displaced with respect to each other and with respect to the support structure 18. The displacement takes place in a direction, which may be parallel to direction D. The compartments 11, 12 may be coupled to each other using a conveyor belt which may be wrapped around a deflecting member of the support structure 18. In the simplified perspective view of FIG. 1, neither the conveyor belt nor the deflection member is visible. We will refer to these parts of the package 10 further below in more detail.

[0030] A first displacement of the first compartment 11, which has a first direction D1, is converted via the conveyor belt into a second displacement of the second compartment 12, which is directed in a second direction D2. By pushing for example the first compartment 11 in the first direction D1, the second compartment 12 is automatically displaced towards the second direction D2. The first direction D1 and the second direction D2 may be substantially opposite to each other. To close the package 10 according to the embodiment of FIG. 1, a user may push the first compartment 11 towards direction D1*, which is substantially opposite to the first direction D1. The second compartment 12 automatically performs a displacement towards direction D2*. Similar to the conversion of a displacement in the first direction D1 into a displacement towards the second direction D2, a displacement of the first compartment 11 towards direction D1* is converted into a displacement of the second compartment 12 towards a direction D2*. The package 10 may be opened and closed by a displacement of either one of the first compartment 11 or the second compart-

ment 12. The other compartment 11, 12 will automatically follow this displacement, however, in opposite direction.

[0031] FIG. 2 is a simplified front side view of the package 10 according to the embodiment of FIG. 1. The direction of view is towards the front panel 12a of the support structure 18. For clarity reasons only, the front panel 12a is omitted. The top panel 19 of the support structure 18 may be arranged to be adjacent to a top wall 21 of the first compartment 11 and to a top wall 22 of the second compartment 12 (see also FIG. 1). Similar, the bottom panel 23 of the support structure 18 may be arranged to be adjacent to a bottom wall 24 of the first compartment 11 and a bottom wall 25 of the second compartment 12.

[0032] The deflection member can project between a top panel 19 and a bottom panel 23 of the support structure 18. The deflection member may be arranged to be substantially perpendicular to the top panel 19 and to the bottom panel 23. Furthermore, a direction D of the displacement of the first compartment 11 and the second compartment 12 may be substantially perpendicular to a length extension of the deflection member.

[0033] In FIG. 3, there is a simplified top side view of the package 10 according to the embodiment of FIG. 1. The front panel 12a, the top panel 19 and a rear panel 31 of the support structure 18 are visible. A front wall 16 of the first compartment 11 may be adjacent to the rear panel 31 of the support structure 18. Similar, a front wall 17 of the second compartment 12 may be arranged to be adjacent to the front panel 12a of the support structure 18. Furthermore, a rear wall 32 of the first compartment 11 may face a rear wall 33 of the second compartment 12. The deflection member of the support structure 18 may project between these rear walls 32, 33. The deflection member is not visible in FIG. 3, however, its position is indicated by a dashed line 34.

[0034] The compartments 11, 12 are in the first position. The lids 13, 14 of the first and second compartment 11, 12 may be opened. The first compartment 11 may be accessed by swiveling the first lid 13 around the first hinge line 51a. The first lid 13 comprises a rear side tab 56a, a top side tab 54a, a front side tab 53a and a pair of lateral tabs 58a, 51b. In FIG. 3, only a second lateral tab 51b is visible. The design of the first compartment 11 will be explained in more detail when making reference to a blank, which is for manufacturing this compartment (see FIG. 10).

[0035] A front wall 16 of the first compartment 11 includes the rear tab 56a of the first lid 13. The hinge line 51a may be arranged on this front wall 16. The second lid 14 of the second compartment 12 may be configured similar to the first lid 13 of the first compartment 11. A second hinge line 15, which is for swiveling the second lid 14, may be arranged on the front side 17 of the second compartment 12.

[0036] A second position of the compartments 11, 12, which is the closed state of the package 10, is shown in the simplified top side view of the FIG. 4. The access openings of the compartments 11, 12 are not accessible because the lids 13, 14 may not be swiveled around the hinge lines 51a and 15, respectively. For example, the first lid 13 of the first compartment 11 may not be opened because the front side tab 53a of the first lid 13 is adjacent to the rear wall 33 of the second compartment 12. The first lid 13 may not be swiveled around the first hinge line 51a. In the second state of the compartments 11, 12, the first compartment 11 may not be opened accidentally. This prevents the user from an unintended loss of the tobacco related articles, which may be stored in the compartments 11, 12. Similar explanations apply mutatis mutandis to the second lid 14 of the second compartment 12.

[0037] In the second position of the compartments 11, 12, the top side tab 54a of the first lid 13 and a side wall 35 of the second compartment 12 may substantially project in a common plane. Similar, a side wall 59 of the first compartment 11 and a top side tab 36 of the second lid 14 of the second compartment 12 may substantially project in a common plane.

[0038] FIG. 5 is a simplified cross sectional view along line V-V in FIG. 2. However, different from FIG. 2, the lids 13, 14 of the compartments 11, 12 are swiveled around the hinge lines 51a and 15 and a first interior space 37 of the first compartment 11 may be accessed via a first access opening 38 and a second interior space 39 of the second compartment 12 may be accessed via a second access opening 31a. A rear wall 32 of the first compartment 11 and a rear wall 33 of the second compartment 12 are coupled to a conveyor belt 91 in a first connecting area 54b and in a second connecting area 32a, respectively. The conveyor belt 91 and the rear walls 32, 33 may be connected using glue or a suitable adhesive.

[0039] A displacement of the first compartment 11 from the closed position, which is shown in FIGs. 4, 6 and 7, into the opened position, which is shown in FIGs. 1 to 3, 5 and 8, along direction D1 causes the conveyor belt 91 to rotate clockwise around the deflection member 45. This rotation of the conveyor belt 91 causes the second compartment 12 to be displaced in the second direction D2. For closing the package 10, for example the first compartment 11 is pushed or displaced towards direction D1*. The conveyor belt 91 is rotated in anti-clockwise direction around the deflection member 45. Consequently, the second compartment 12 is automatically displaced towards direction D2*. The closed status of the package 10 is shown in another simplified cross-sectional view of FIG. 6.

[0040] FIG. 7 and 8 are further simplified perspective views showing the package 10 according to the embodiment. In FIG. 7, the compartments 11, 12 are in the second state and the package 10 is closed. An interior space of either one of the compartments 11, 12 is inaccessible, because the lids 13, 14 of the compartments 11, 12 may not be opened. The support structure 18 at least partially surrounds the first compartment 11 and the second compartment 12. In FIG. 8, the package 10 is opened and

the compartments 11, 12 are accessible. The lids 13, 14 may be opened. In FIG. 8, the first lid 13 of the first compartment 11 is swiveled around the first hinge line 51a and tobacco related articles 81, for example cigarettes, are accessible to a user. An inner frame 84 of the first compartment 11 is visible in FIG. 8. An inner surface of the first lid 13 abuts this inner frame 84, when the first compartment 11 is closed.

[0041] In FIG. 9, there is a simplified view showing a blank 40 for manufacturing a support structure 18 of a package 10, according to an embodiment of the invention. Same reference numerals are used for the parts of the blank 40 and the support structure 18 in FIGs. 1 to 8.

[0042] The blank 40 comprises a bottom panel 23, a top panel 19, a front panel 12a and a rear panel 31. Furthermore, the blank 40 comprises a deflecting member 45, which is coupled to a first connecting strap 46 and to a second connecting strap 47. The first connecting strap 46 comprises a connecting area 48, which may be free from varnish and / or ink and which may be for coupling the first connecting strap 46 to an inner surface of the bottom panel 23. The second connecting strap 47 may be coupled to an inner surface of the top panel 19. The parts may be coupled to each used using a glue or a suitable adhesive.

[0043] The deflection member 45 may comprise two lateral flaps 49, which may be folded along folding lines 41a. The deflection member 45 may be surrounded by the conveyor belt 91. The lateral flaps 49 may provide a reinforcement of the edges of the deflection member 45 and will further allow a smooth rotation of the conveyor belt 91 around the deflection member 45.

[0044] For manufacturing of the support structure 18, the blank 40 is folded along the further folding lines 42a. When the blank 40 is folded and the deflection member 45 is coupled to the bottom panel 23 and the top panel 19 via the first connecting strap 46 and the second connecting strap 47, respectively, the deflection member 45 projects vertically in an interior space which is surrounded by the support structure 18. The steps during manufacture of the support structure 18 will be explained in more detail when making reference to FIGs. 13 to 18. According to the embodiment, the support structure 18 provides a frame for accommodating the first compartment 11 and the second compartment 12. The deflection member 45 substantially projects between the bottom panel 23 and the top panel 19 in substantially a center of this frame.

[0045] For example, a total length of the blank 40 may be 332.9 mm and the blank 40 may have a width of 60 mm. The bottom panel 23 may have a length of 60 mm and a width of 21.5 mm. The front panel 12a may have a length of 89.6 mm and a width of 60 mm. The top panel 19 may be 60 mm long and 22 mm wide. The rear panel 31 of the support structure 18 may have a length of 89.3 mm and a width of 60 mm. The first connecting strap 46 may have a width of 11 mm and a length of 60 mm. The deflecting member 45 may have a length of 89 mm and a width of 33 mm. The lateral flaps 49 may have a width of 11 mm, their length may be shorter than a length of the deflecting member 45. However, according to another embodiment of the invention, the length of the lateral flaps 49 may be arranged to be substantially equal to a length of the deflecting member 45. The second connecting strap 47 may have a width of 10.5 mm and a length of 60 mm.

[0046] In FIG. 10 there is a blank 50 for manufacturing a first compartment 11 or a second compartment 12 for a package 10 according to an embodiment of the invention. The package 10 comprises two compartments 11, 12 and two blanks 50 are suitable for manufacturing the first compartment 11 and the second compartment 12, respectively.

[0047] By way of an example only, the blank 50 in FIG. 10 is applied for manufacturing the first compartment 11. However, the second compartment 12 may be manufactured and configured similar and the below description applies mutatis mutandis. Again, same reference numerals are used for parts of the blank 50 in FIG. 10 and for the first compartment 11 in FIGs. 1 to 8.

[0048] The blank 50 comprises a front wall 16, a rear wall 32, a top wall 21 and a bottom wall 24. The top wall 21 and the bottom wall 24 are coupled to the rear wall 32. The front wall 16 is coupled to a first connecting tab 55 having a connection area 56 which may be free of ink and varnish and which is for coupling the first connecting tab 55 to an inner surface of the top wall 21. Similar, a second connecting tab 57 having a connecting area 58 which may be free of ink and varnish may be connected to the front wall 16. The connecting area 58 is for connecting the second connecting tab 57 to an inner surface of the bottom wall 54. The first compartment 11 may be manufactured by folding the blank 50 along the folding lines which are shown in dashed lines. For example, a length of the rear wall 32 and the front wall 16 of the first compartment 11 is 87 mm. The rear wall 32 may be 60 mm wide and the front wall may be 80 mm wide. A width of the side wall 59 may be 9,5 mm.

[0049] Furthermore, the blank 50 comprises a side wall 59 which is arranged opposite to a first access opening 38 (see FIG. 5). The first access opening 38 of the first compartment 11 may be opened and closed using the hinged lid 13, which is swivelable along the hinge line 51a. The hinged lid 13 comprises an inner flap 52a which may be folded along a folding line (shown in dashed line) between the inner flap 52a and a front side tab 53a. Furthermore, the first lid 13 comprises a top side tab 54a, which may be a side wall of the first compartment 11, and which may be arranged opposite to the side wall 59 with respect to an interior of the first compartment 11. The front wall 53a of the lid 13 may be a part of the rear wall 32 of the first compartment 11 and may project into a recess 55a of the rear wall 32, when the lid 13 is closed. A rear tab 56a of the lid 13 may be coupled to the hinge line 51a and may be a part of the front wall 16 of the first compartment 11. The front wall 16 and the rear tab 56a

form a front side surface of the first compartment 11. The first lid 13 may be manufactured by coupling a first lateral tab 57a with a connecting area 58a to an opposite lateral tab 57a. Similar, a second lateral tab 51b may be coupled to a connecting area 52b of a second lateral tab 51b. The inner flap 52a may be folded inwardly so as to contract an inner surface of the front wall 53a.

[0050] The blank 50 for manufacturing the first compartment 11 or the second compartment 12 comprises a central connecting area 54b which may be arranged on the rear wall 32. This central connecting area 54b is for coupling the conveyor belt 91 to the first compartment 11 and to the second compartment 12, respectively.

[0051] FIG. 11 is a blank 60 for a conveyor belt 91. A first lateral edge 61 and a second lateral edge 62 of the conveyor belt 91 may overlap in the central connecting area 54b of the first compartment 11 or the second compartment 12, when the conveyor belt is fixed to either one of the two compartments 11, 12. When the edges 61, 62 of the conveyor belt 91 are for example connected to the first compartment 11, the second compartment 12 may be connected to a center of the conveyor belt 91. A same applies vice versa, when the edges 61, 62 of the conveyor belt 91 are connected to the second compartment 12. For example, the conveyor belt 91 may be 86 mm long and may have a width of 66 mm. This dimension is slightly smaller than a length of the deflection member 45, which may be 89mm, in order to allow a smooth rotation of the conveyor belt 91 around the deflection member 45.

[0052] In FIG. 12, there is a blank 70 for an inner frame 84 or collar, which may be inserted in the access openings 38, 31a of the compartments 11, 12. Inner frames 84 are in principle known from hinged lid packages. A front wall 53a of for example the first lid 13 (FIG. 5) abuts the inner frame 84, when the first compartment 11 is closed. The inner frame 84 (see FIG. 8) comprises spring tabs 71 which provide a frictional connection with an inner surface of the lid 13 so as to hold the first lid 13 in its closed position. A lower part 72 of the inner frame 84 may be fixed to an inner surface of the rear wall 32 of for example the first compartment 11. An upper part 73 is abutted by the first lid 13.

[0053] In the simplified perspective views of FIGs. 13 to 18 the assembly of the package 10 according to the embodiment of FIGs. 1 to 8 will be explained by making reference to selected process steps.

[0054] In FIG. 13, there is the blank 40 for manufacture of the support structure 18. As a first step, the flaps 49 are folded along folding lines 41a onto the deflection member 45. The rotation of the lateral flaps 49 along the folding lines 41a is indicated by arrows.

[0055] In a subsequent step, the blank 60 for manufacturing the conveyor belt 91 is arranged on the deflection member 45 and is wrapped round the deflection member 45. This is indicated by arrows in FIG. 15.

[0056] Subsequently, the first compartment 11 and the second compartment 12 are arranged on the conveyor belt 91. The first and second compartment 11, 12 may be coupled to the conveyor belt 91 at a respective one of their central connecting areas 45b (see FIG. 10).

[0057] When the compartments 11, 12 are arranged on the conveyor belt 91, the blank 40 for manufacturing the support structure 18 is wrapped around the first and second compartment 11, 12 by folding the blank 40 along the folding lines 42a. This is illustrated in FIGs. 17 and 18, which show subsequent steps during the folding of the blank 40.

[0058] FIG. 19 is a simplified perspective view, showing a package 10 according to another embodiment of the invention. The package 10 is configured similar to the package 10, which is known from FIGs. 1 to 8. The first lid 13 of the first compartment 11 is shown in open state and an interior space, which is for accommodating tobacco related articles 81, for example cigarettes, is accessible. When the first lid 13 is closed, an inner surface of the front wall 53a of the lid 13 abuts the inner frame 84. Different from the embodiments in FIGs. 1 to 8, the support structure 18 of the package 10, according to the embodiment in FIG. 19, comprises no front panel and no rear panel. The support structure 18 comprises only a top panel 19 and a bottom panel 23. The top panel 19 may be adjacent to a top wall 21 of the first compartment 11 and to a top wall 22 of the second compartment 12. Similar, the bottom panel 23 of the support structure 18 may be adjacent to a bottom wall 24 of the first compartment 11 and adjacent to a bottom wall 25 of the second compartment 12.

[0059] FIG. 20 is a simplified perspective front view of the package 10 according to the embodiment of FIG. 19. For clarity reasons only, the first compartment 12 is omitted. The deflection member 45 is arranged between the top panel 19 and the bottom panel 23 of the support structure 18. The deflection member 45 is surrounded by the conveyor belt 91. A direction D is a direction of the rotation of the conveyor belt 91 and a direction of the displacement of the first compartment 11 and the second compartment 12, respectively. Direction D may be substantially perpendicular to a direction of the hinge line 51a.

[0060] In FIG. 21, there is another simplified perspective view showing a package 10 for tobacco related articles 81, according to another embodiment of the invention. The package 10 comprises a first compartment 11 and a second compartment 12. The first compartment 11 comprises an access opening 38 which may be a cut-out in the rear wall 117 of the first compartment 11. The first compartment 11 does not comprise a hinged lid, the first access opening 38 is closed by a rear wall 116 of the second compartment 12, when the package 10 is in a closed position, i.e. when the compartments 11, 12 are in the second position.

[0061] This situation is illustrated in the simplified top view of FIG. 22. The compartments 11, 12 are in a second position and the rear wall 117 of the first compartment 11 and the rear wall 116 of the second compartment 12 almost entirely overlap or cover each other. A first side wall 112 of the first compartment 11 and a first side wall

114 of the second compartment 12 project almost in a same plane, when the compartments 11, 12 are in this second position. Similar, a second side wall 113 of the first compartment 11 and a second side wall 115 of the second compartment 12 may be arranged in a common plane. The rear wall 116 of the second compartment 12 closes the first access opening 38 of the first compartment 11, when the compartments 11, 12 are in this second position. In a first position of the compartments 11, 12, the first access opening 38 of the first compartment 11 is accessible. In the second position, which is shown in FIG. 22, the first access opening 38 of the first compartment 11 is inaccessible, because it is closed by the rear wall 116 of the second compartment 12.

[0062] By way of an example only, the edges between a front wall 16 and the side walls 112, 113 of the first compartment 11 and the edges between the front wall 17 and the side walls 114, 115 of the second compartment 12 are beveled.

[0063] FIG. 23 is a simplified view on the rear wall 117 of the first compartment 11. The rear wall 117 comprises a slit 121, which is for insertion of a connecting member for coupling the first compartment 11 and the second compartment 12. The slit 121 has a width W2.

[0064] In FIG.24, there is a simplified view on the rear wall 116 of the second compartment 12. Similar to the first compartment 11, the second compartment comprises a second access opening 31a, which may be a cutout in the rear wall 116 of the second compartment 12. The rear wall 116 of the second compartment 12 comprises a connecting member 131. In particular, the connecting member 131 may be cut out from the rear wall 116. The cutout in the rear wall 116 may be slightly greater than the connecting member 131 and the tobacco related articles 81 inside the second compartment 12 are visible through the remaining aperture. An inner foil, which usually surrounds the tobacco related articles 81 is omitted for clarity reasons only.

[0065] The connecting member 131 may be shaped similar to an arrow. This will facilitate the insertion of the connecting member 131 into the slit 121. A distant portion 132 at the free end of the connecting member 131 may be wider than a connecting portion 133, which is coupled to the rear wall 116 at connecting line 134. The distant portion 132 of the connecting member 131 has a width W3, which may be greater than the width W2 of the slit 121. This prevents the connecting 131 member from being pulled out of the slit 121. Furthermore, this wider distant portion 132 limits the displacement of the compartments 11, 12 with respect to each other. The width W3 may be greater than a width W1 of the connecting portion 133. To allow a smooth movement between the first and the second compartment 11, 12, the width W1 of the connecting portion 133 is slightly smaller than the width W2 of the slit 121.

[0066] According to another embodiment of the invention, one or both of the compartments 11, 12 may be provided with a hinged lid covering a lateral access opening. In other words, the first and second compartment 11, 12 according to the embodiment of FIGs. 21 to 24 may be configured similar to the compartments 11, 12, which are known from the embodiment of FIGs. 1 to 7. In particular, a hinge line for swiveling the lids may be arranged on a front wall 16 and 17 of the first compartment 11 and the second compartment 12, respectively. Same or similar advantages and technical aspects apply to a package according to this particular embodiment of the invention, which have been already mentioned with respect to the embodiments of FIGs. 1 to 7.

[0067] The first compartment 11, the second compartment 12, the support structure 18 and the conveyor belt 91 may be manufactured from cardboard material. The material of the conveyor belt 91 may be however a flexible material. This advantageously applies to all embodiments of the invention.

[0068] Although the invention has been described hereinabove with reference to specific embodiments, it is not limited to these embodiments and no doubt further alternatives will occur to the skilled person that lie within the scope of the invention as claimed.

Claims

1. A package for tobacco related articles comprising at least a first compartment and a second compartment, wherein the at least first compartment and second compartment are coupled to each other and the compartments are slidable with respect to each other between a first position and a second position, and wherein in the first position of the compartments, at least a first access opening of the first compartment is accessible, and in the second position of the compartments, at least the first access opening of the first compartment is inaccessible.

2. The package according to claim 1, wherein the first compartment and the second compartment each comprise a front wall and a rear wall, which are opposite to each other with respect to an interior of the compartment, and wherein the first compartment and the second compartment are coupled to each other at their rear walls.

3. The package according to claim 1 or 2, wherein the first access opening for providing access to an interior of the first compartment is arranged on the rear wall of the first compartment.

4. The package according to anyone of claims 1 to 3, wherein in the first position of the compartments, a second access opening of the second compartment is accessible and in the second position of the compartments, the second access opening of the second compartment is inaccessible, and the second access opening for providing access to an interior of the sec-

ond compartment is arranged on the rear wall of the second compartment.

5. The package according to anyone of claims 2 to 4, wherein the rear wall of the first compartment comprises a slit and the rear wall of the second compartment comprises a connecting member, wherein the first compartment and the second compartment are coupled to each other by an arrangement of the connecting member in or through the slit such that the connecting member projects into the interior of the first compartment.

6. The package according to claim 1 or 2, wherein the package further comprises a support structure having a deflecting member which is surrounded by a conveyer belt, wherein the conveyer belt is coupled to the first compartment and to the second compartment.

7. The package according to claim 6, wherein the first compartment and the second compartment are slidable with respect to the support structure, and a first displacement of the first compartment, the first displacement having a first direction, is transferred into a second displacement of the second compartment towards a second direction, which is substantially opposite to the first direction, wherein the opposite displacement of the compartments is due to a rotation of the conveyer belt around the deflecting member.

8. The package according to claim 7, wherein a direction of movement of the conveyor belt is substantially perpendicular to a length extension of the deflecting member and in particular, the direction of movement of the conveyor belt is substantially perpendicular to a length extension of the package.

9. The package according to anyone of claims 6 to 8, wherein the support structure further comprises a top panel and a bottom panel, wherein the top panel and the bottom panel project substantially perpendicular to the deflecting member, the top panel at least partially covers a top wall of the first compartment and a top wall of the second compartment and the bottom panel at least partially covers a bottom wall of the first compartment and a bottom wall of the second compartment.

10. The package according to claim 9, wherein the support structure further comprises a front panel and a rear panel, wherein the front, rear, top and bottom panel form a frame, which at least partially surrounds the first compartment and the second compartment.

11. The package according to claim 10, wherein the deflecting member projects between the top panel and the bottom panel of the support structure and inside an interior space, which is surrounded by the frame.

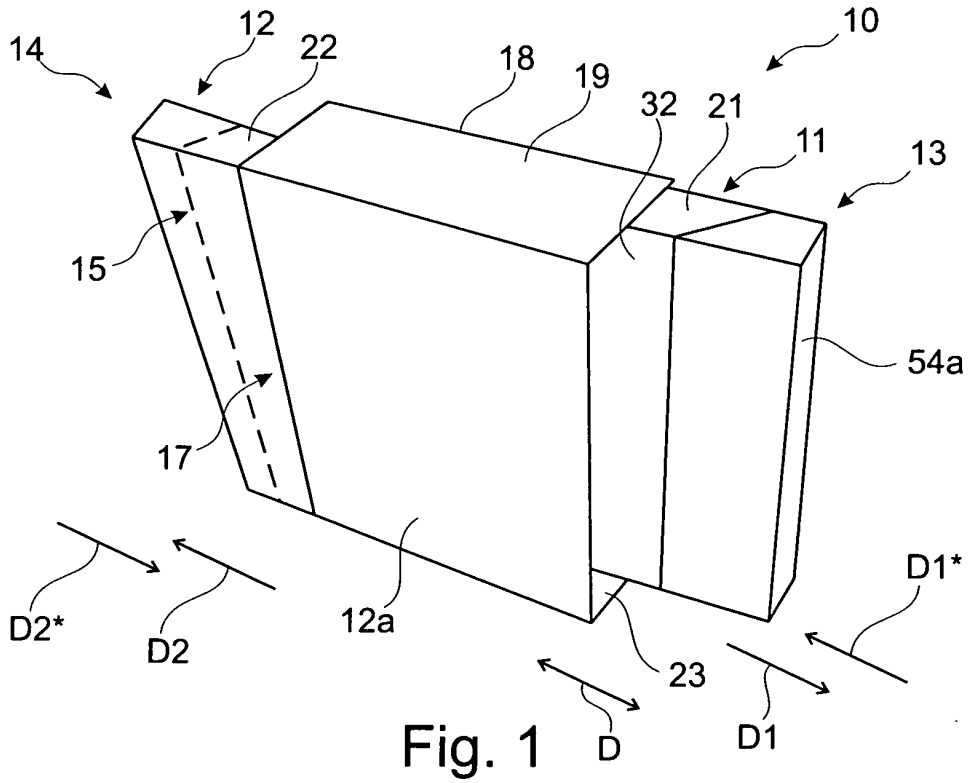
12. The package according to anyone of the claims 9 to 11, wherein the first compartment and the second compartment each comprise: a top wall, a bottom wall, a front wall and the rear wall, wherein the front wall and the rear wall are opposite to each other with respect to an interior of the compartment and the top wall and the bottom wall are opposite to each other with respect to the interior of the compartment, and wherein an access opening for providing access to an interior of the compartment is arranged on a side surface of the compartment, which is adjacent to the top, bottom, front and rear wall, and wherein the conveyer belt is coupled to a respective one of the rear walls of the first compartment and the second compartment.

13. The package according to claim 12, wherein the front panel of the support structure at least partially contacts the front wall of the first compartment, the rear panel at least partially contacts the front wall of the second compartment, the top panel contacts the top walls and the bottom panel contacts the bottom walls of the first compartment and the second compartment.

14. The package according to claim 13, wherein the deflecting member projects between the rear walls of the compartments.

15. The package according to anyone of claims 6 to 14, wherein at least one of the first compartment and the second compartment comprises a hinged lid for closing the access opening, which is arranged on a lateral side of at least the first compartment and the second compartment.

16. The package according to claim 15, wherein the lid is configured to be swiveled around a hinge line for opening an closing the access opening, and wherein the hinge line is arranged on the front wall of the compartment.


14
12
22
18
19
32
21
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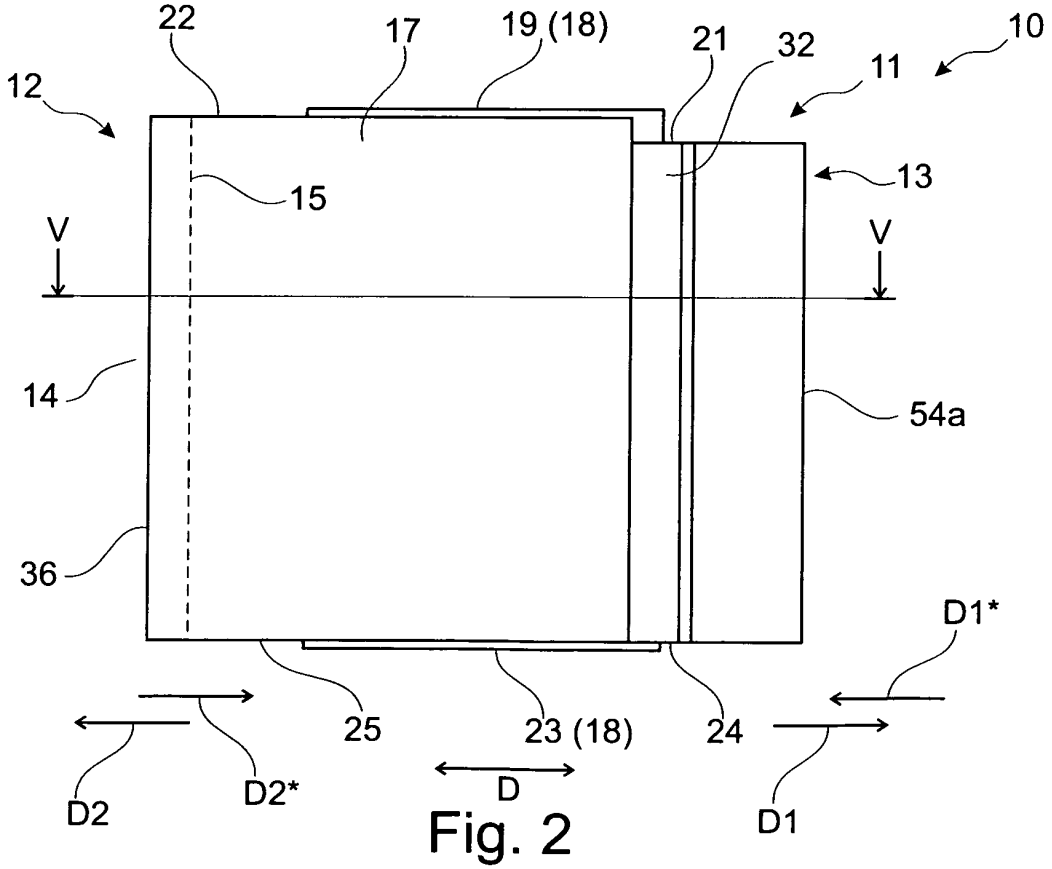
11
13
15
54a
17
D2*
D2
12a
23
D1*
D
D1

Fig. 1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17
19 (18)
21
32
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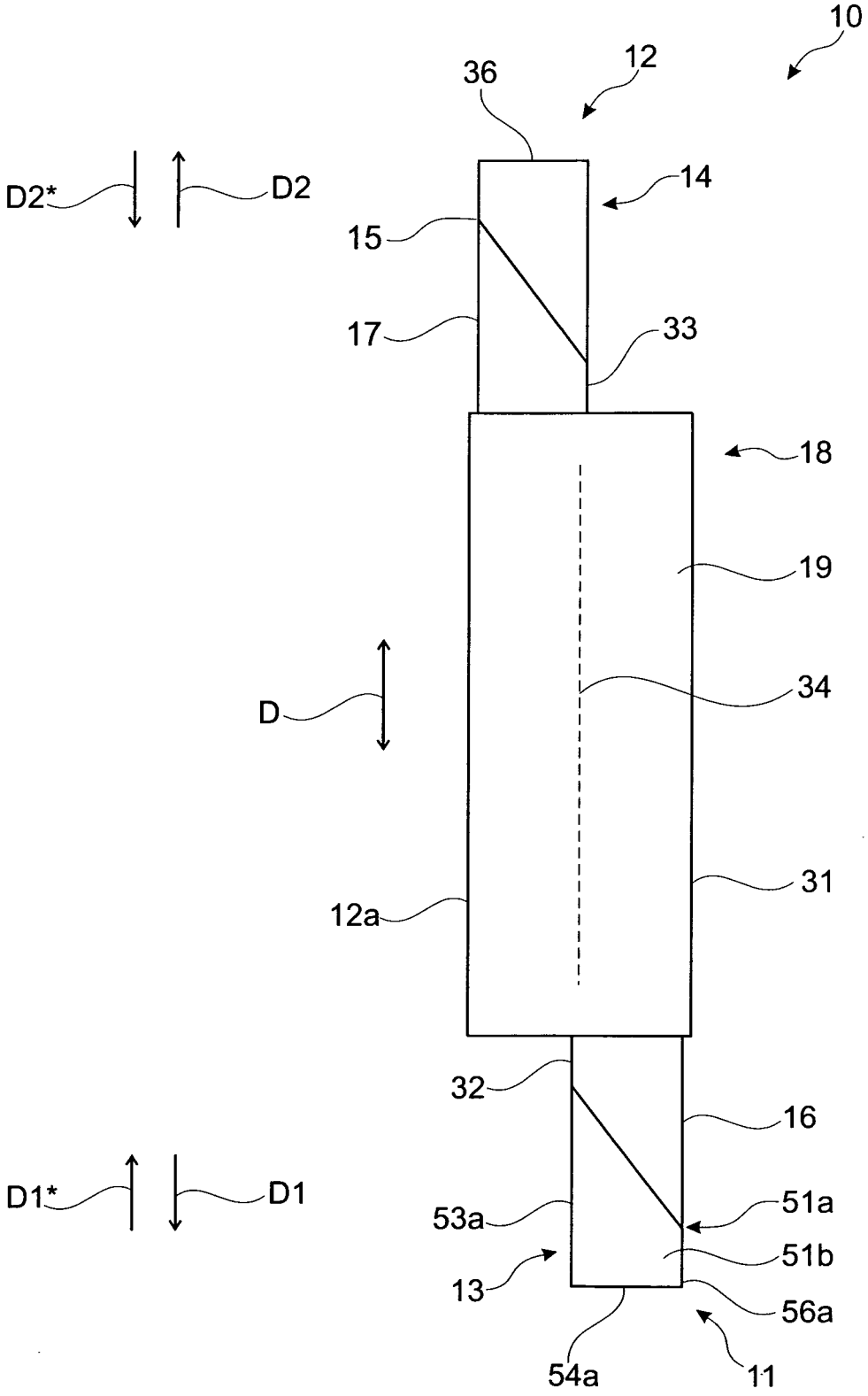
15
V
V
14
54a
36
D1*
25
23 (18)
24
D2
D2*
D
D1

Fig. 2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12
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D2*
D2
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17
33
18
19
D
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12a
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D1*
D1
53a
51a
51b
13
56a
54a
11

Fig. 3

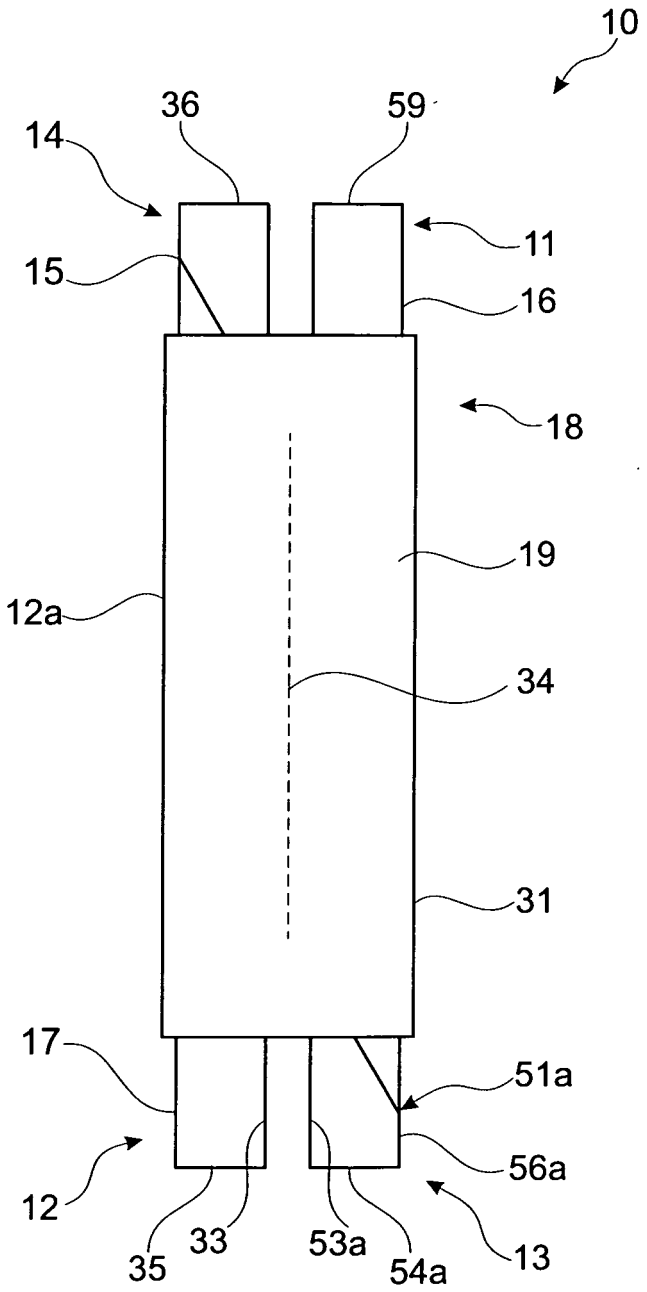


Fig. 4

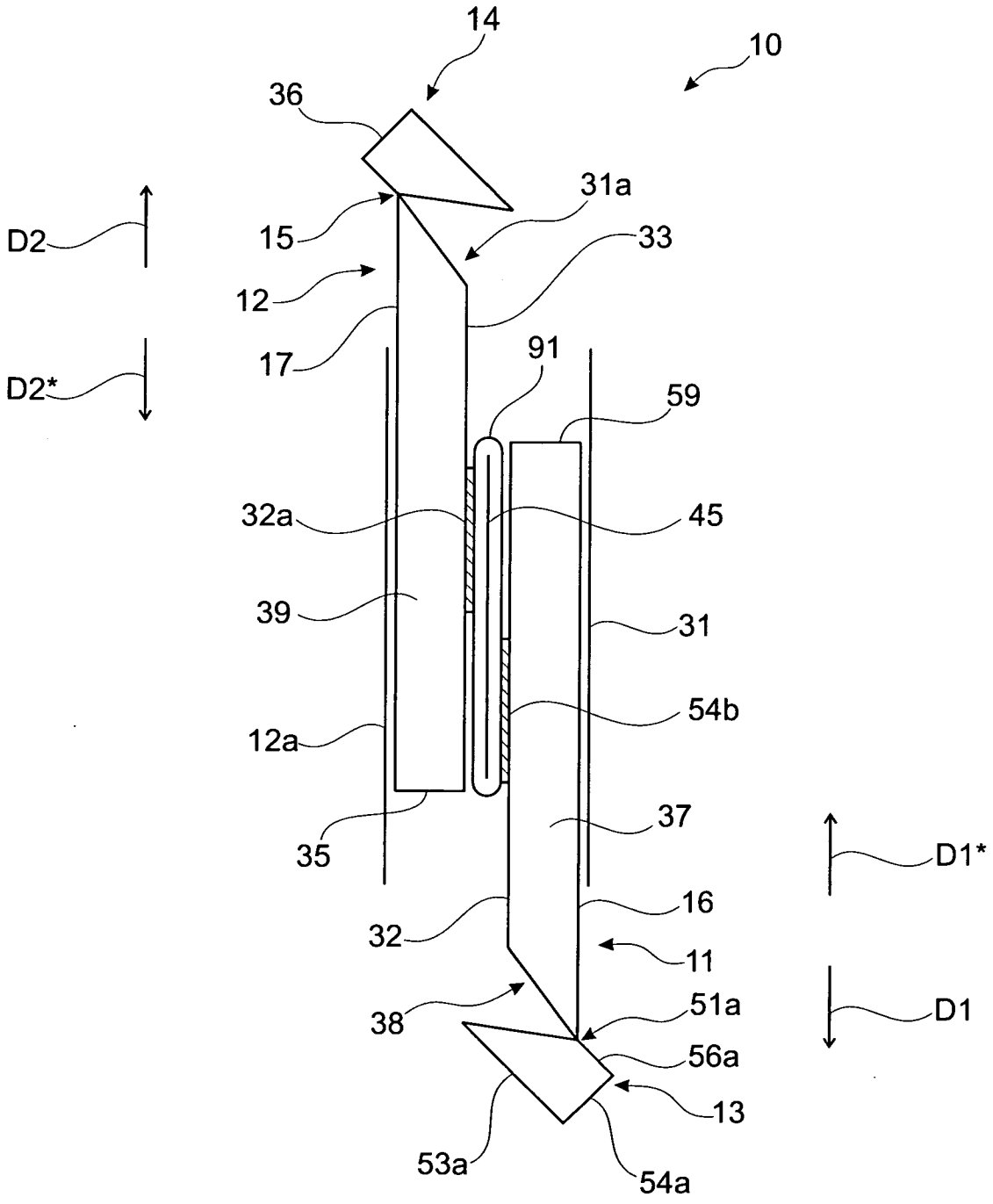
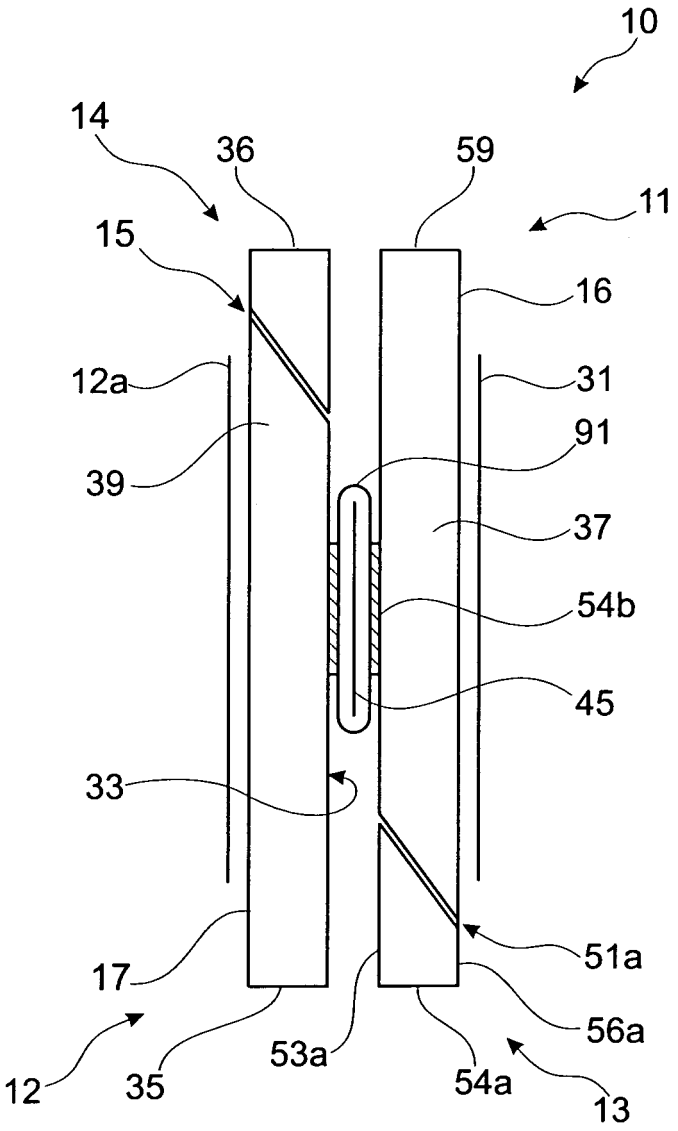

14
10
36
31a
D2
15
33
12
17
D2*
91
59
32a
45
39
31
54b
12a
37
35
D1*
16
32
11
38
51a
D1
56a
13
53a
54a

Fig. 5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56a
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54a
13

Fig. 6

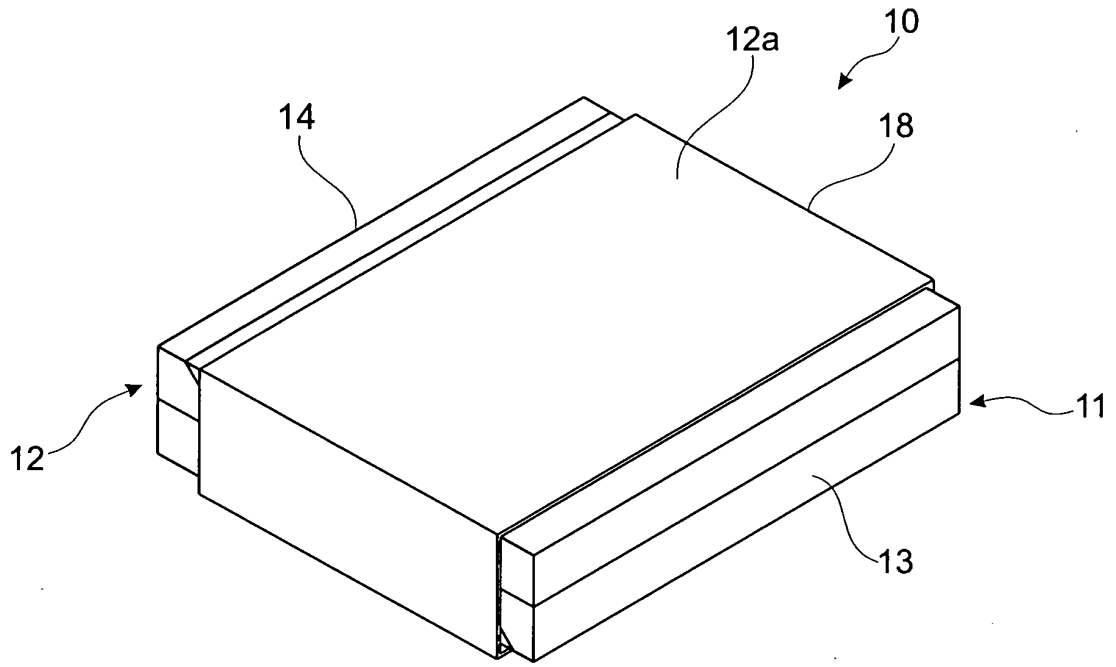


Fig. 7

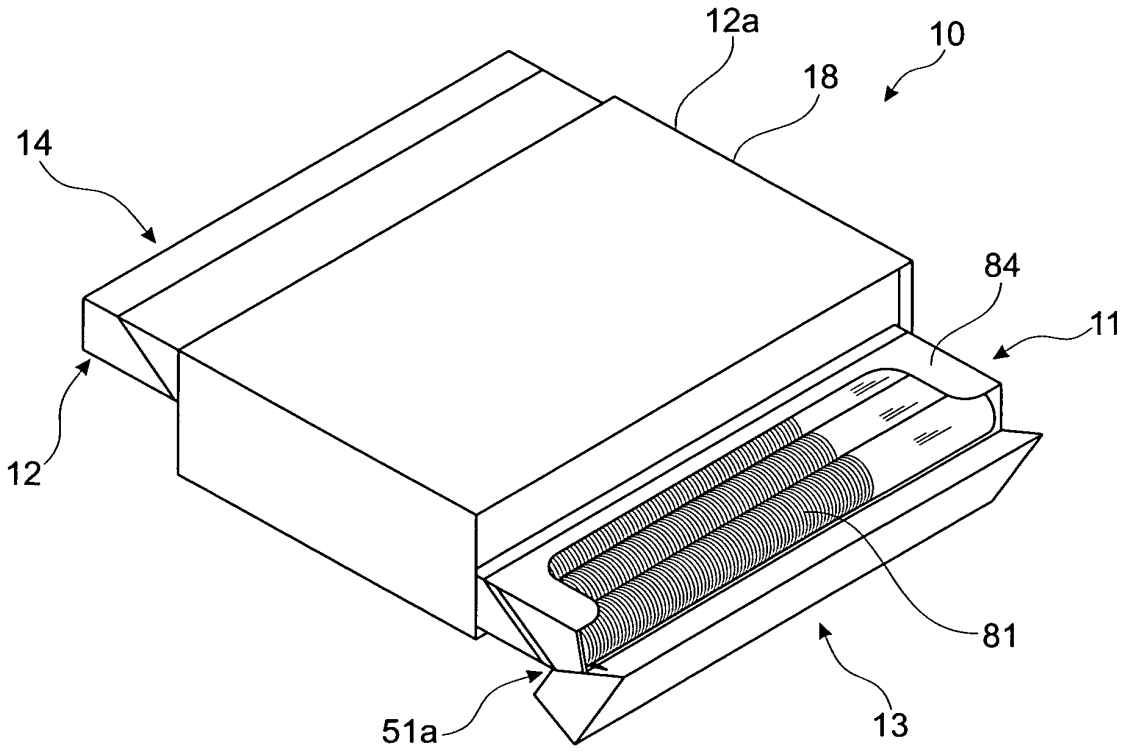
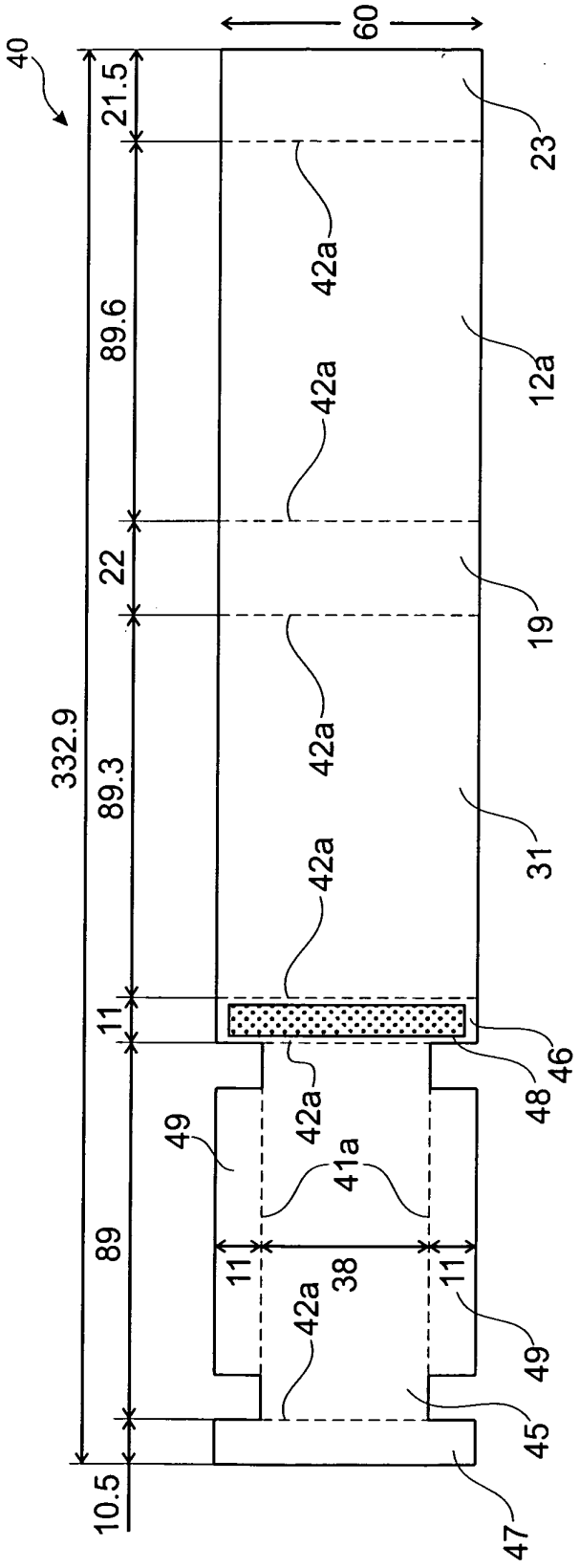


Fig. 8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60
21.5
89.6
22
332.9
89.3
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10.5
23
12a
19
31
46
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49
41a
38
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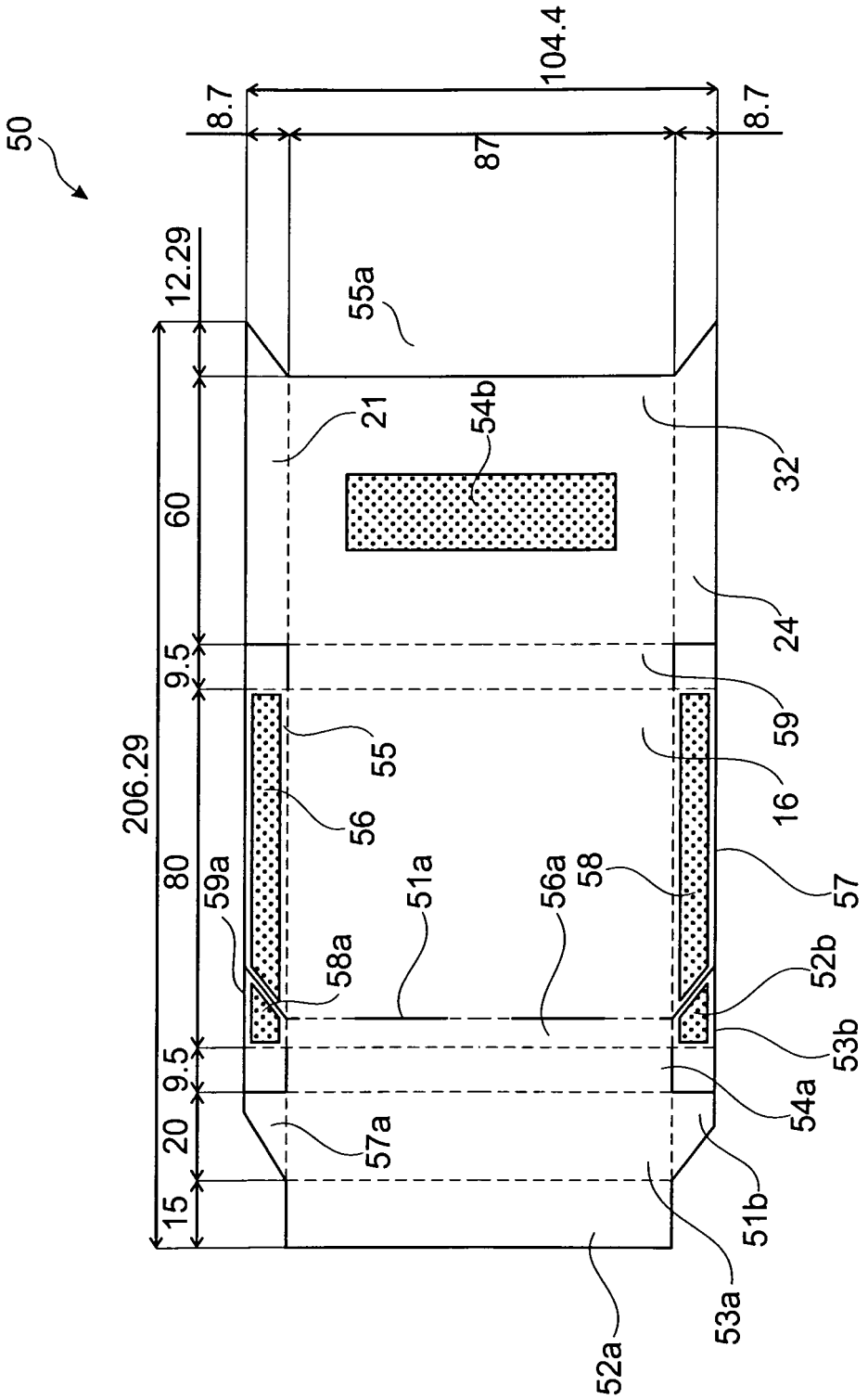
47
42a

Fig. 9


50
104.4
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8.7
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206.29
55
16
56
80
59a
51a
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53a
52a

Fig. 10

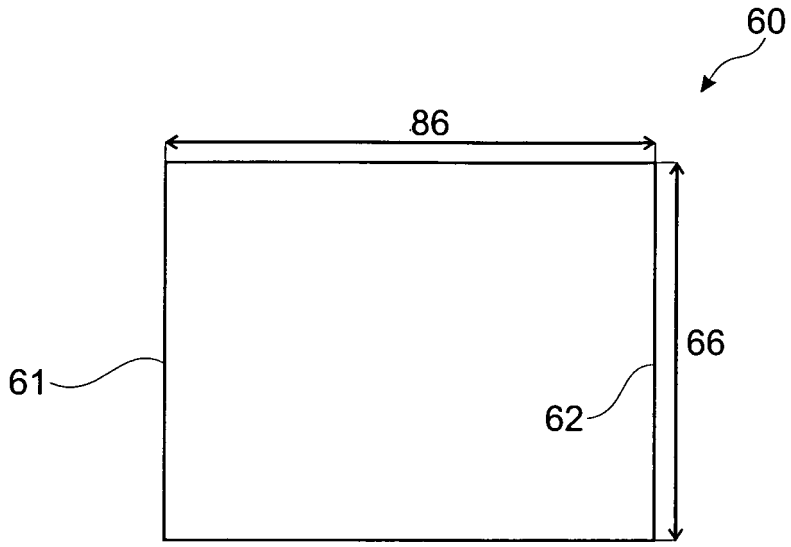

Fig. 11

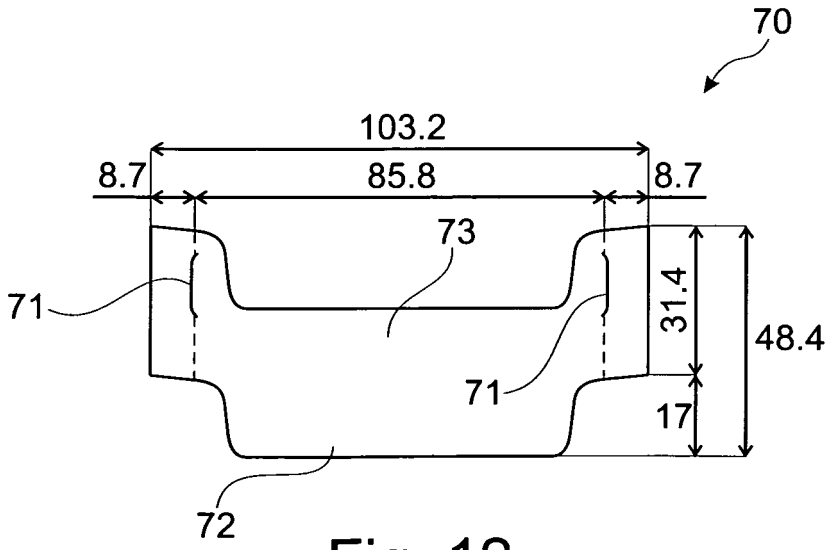

Fig. 12

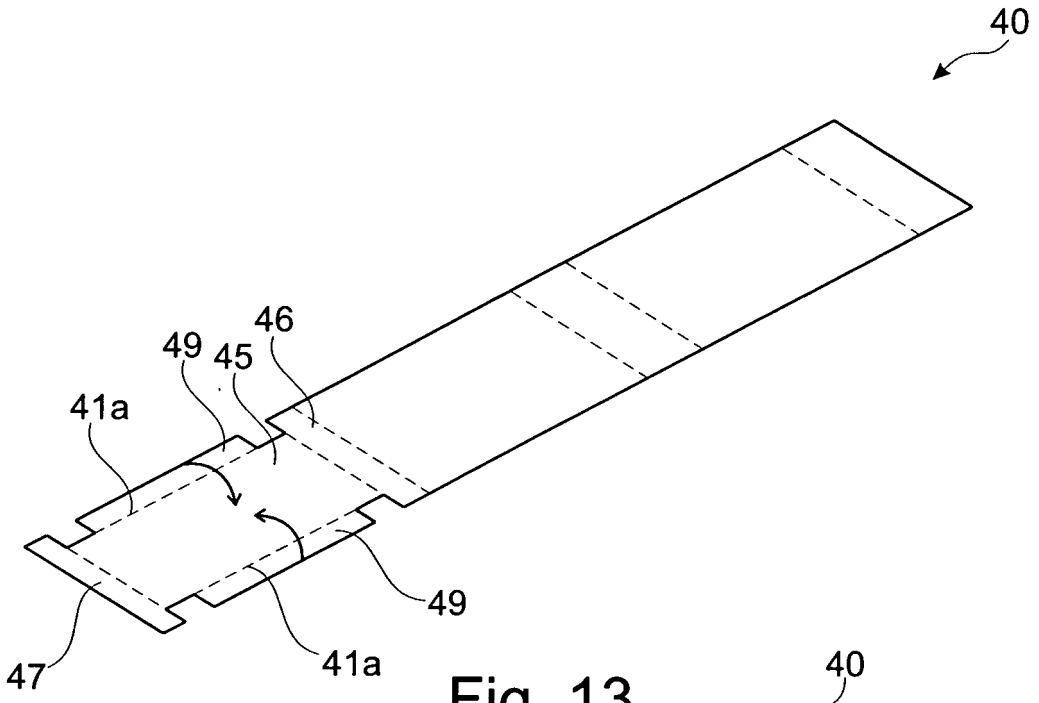

Fig. 13

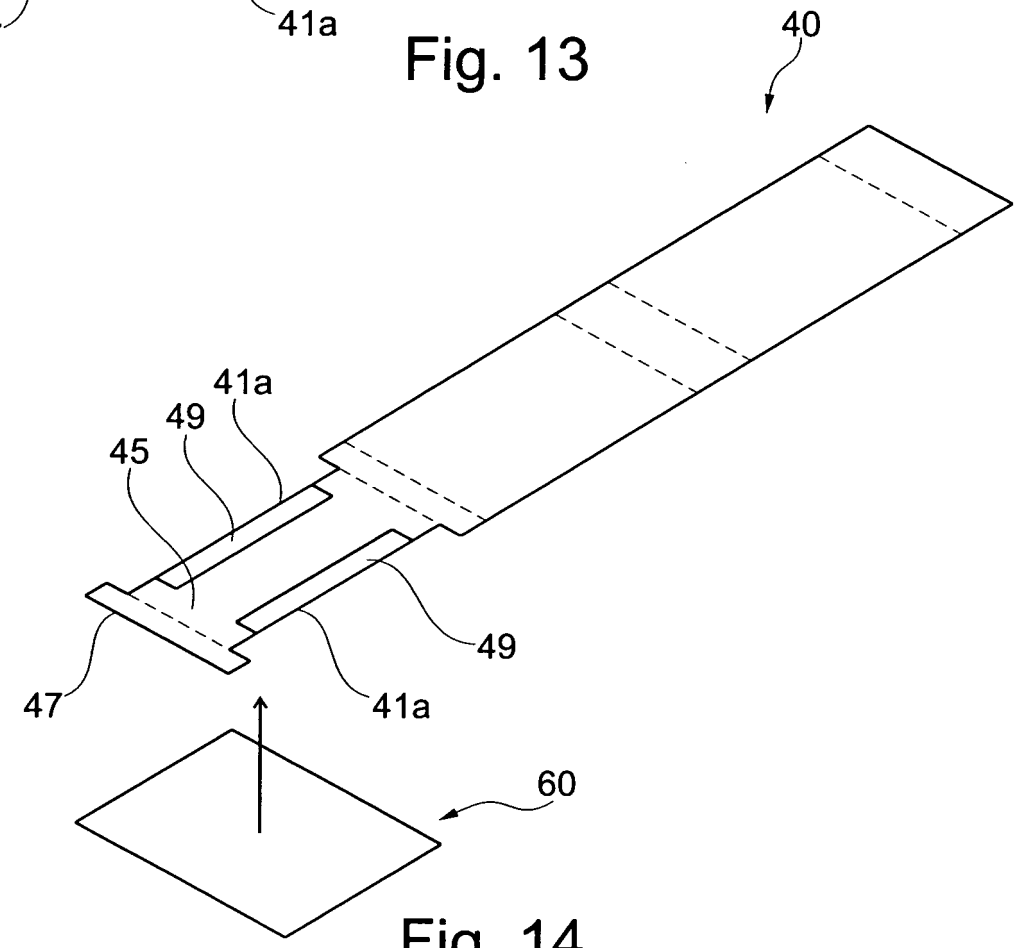

Fig. 14

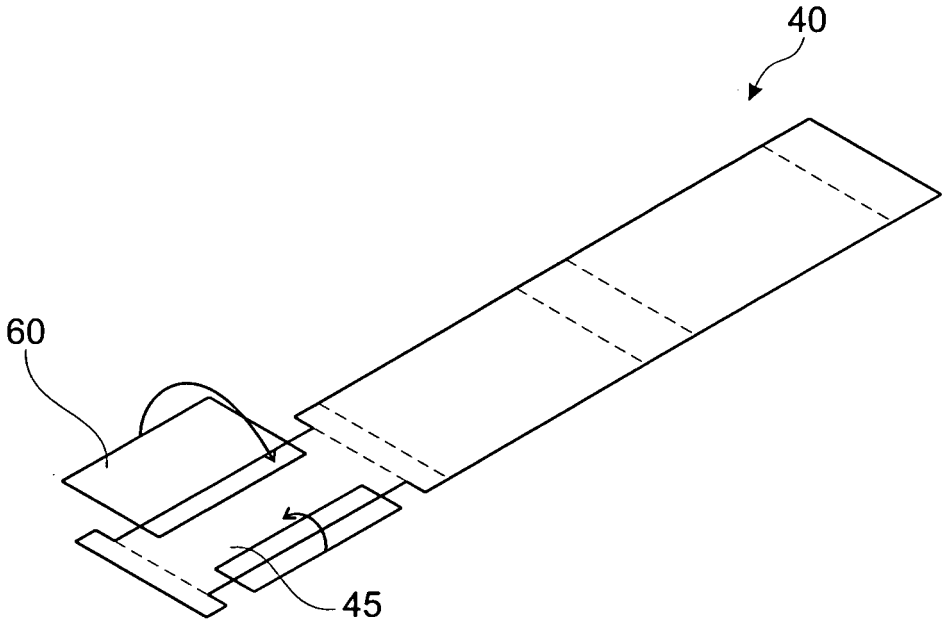

Fig. 15

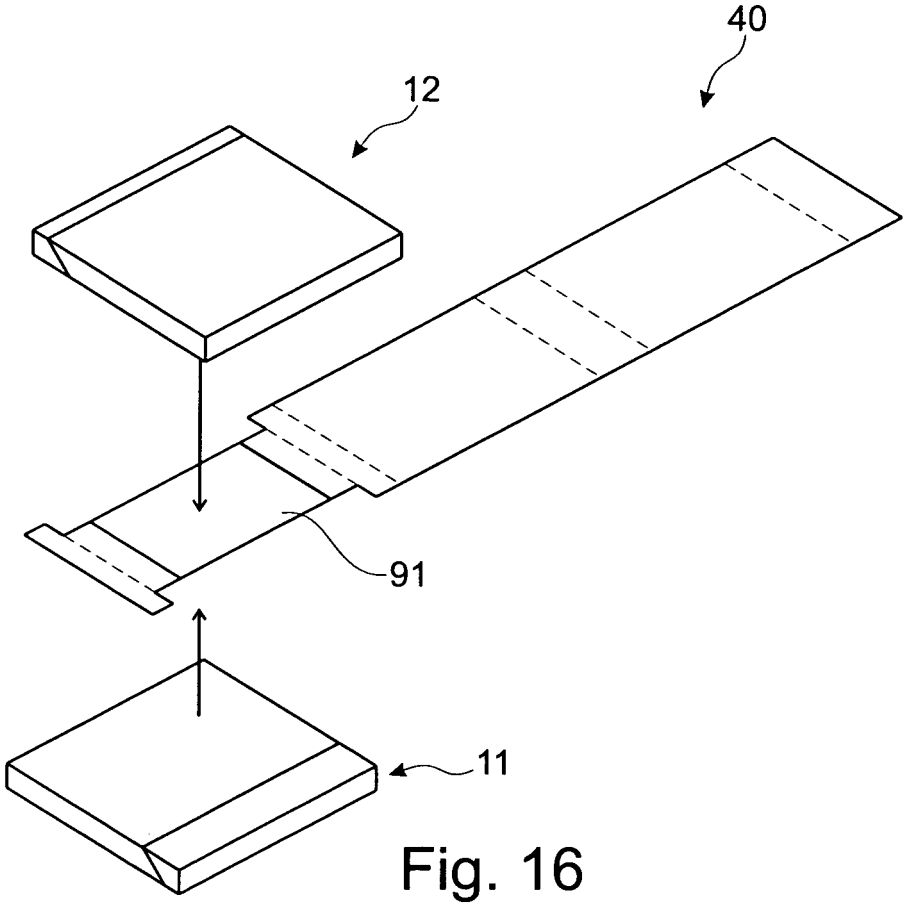

Fig. 16

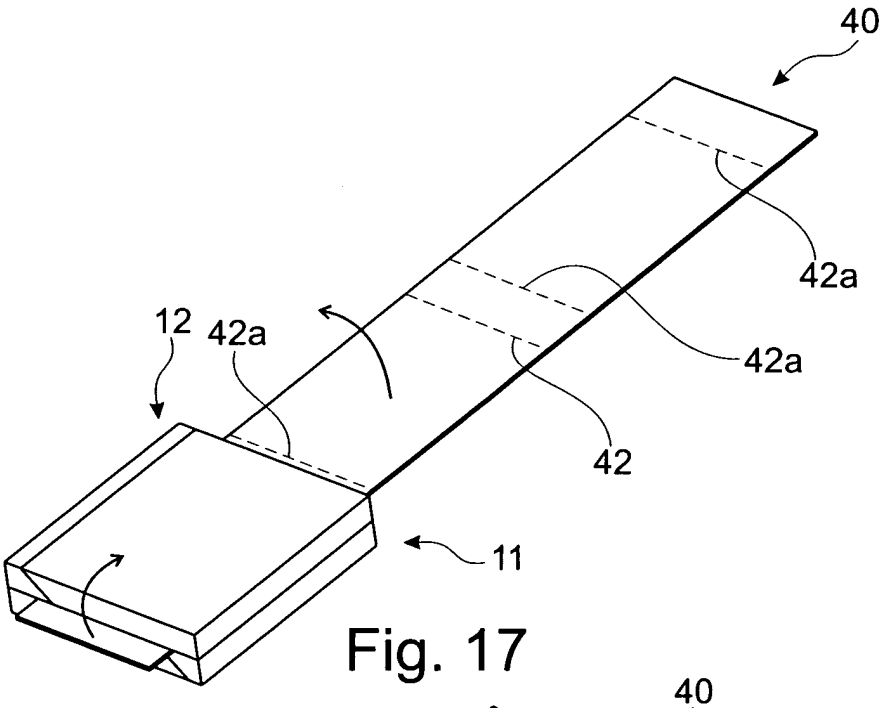

Fig. 17

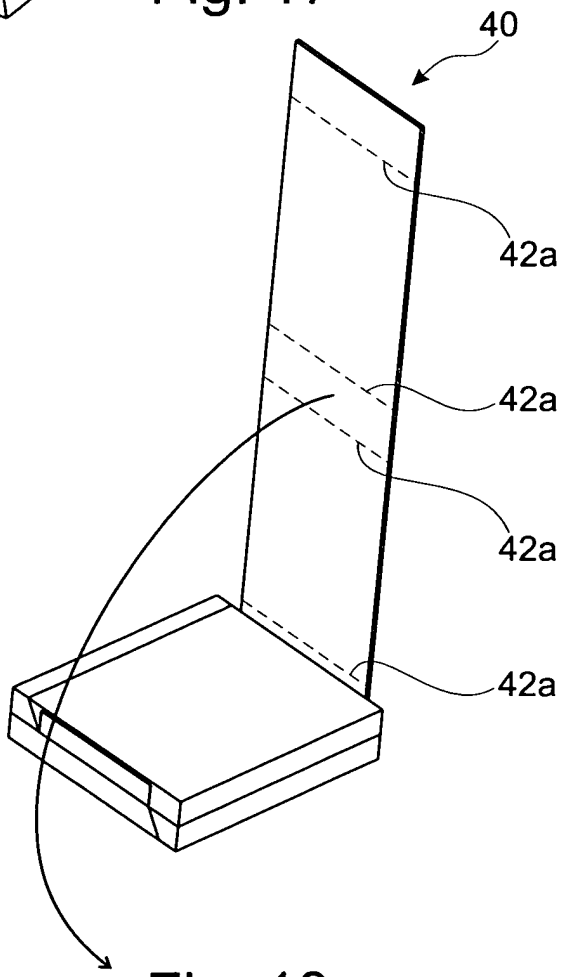

Fig. 18

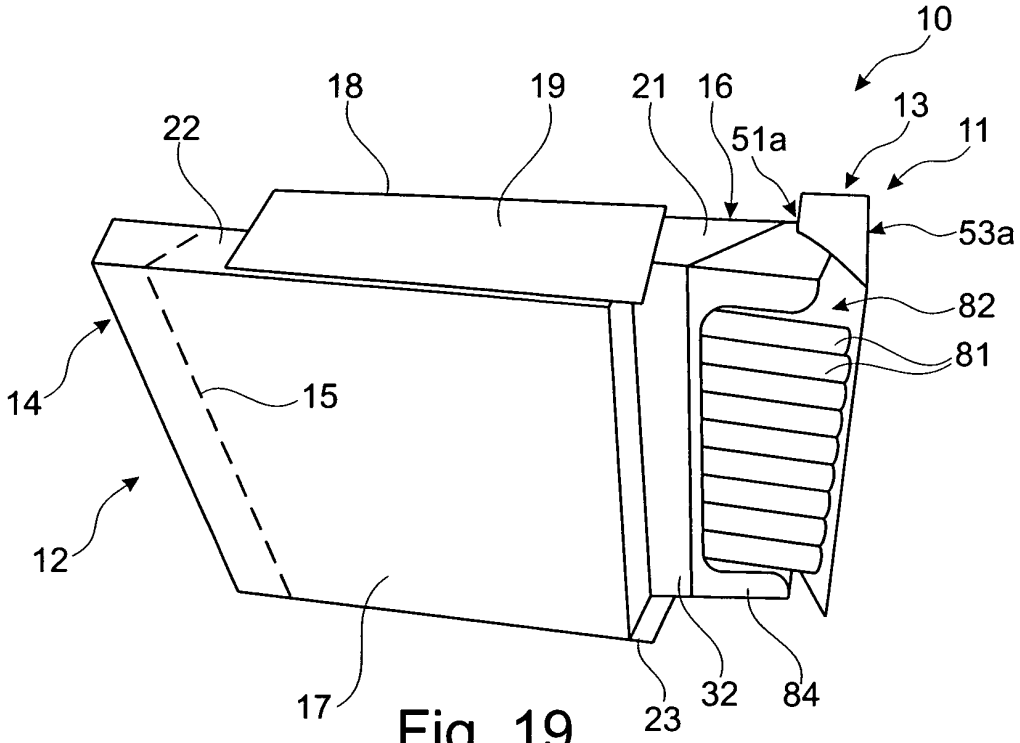
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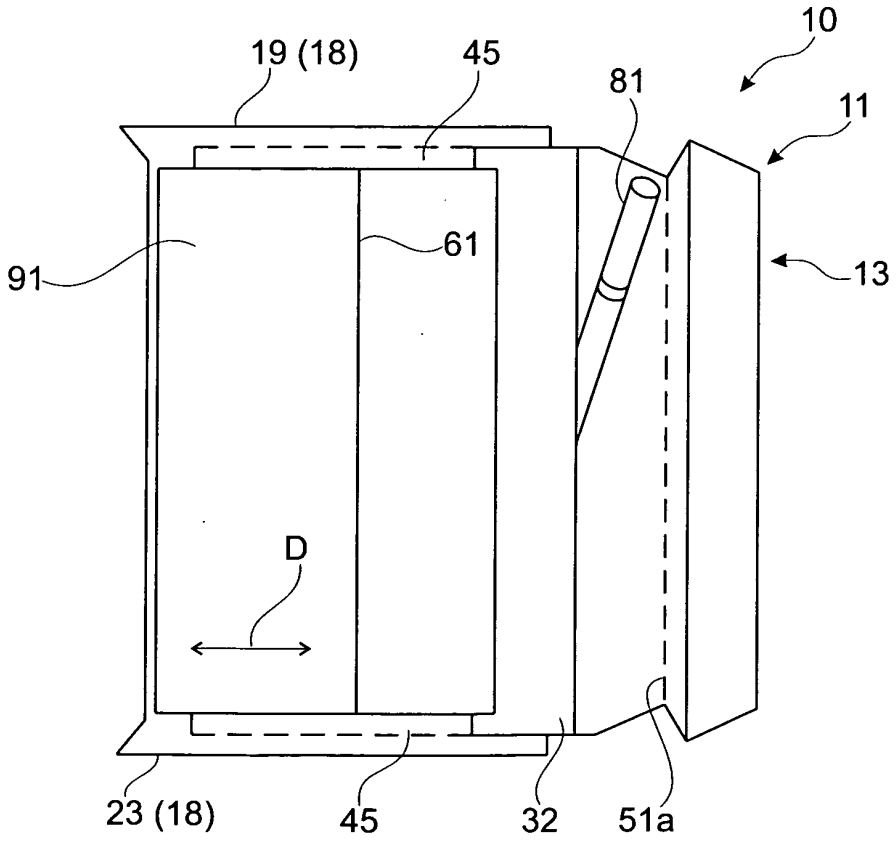
Fig. 19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19 (18)
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81
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D
23 (18)
45
32
51a

Fig. 20

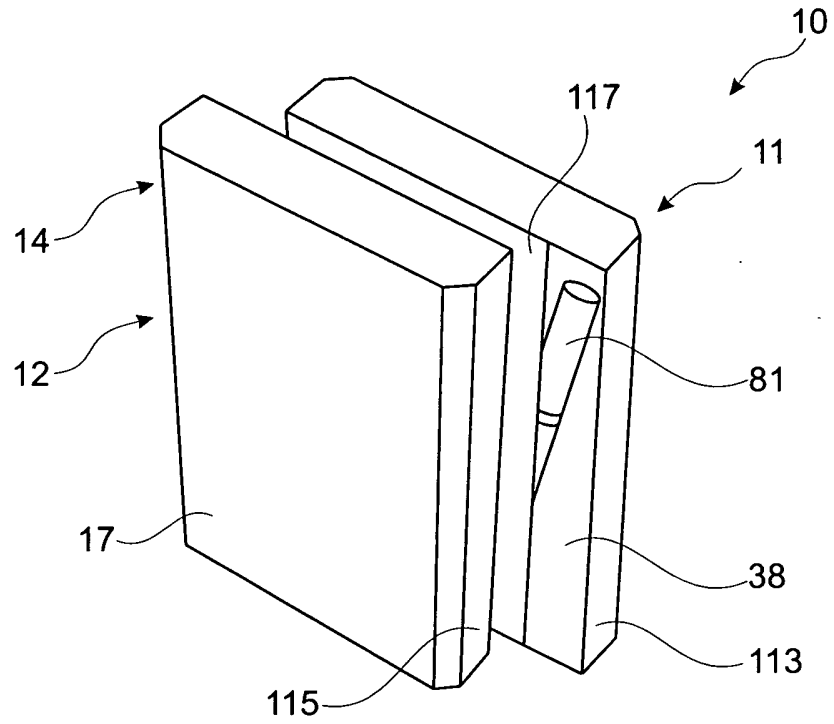
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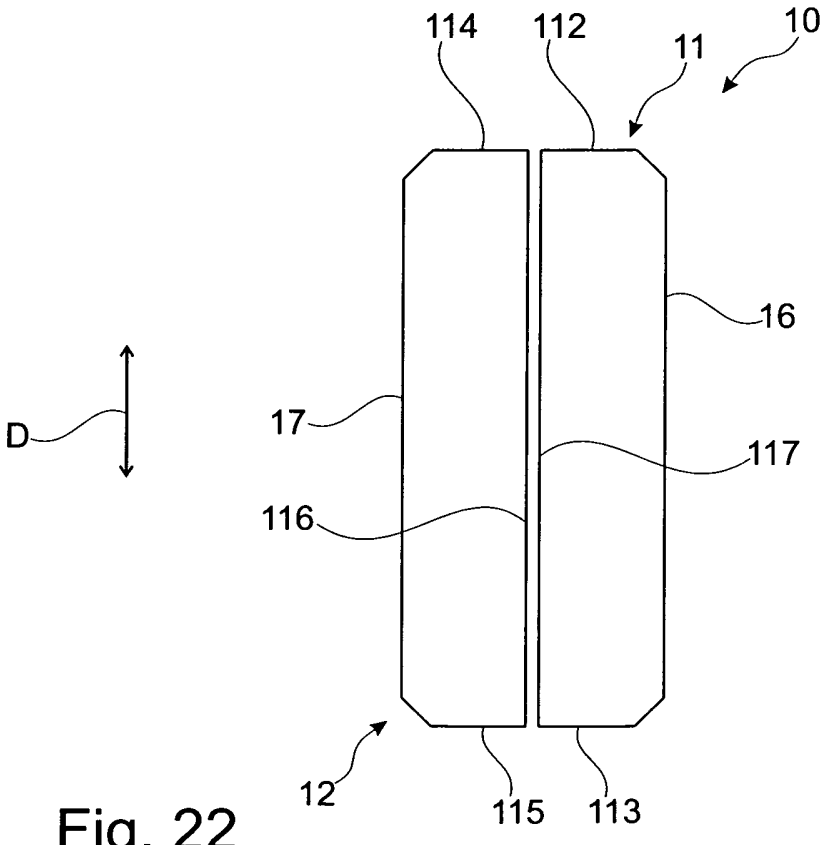
Fig. 21


114
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D
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Fig. 22

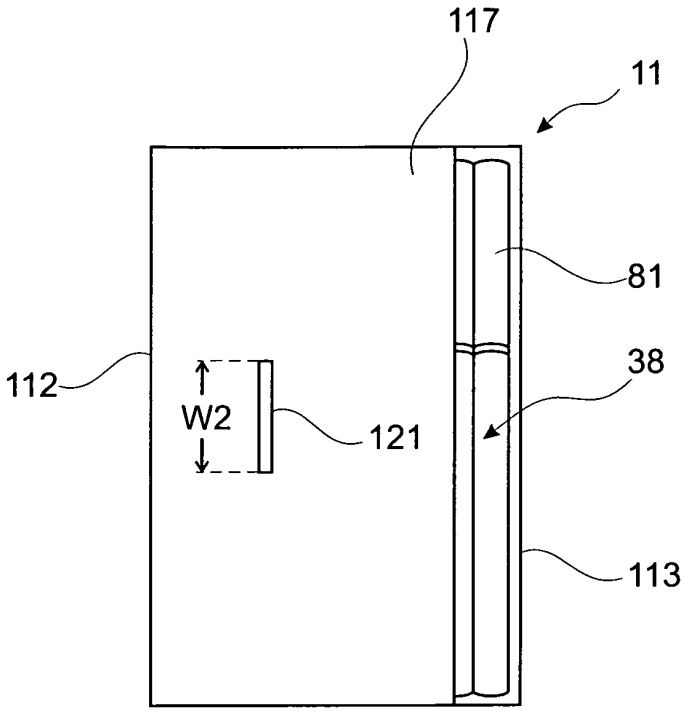
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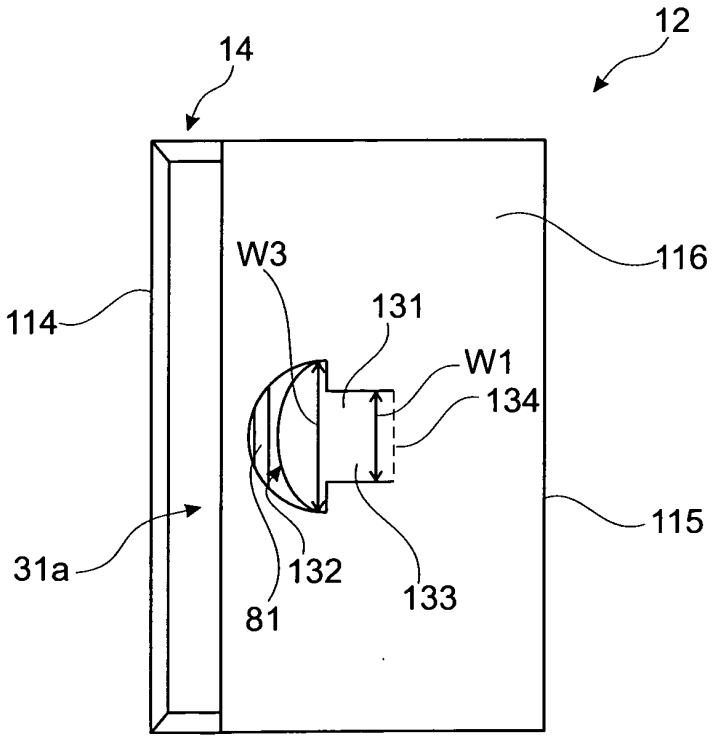
Fig. 23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116
W3
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W1
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31a
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81

Fig. 24

Europäisches Patentamt
European Patent Office
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EUROPEAN SEARCH REPORT

Application Number
EP 12 19 1180

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	CA 2 639 984 A1 (DUFF DESIGN LTD [GB]) 26 July 2007 (2007-07-26) * page 6, line 11 - page 12, last line; figures 1-8 *	1-4,6-16	INV. B65D5/38 B65D85/10
X	WO 2007/007094 A1 (BURGOPAK LTD [GB]; WHARTON BURGO [GB]; THAIN HAMISH [GB]) 18 January 2007 (2007-01-18) * page 8, line 14 - page 12, line 12; figures 1-10 *	1,2,6-16	
X	WO 98/24696 A1 (WILKINS ANDRE PHILIP [GB]) 11 June 1998 (1998-06-11) * page 2, line 13 - page 5, line 6; figures 1-6 *	1,2,6	
X	WO 2008/134779 A1 (BRITISH AMERICAN TOBACCO CO [GB]; WALT LOUIS STEPHANUS V D [ZA]; TEARL) 6 November 2008 (2008-11-06) * page 5, line 29 - page 18, line 16; figures 1-10 *	1,2	

TECHNICAL FIELDS SEARCHED (IPC)

B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	11 February 2013	Derrien, Yannick

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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D : document cited in the application
L : document cited for other reasons

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1

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 12 19 1180

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11-02-2013

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CA 2639984 A1	26-07-2007	AU 2007206725 A1	26-07-2007
		CA 2639984 A1	26-07-2007
WO 2007007094 A1	18-01-2007	NONE	
WO 9824696 A1	11-06-1998	EP 0885146 A1	23-12-1998
		WO 9824696 A1	11-06-1998
WO 2008134779 A1	06-11-2008	AR 066307 A1	12-08-2009
		AU 2008245393 A1	06-11-2008
		CA 2683889 A1	06-11-2008
		CN 101687563 A	31-03-2010
		EA 200901439 A1	30-04-2010
		EP 2139779 A1	06-01-2010
		JP 2010524801 A	22-07-2010
		KR 20100018498 A	17-02-2010
		TW 200911635 A	16-03-2009
		US 2010176010 A1	15-07-2010
		WO 2008134779 A1	06-11-2008

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- CN 201276282 **[0003]**
- CN 201338814 **[0004]**