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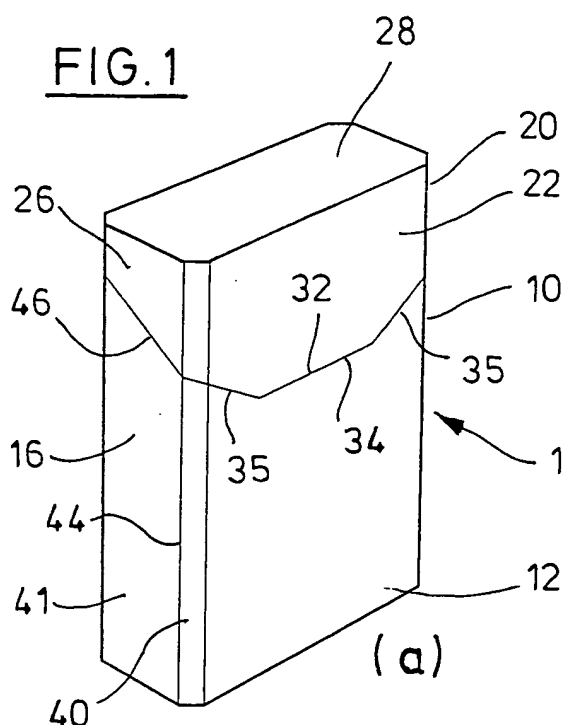
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(54) **Package for smoking articles**

(57) A package (1) for smoking articles includes a shell (10) comprising a front wall (12), a rear wall, two side walls (16) and a bottom wall, the front wall (12) and the rear wall having a larger area than the side walls (16), and a lid (20). The lid (20) comprises a front wall (22) having a straight upper edge (38) and a lower edge (32), a rear wall, two side walls (26) and a top wall (28) and is adapted to close the top of the shell (10) when it is in a closed state and to allow access to the interior of the shell (10) when it is in an opened state. The rear wall of the

lid (20) is connected to the rear wall of the shell (10) along a hinge line about which the lid (20) can be swivelled for transition between the closed state and the opened state. The lower edge (32) of the front wall (22) of the lid (20) has a non-straight shape, the distance between the lower edge (32) and the upper edge (38) of the front wall (22) of the lid (20) being largest in the centre region of the lower edge (32). The front wall (12) of the shell (10) and the front wall (22) of the lid (20), in the closed state of the lid (20), form a continuous surface.



Description

[0001] The invention relates to a package for smoking articles, e.g., for cigarettes or cigarillos.

[0002] In numerous designs, a package for smoking articles includes a shell comprising a front wall, a rear wall, two side walls and a bottom wall, the front wall and the rear wall having a larger area than the side walls, and a lid. The lid comprises a front wall having a straight upper edge and a lower edge, a rear wall, two side walls and a top wall and is adapted to close the top of the shell when it is in a closed state and to allow access to the interior of the shell when it is in an opened state. The rear wall of the lid is connected to the rear wall of the shell along a hinge line about which the lid can be swivelled for transition between the closed state and the opened state.

[0003] Although many designs of the above kind include reasonable handling properties and have a good appearance, there is still a need for improvements.

[0004] It is the object of the invention to provide a package for smoking articles which involves a very good handling and allows for an elegant design.

[0005] This problem is solved by a package for smoking articles having the features of claim 1. Advantageous embodiments of the invention follow from the dependent claims.

[0006] In the package according to the invention, the lower edge of the front wall of the lid has a non-straight shape, the distance between the lower edge and the upper edge being largest in the centre region of the lower edge. Moreover, the front wall of the shell and the front wall of the lid, in the closed state of the lid, form a continuous surface (except for the small gap separating the shell and the lid).

[0007] The shape of the lower edge of the lid accentuates the zone where a user can grip the lid in order to open it. The total length of the lower edge of the lid is larger than in case of a conventional lid having a straight lower edge. This improves the recloseability of the lid. In particular, when the shell comprises an inner frame, which forms an abutment face for the lid in the region of the lower edge of the front wall of the lid, the lid can be easily closed and stays in the closed state. Due to the shape of the lid, the material of the lid experiences larger stresses than in a conventional lid, which contributes to the safe closure of the lid and also adds to the stability of the package as a whole.

[0008] In advantageous embodiments of the invention, the lower edge of the front wall of the lid is convex-shaped along its full extension, for example polygon-shaped or comprising at least one bow-shaped section. Convex-shaped means that any straight line connecting two points on the lower edge of the front wall of the lid completely runs in an area belonging to the front wall of the lid including its lower edge. A bow-shaped section may extend over the full length of the lower edge of the front wall of the lid or over part of its length.

[0009] The shape of the lower edge of the front wall of

the lid can be symmetric with respect to its centre, wherein the centre region preferably runs in parallel to the upper edge of the front wall of the lid.

[0010] In summary, in addition to an elegant appearance of the package provided by the shape of the front wall of the lid, the package according to the invention can be conveniently handled and allows for an easy access to its contents.

[0011] When the shell of the package includes an inner frame, the inner frame, preferably, is provided with an access cut-out at the front wall of the shell, the access cut-out comprising a lower edge. In this case, the accessible (i.e. visible, when the lid is in its opened state) area of the inner frame below the lower edge of the access cut-out can provide space for additional communication in conjunction with print-registered inner frame, e.g. for a logo, etc. However, in another design, the access cut-out can be relatively large without providing such extra space. The lower edge of the access cut-out can essentially run in parallel to the lower edge of the front wall of the lid (when the lid is in its closed state).

[0012] In advantageous embodiments of the invention, both side walls of the shell comprise two or three panels each, which are distinguished by one or two folding lines, respectively, formed in the respective side wall such that the shell has an hexagonal or octagonal cross-sectional shape in a plane in parallel to the bottom wall of the shell. The shape of the side walls of the lid is adapted to the shape of the side walls of the shell. This prism-like form of the package provides a very good impression.

[0013] It is also possible that both side walls of the shell comprise one or two rounded edge regions each, which extend in parallel to the longitudinal axis of the package, wherein the shape of the side walls of the lid is adapted to the shape of the side walls of the shell.

[0014] In addition to the shape of the lower edge of the front wall of the lid explained so far, the lower edges of the side walls of the lid can extend in a sloped manner. This particular shape of the lower edge of the lid adds to the advantageous properties of the package according to the invention.

[0015] In the following, the package according to the invention is described in more detail by means of embodiments. The drawings show in

Figure 1 a first embodiment of a package according to the invention, i.e. in part (a) an isometric view of the package, the lid of the package being in the closed state, in part (b) an isometric view of the package, the lid being in the opened state, in part (c) a front view of the package and in part (d) a bottom view of the package,

Figure 2 a second embodiment of a package according to the invention, i.e. in part (a) an isometric view of the package, the lid of the package being in the closed state, in part (b) an iso-

- metric view of the package, the lid being in the opened state, in part (c) a front view of the package and in part (d) a bottom view of the package,
- Figure 3 a third embodiment of a package according to the invention, i.e. in part (a) an isometric view of the package, the lid of the package being in the closed state, in part (b) a front view of the package and in part (c) a bottom view of the package,
- Figure 4 a fourth embodiment of a package according to the invention, i.e. in part (a) an isometric view of the package, the lid of the package being in the closed state, in part (b) a front view of the package and in part (c) a bottom view of the package,
- Figure 5 a fifth embodiment of a package according to the invention, i.e. in part (a) an isometric view of the package, the lid of the package being in the closed state, in part (b) a front view of the package and in part (c) a bottom view of the package, and
- Figure 6 a sixth embodiment of a package according to the invention, i.e. in part (a) an isometric view of the package, the lid of the package being in the closed state, in part (b) a front view of the package and in part (c) a bottom view of the package.

[0016] Figure 1 illustrates a first embodiment of a package for smoking articles.

[0017] The package 1 is designed as a flip-top box and comprises a shell 10 and a lid 20. In the embodiment, the shell 10 is folded from a cardboard blank and comprises a front wall 12, a rear wall 14, two side walls 16 and a bottom wall 18.

[0018] The lid 20 is folded from a cardboard blank as well and includes a front wall 22, a rear wall (not directly visible in Figure 1), two side walls 26 and a top wall 28. At the rear side of package 1, the lid 20 is swivelably connected to the shell 10 along a hinge line 30. By swivelling the lid 20 about the hinge line 30, the lid 20 can be transferred from a closed state, see Figure 1(a), to an opened state, see Figure 1(b).

[0019] The front wall 22 of lid 20 comprises a lower edge 32, which has a non-straight shape, see in particular Figure 1(c). In the embodiment, the lower edge 32 is polygon-shaped and comprises a centre section or region 34 and two side sections or regions 35 which extend up to the longitudinal edges 36 of package 1. The centre section 34 runs in parallel to the upper edge 38 of the front wall 22 of lid 20. In the embodiment, the lower edge 32 is symmetric with respect to a longitudinal centre axis of package 1. As is evident from Figure 1, the distance

between the lower edge 32 and the upper edge 38 is largest in the centre region 34 of lower edge 32. Lower edge 32 is shaped in a convex manner, i.e. any line connecting two points on lower edge 32 completely runs across an area of the front wall 22 of lid 20 or on the line defining the lower edge 32.

[0020] As is best seen in Figure 1(d), each side wall 26 of the shell 10 comprises three panels 40, 41 and 42, which are distinguished by folding lines 44 and 45 running in parallel to the longitudinal axis of package 1. In this way, the bottom wall 18 of shell 10 has an octagonal shape. The shape of the side walls 26 of lid 20 is adapted to that shape such that any cross-section through package 1 in parallel to bottom wall 18 has a generally octagonal form.

[0021] As shown in Figure 1(b), the shell 10 comprises an inner frame 50, which forms an abutment face for the lid 20 when lid 20 is in the closed state. In the embodiment, the inner frame 50 is made from an extra cardboard blank and glued to the inner faces of the front wall 12, the rear wall 14 and the side walls 16 of shell 10. The inner frame 50 is provided with an access cut-out 52, which facilitates access to the contents of package 1. In the embodiment according to Figure 1, the access cut-out 52 is relatively large. Its lower edge 54 has a similar shape as a step line 56, see Figure 1(b).

[0022] When the lid 20 is closed, its lower edge 32 rests adjacent to step line 56, which has the same shape as lower edge 32. Thus, in the closed state of the lid 20, the front wall 12 of shell 10 and the front wall 22 of lid 20 form a continuous surface. In this state, the lower edge 32 is supported by the inner frame 50.

[0023] Figure 1(b) also shows a cigarette block 57 wrapped in an aluminium foil which can easily be opened in order to take cigarettes from package 1 when the lid 20 is opened.

[0024] The lower edges 46 of the side walls 26 of lid 20 run in a sloped manner, in continuation of the general direction of the side regions 35 of the lower edge 32 of the front wall 22 of lid 20. In the embodiment, the inner frame 50 extends to the side walls 16 of package 1 such that the step line 56 is continued at the side walls 16 as well.

[0025] Figure 2 displays a package 1', which is very similar to package 1 of Figure 1. For this reason, the same reference numerals are used in Figures 1 and 2, with a few exceptions which indicate the differences between these embodiments:

[0026] As shown in Figure 2(b), an inner frame 50' has an access cut-out 52', which is smaller than access cut-out 52 in Figure 1. The lower edge 54' of access cut-out 52' is more square-shaped and does not follow the course of step line 56. Between step line 56 and lower edge 54', there is sufficient space for additional communication in conjunction with print-registered inner frame. In other words, this area can be provided with, e.g., a logo, advertising indicia, etc., which become striking when the lid 20 of package 1' is opened.

[0027] Figures 3 to 6 illustrate further embodiments of a package in which the lower edge of the front wall of the lid has a non-straight shape. These embodiments generally differ from those of Figures 1 and 2 and from each other in the cross-sectional shape of the shell and the lid. Otherwise, they are very similar to the embodiments according to Figures 1 and 2 and do not require a detailed explanation.

[0028] In the embodiment according to Figure 3, a package 60 comprising a shell 62 and a lid 64 has a generally rectangular cross-sectional shape 66. Thus, its side walls are plane and do not include folding lines.

[0029] Package 70 according to the embodiment displayed in Figure 4 comprises a shell 72 and lid 74 with a hexagonal cross-sectional shape 76. The side walls of the shell 72 and the lid 74 comprise one folding line each which divides the side wall into a narrow panel joining the front wall at an acute angle and a wide panel being orthogonal to the rear wall of shell 72 and lid 74.

[0030] In the embodiment of Figure 5, a package 80 comprising a shell 82 and a lid 84 includes side walls having two rounded edge regions each, as is evident from the cross-sectional shape 86.

[0031] In the embodiment according to Figure 6, a package 90 comprising a shell 92 and a lid 94 has a cross-sectional shape 96 including side walls with one rounded edge region each, which is located adjacent to the front wall of shell 92 and lid 94. Moreover, the overall width of package 90 is smaller than that of package 80, see Figures 6(c) and 5(c).

[0032] Generally, the lower edge of the front wall of the lid (reference numeral 32 in Figure 1), which in the embodiments according to Figures 1 to 6 is designed as a polygon line including three sections, can also have quite different shapes, for example polygons with more (or less) than three sections, bow-like shapes and also shapes including bow-like sections and straight sections. These aspects and the general advantages of the package have already been considered in the introductory part.

Claims

1. A package for smoking articles, comprising

- a shell (10) comprising a front wall (12), a rear wall (14), two side walls (16), and a bottom wall (18), the front wall (12) and the rear wall (14) having a larger area than the side walls (16), and
- a lid (20) comprising a front wall (22) having a straight upper edge (38) and a lower edge (32), a rear wall, two side walls (26) and a top wall (28) and being adapted to close the top of the shell (10) when it is in a closed state and to allow access to the interior of the shell (10) when it is in an opened state, wherein the rear wall of the lid (20) is connected to the rear wall (14) of the

shell (10) along a hinge line (30) about which the lid (20) can be swivelled for transition between the closed state and the opened state,

characterised in that

- the lower edge (32) of the front wall (22) of the lid (20) has a non-straight shape, the distance between the lower edge (32) and the upper edge (38) being largest in the centre region of the lower edge (32), and
- the front wall (12) of the shell (10) and the front wall (22) of the lid (20), in the closed state of the lid (20), form a continuous surface.

2. Package according to claim 1, **characterised in that** the lower edge (32) of the front wall (22) of the lid (20) is convex-shaped along its full extension.

3. Package according to claim 2, **characterised in that** the lower edge (32) of the front wall (22) of the lid (20) is polygon-shaped (34, 35) or comprises at least one bow-shaped section.

4. Package according to anyone of claims 1 to 3, **characterised in that** the shape of the lower edge (32) of the front wall (22) of the lid (20) is symmetric with respect to its centre.

5. Package according to claim 4, **characterised in that** the centre region (34) of the lower edge (32) of the front wall (22) of the lid (20) runs in parallel to the upper edge (38).

6. Package according to anyone of claims 1 to 5, **characterised in that** the shell (20) comprises an inner frame (50; 50'), which forms an abutment face for the lid (20) in the region of the lower edge (32) of the front wall (22) of the lid (20).

7. Package according to claim 6, **characterised in that** the inner frame (50; 50') is provided with an access cut-out (52; 52') at the front wall (12) of the shell (10), the access cut-out (52; 52') comprising a lower edge (54; 54').

8. Package according to claim 7, **characterised in that** the accessible area of the inner frame (50') below the lower edge (54') of the access cut-out (52') provides space for additional communication in conjunction with print-registered inner frame.

9. Package according to claim 7 or 8, **characterised in that** the lower edge (54) of the access cut-out (52) essentially runs in parallel to the lower edge (32) of the front wall (22) of the lid (20) when the lid (20) is in its closed state.

10. Package according to anyone of claims 1 to 9, **characterised in that** both side walls (16) of the shell (10; 72) comprise two or three panels (40, 41, 42) each, which are distinguished by one or two folding lines (44, 45), respectively, formed in the respective side wall (16) and extending in parallel to a longitudinal axis of the package (1), the longitudinal axis being orthogonal to the bottom wall (18) of the shell (10; 72), thus forming a hexagonal or an octagonal, respectively, cross-sectional shape of the shell (10; 72) in a plane in parallel to the bottom wall (18) of the shell (10; 72), and **in that** the shape of the side walls (26) of the lid (20; 74) is adapted to the shape of the side walls (16) of the shell (10; 72).
11. Package according to anyone of claims 1 to 9, **characterised in that** both side walls of the shell (82; 92) comprise one or two rounded edge regions each, which extend in parallel to a longitudinal axis of the package (80; 90), the longitudinal axis being orthogonal to the bottom wall of the shell (82; 92), and **in that** the shape of the side walls of the lid (84; 94) is adapted to the shape of the side walls of the shell (82; 92).
12. Package according to anyone of claims 1 to 11, **characterised in that** the lower edges (46) of the side walls (26) of the lid (20) extend in a sloped manner.

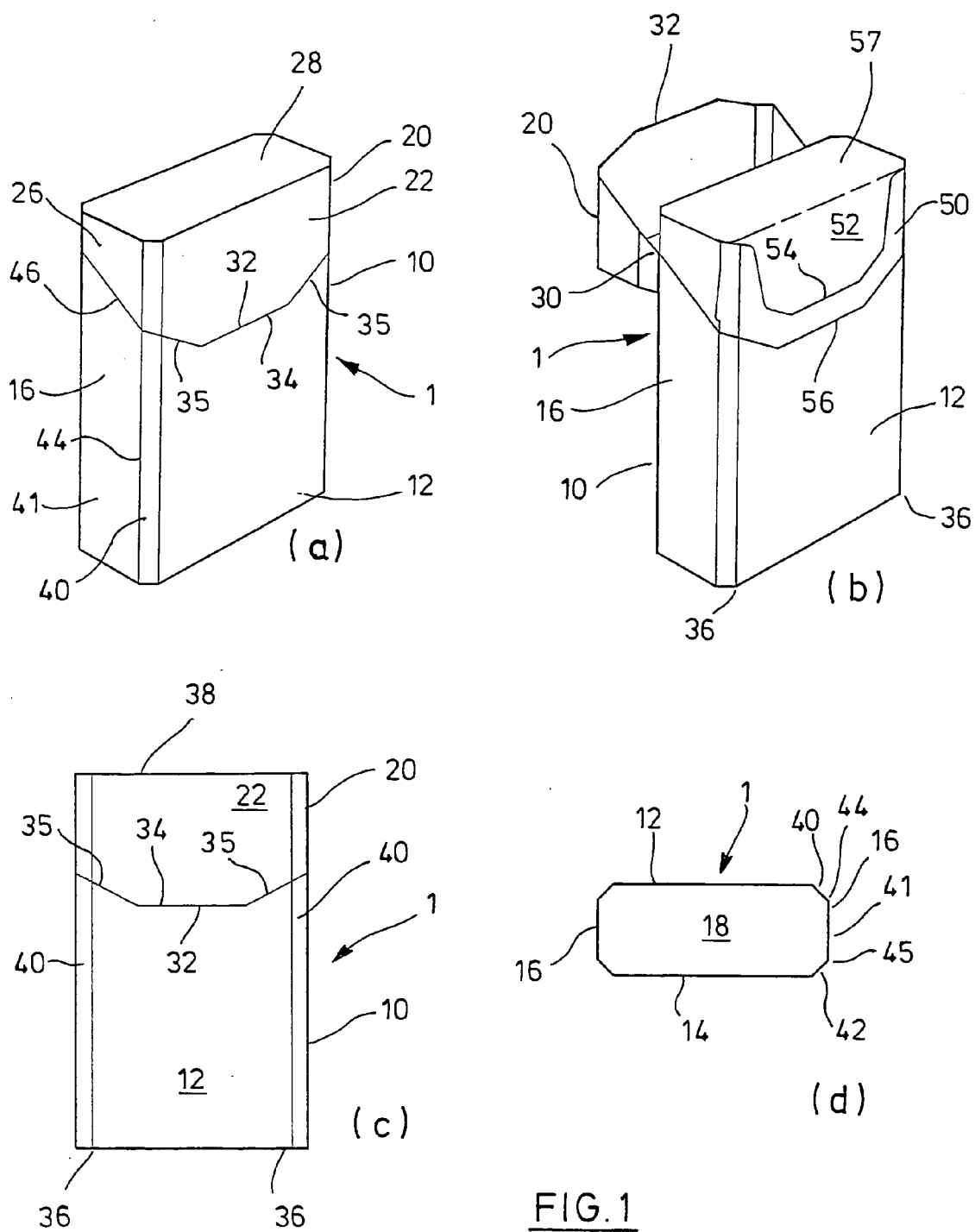


FIG.1

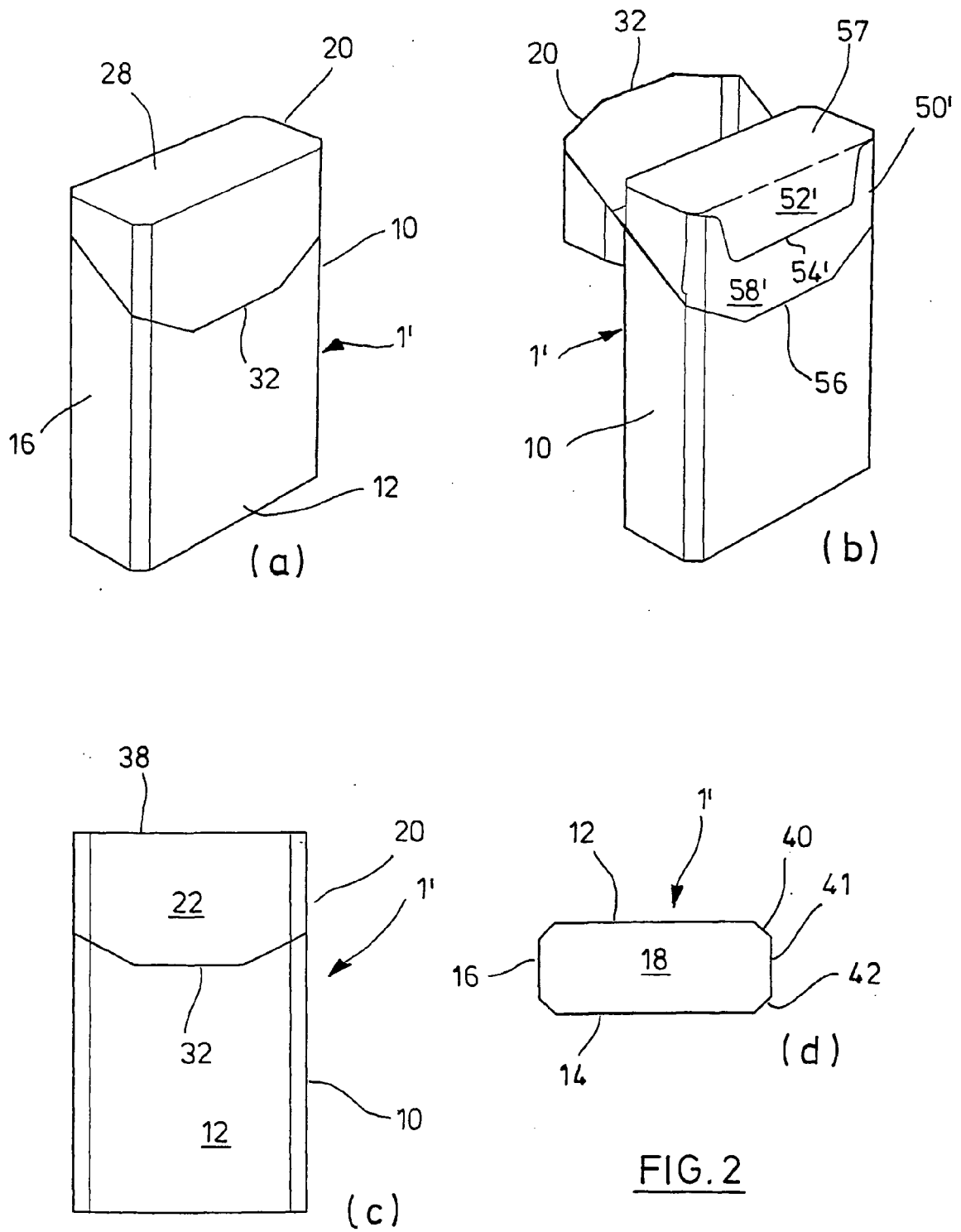


FIG. 2

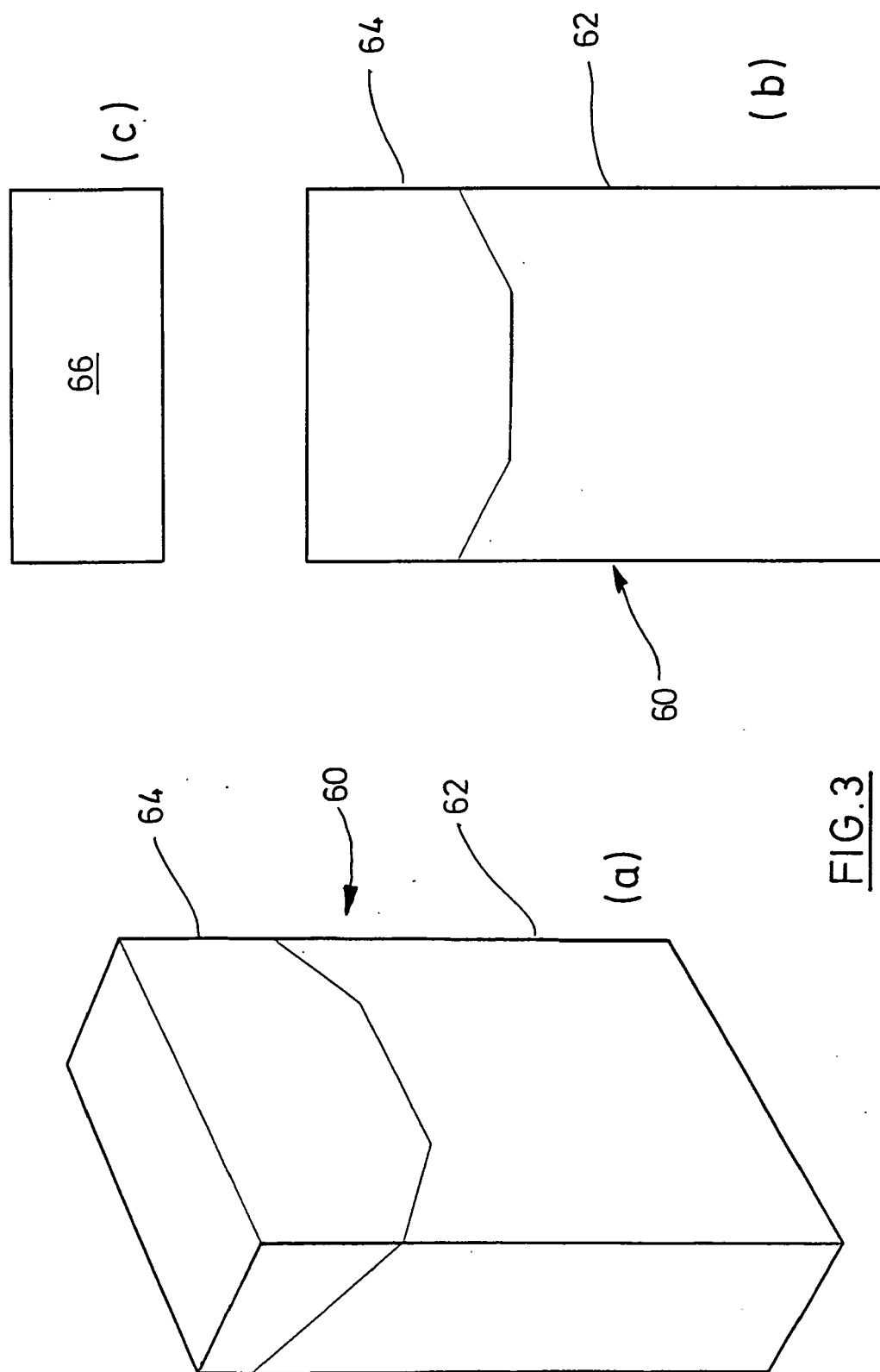


FIG. 3

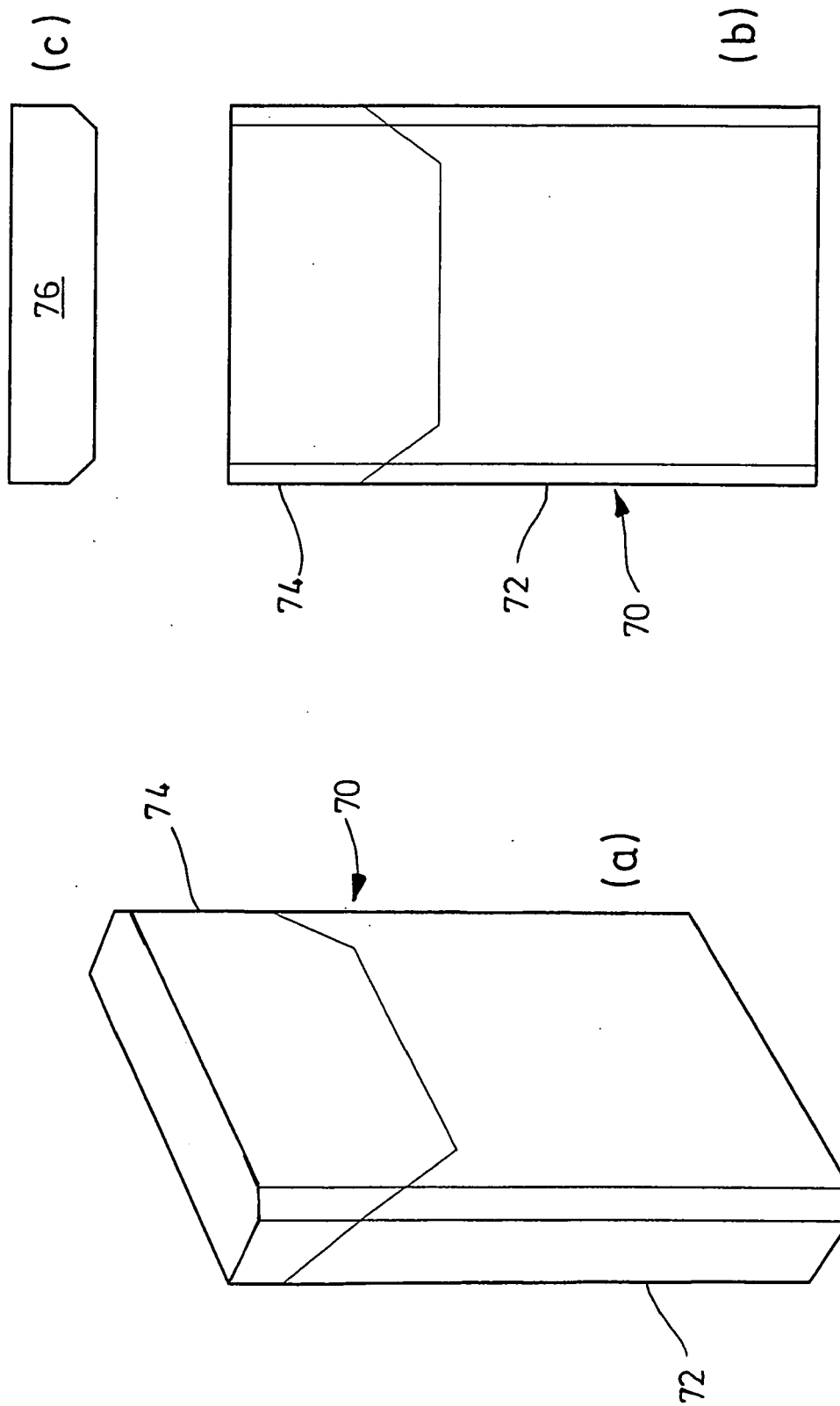


FIG. 4

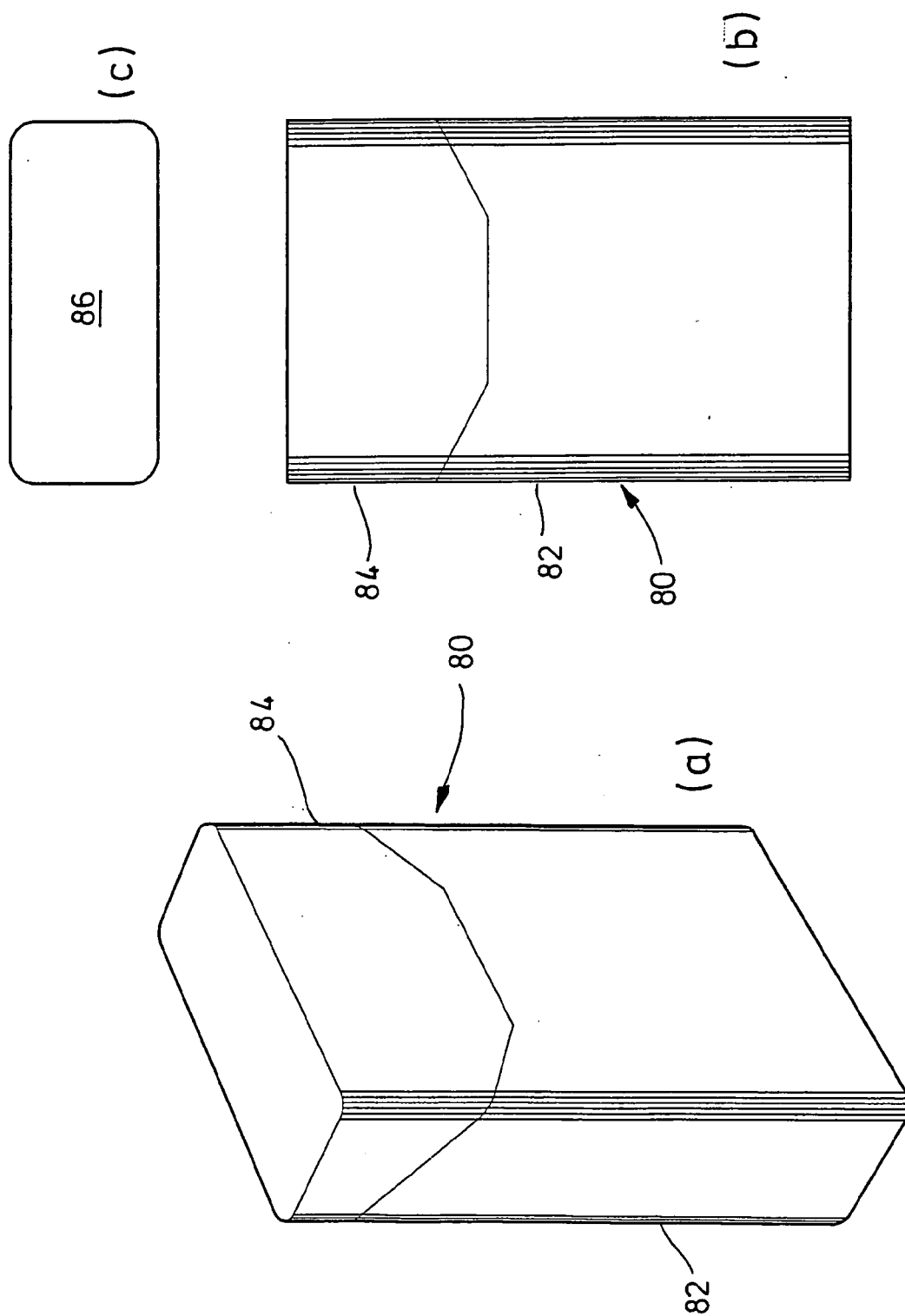


FIG. 5

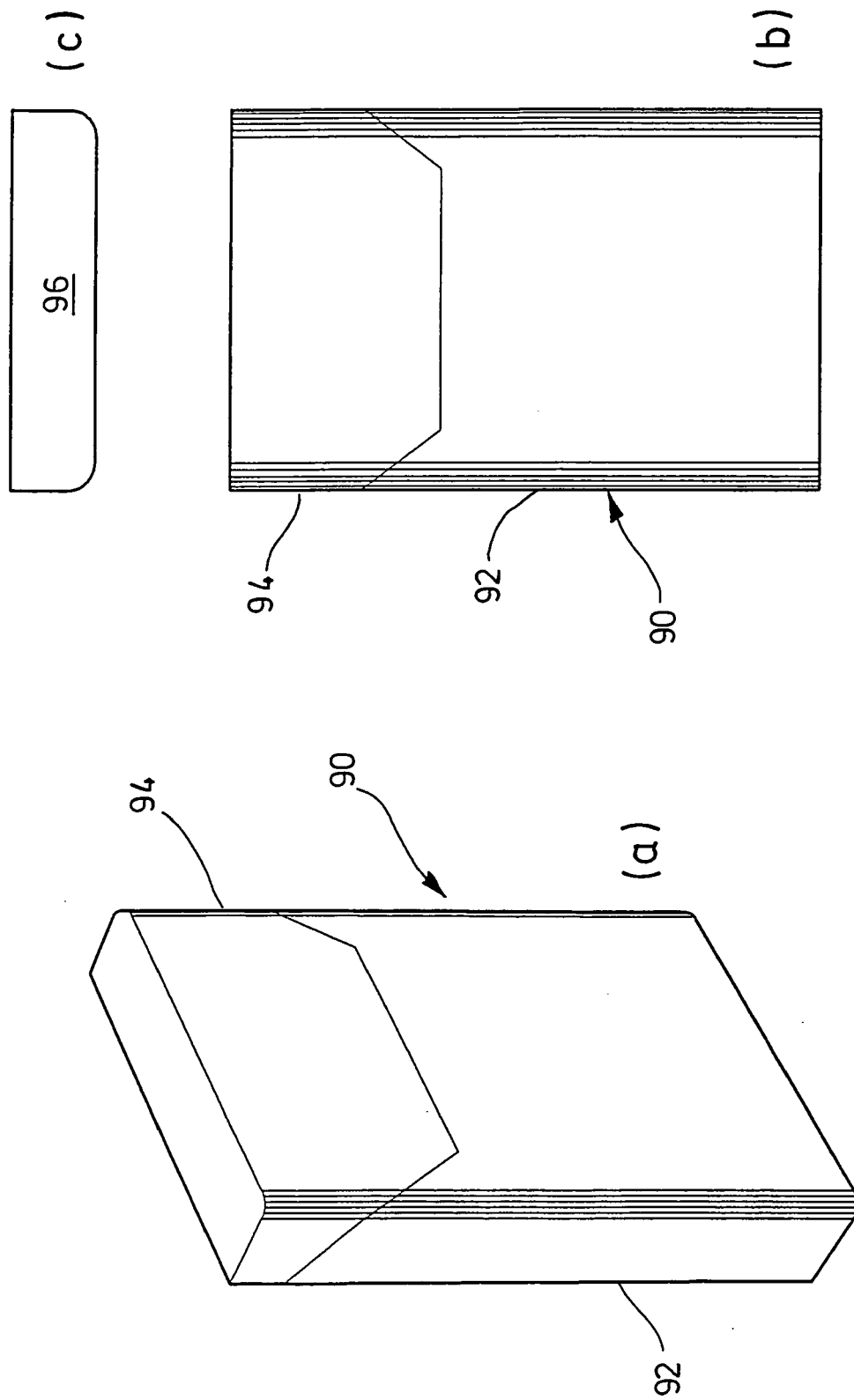


FIG. 6



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EUROPEAN SEARCH REPORT

Application Number
EP 08 40 0055

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 19 May 2009	Examiner Derrien, Yannick
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 08 40 0055

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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