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(54) **PACKAGING FOR FOODSTUFFS, MORE IN PARTICULAR FOR SNACKS, AND METHOD FOR THE MANUFACTURE THEREOF**

(57) Packaging for foodstuffs, more in particular for snacks, formed by a tray with a bottom (2) and a side wall (3) standing upwards from the bottom, wherein a partition part (4) is provided that is operable from out of a first position, in which the partition part lies flat on the bottom, into a second position, in which the partition part

is standing upwards, such that this divides the tray in a compartment (6) for solid foodstuffs or snacks and into a compartment (7) for non-solid foodstuffs, such as a sauce or mayonnaise, and method for the manufacture thereof.

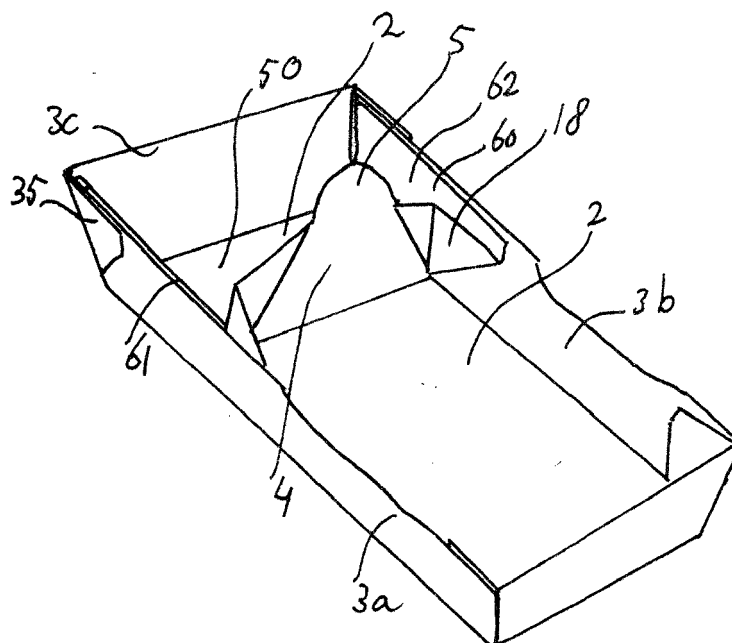


Fig. 15

Description

[0001] The present invention relates to a packaging for foodstuffs, more in particular for snacks, formed by a tray with a bottom and a side wall standing upwards from the bottom.

[0002] Such a packaging is known.

[0003] Such a packaging is used for various snacks, among which French fries. The fries are put into the tray, whereby a mayonnaise may be provided next to or on top of the fries.

[0004] Further is known a packaging formed by a tray having a double arrangement, whereby the tray is divided into a part for the snack, such as fries, and a part for a sauce, such as ketchup or mayonnaise. When no sauce or mayonnaise and such like is used with the snack the double division with this known tray has no use.

[0005] It is an object of the present invention to provide an improved packaging for this kind of foodstuffs. More in particular it is an object to provide a packaging that can be adapted to the sort of foodstuffs, that is to say, can be adapted to just solid foodstuffs or to solid and more or less liquid foodstuffs. Further it is an object to provide a packaging, that comprises a part that is suitable for containing hot and more or less liquid foodstuffs, without there being any case of leak through.

[0006] The packaging according to the invention there-to is characterized, in that a partition part is provided that is operable from out of a first position, in which the partition part lies flat on the bottom, into a second position, in which the partition part is standing upwards, such that this divides the tray in a compartment for solid foodstuffs or snacks and into a compartment for non-solid foodstuffs, such as a sauce or mayonnaise.

[0007] According to a characteristic of the packaging according to the invention the partition part is formed by a plate shaped part having a lower edge, two side edges and an upper edge, whereby the part is attached to the bottom at its lower edge and along this attachment is foldable from out of the first position to the second position.

[0008] According to another characteristic of the packaging according to the invention at least one side edge and at least one side wall are provided with co-operating engaging means for the bringing about in the second position of an attachment of the partition part to the side wall, such that the partition part is more or less retained in the second position.

[0009] According to a further characteristic of the packaging according to the invention the engaging means provided onto the partition part are formed by a protuberance and the engaging means provided onto the side wall is formed by a recess or slot.

[0010] According to another characteristic of the packaging according to the invention at least one connection strip is provided, which is connected with a first outer end to a side wall and is connected with a second outer end to a side edge of the partition part for the formation of a

seal between the side edge and the side wall.

[0011] According to yet a further characteristic of the packaging according to the invention the connection strip comprises, between the first outer end and the second outer end, a strip of material which can be rolled up or folded up, by which rolling up/folding up respectively un-rolling/unfolding, the varying distance between the side edge and the side wall during operating of the partition part from the first position to the second position and back again, can be bridged.

[0012] According to another characteristic of the packaging according to the invention the partition part and the connection strip comprise a number of folding parts, which are connected to each other along folding lines, which folding parts, by a moving of the partition part from the first position to the second position and back again, can fold against each other and away from each other.

[0013] According to a further characteristic of the packaging according to the invention the part that is intended for the formation of the compartment for non solid foodstuffs is made from a material having a greater thickness than the material that is used for the remainder of the packaging, or is made from a double layer of material.

[0014] With the packaging according to the invention the user can in a simple manner flip up the partition part, after which a separate compartment for the solid foodstuffs and a separate compartment for the more or less liquid foodstuffs is available.

[0015] The invention further relates to a method for the manufacture of a packaging according to the invention, characterized in that a piece of planar material is divided into six folding parts along five parallel horizontal folding lines, whereby a first folding part is divided by two folding lines in a back wall section and two affixing sections provided on either side of the back wall section, whereby a second folding part is divided by two parallel vertical folding lines in a bottom section and two side wall sections provided on either side of the bottom section, whereby a third folding part is divided by two folding lines in a front wall section and two affixing sections provided on either side of the front wall section, whereby a fourth folding part is intended for the formation of an inner front wall section, whereby a fifth folding part is divided by two parallel vertical folding lines in an inner bottom section and two affixing sections provided on either side of the inner bottom section, and whereby a sixth folding part is divided by two vertical folding lines in a partition part section and two cover sections provided on either side of the partition part section, whereby the partition part section is divided by two folding lines in a middle partition part section and two side partition part sections provided on either side of the middle partition part section, and further each cover section is divided by a folding line in an affixing section and a cover part section, after which the front wall section (the third folding part) and/or the inner bottom section (the fifth folding part) as well as the affixing sections are provided with glue, after which the inner front wall section (the fourth folding part) is folded onto the front wall section

(the third folding part), after which the inner bottom section (the fifth folding part) is folded onto the bottom section (the second folding part), the affixing sections of the fifth folding part are glued to the side wall sections, and the affixing sections of the cover sections (of the sixth folding part) are glued onto the side wall sections, after which the side walls, the front wall section and the back wall section are folded upwards relative to the bottom section and the affixing sections, that are provided onto the front wall section and the back wall section, are glued to the side walls.

[0016] According to a characteristic of the method according to the invention the folding lines provided in between the front wall section and the affixing sections provided on either side of the front wall section, and the folding lines provided in between the back wall section and the affixing sections provided on either side of the back wall section, are tapered, such, that these folding lines, as seen from the horizontal folding lines in between these sections and the bottom section, widen from each other.

[0017] The invention will now be described further with reference to the drawings of a number of examples of embodiments of the packaging and method according to the invention.

The figures 1 and 2 show a side view of an example of an embodiment of the packaging according to the invention.

Figure 3 shows a front view of the example of the embodiment of the packaging according to the figures 1 and 2.

Figure 4 shows a top view of the example of the embodiment of the packaging according to the figures 1 and 2.

The figures 5 and 6 show a top view of another example of an embodiment of the packaging according to the invention.

Figure 7 shows a side view of the example of the embodiment of the packaging according to the figures 5 and 6.

Figure 8 shows a top view of a piece of planar material for use with the method for the manufacture of the packaging according to the figures 5, 6 and 7.

Figure 9 shows a top view of a manufacturing step of the method for the manufacture of the packaging.

[0018] The figures 10 and 11 show perspective views of the further manufacturing step and the folding out and making ready for use of the finished packaging according to the invention.

[0019] In figure 1 is shown a packaging according to the invention, formed by a tray 1 with a bottom 2 and a side wall 3 standing upwards from the bottom. A partition part 4 is provided. Figure 1 shows this partition part 4 in a first position, in which this partition part 4 lies flat on the bottom 2 of the tray. As can be seen in figure 2, this partition part 4 can be folded up from out of the first po-

sition into a second position, in which this partition part 4 is standing up. The partition part can be provided with a tab 5 by means of which it can be pulled upwards. In figure 2 and in figure 4 it can be seen how the partition part 4 in this second position divides the tray 1 in a compartment 6 for solid foodstuffs or snacks and into a compartment 7 for non-solid foodstuffs, such as a sauce or mayonnaise.

[0020] In the example of the embodiment shown the tray is made from a paperboard. Also the partition part 4 is made from paperboard and is formed by a plate shaped part 8 having a lower edge 9, two side edges 10, 11 and an upper edge 12. The partition part 4 is attached at its lower edge 9 to the bottom 2, for instance by a paperboard strip 13 formed thereon, by means of which this is glued onto the bottom. Along this attachment the partition part 4 is foldable from out of the first position into the second position. In a suitable manner the bottom and eventually the side walls of the compartment 7 that is intended for the non-solid foodstuffs can be provided with an extra layer of cardboard (not shown in the figures 1-4), so that leak through and hot fingers are extensively countered.

[0021] As can be seen in the figures the side edges 10 and 11 each are provided with a protruberance 14, while the side walls 3 are provided with the recesses 15 and 16, in which the protuberances 14 can insert. This establishes a fixation of the partition part 4 to the side wall 3, such that the partition part 4 is more or less retained and cannot fold back downwards, flat onto the bottom 2.

[0022] In the figures 5, 6, 7 and 10 and 11 another embodiment of the packaging according to the invention is shown.

[0023] The packaging in this example of an embodiment is made from paperboard. The packaging is formed by the tray 1 with the bottom 2 and the two side walls 3a and 3b standing upwards from the bottom, the front wall 3c standing upwards and the back wall 3d standing upwards. Figures 5 and 10 show the partition part 4 in the first position, in which this partition part 4 lies flat on the bottom 2 of the tray. Figures 6 and 11 show how the partition part 4 is folded up from out of the first position into the second position, in which the partition part 4 is standing upwards. The partition part is provided with the tab 5 by means of which this can be pulled upwards. In figures 6 and 11 it can be seen how the partition part 4 in this second position divides the tray in the compartment 6 for solid foodstuffs or snacks and into the compartment 7 for non-solid foodstuffs, such as a sauce or mayonnaise.

[0024] The partition part 4 is made from paperboard and is formed by a plate shaped part 8 having a lower edge 9, two side edges 10, 11 and the upper edge 12. The partition part 4 is attached at its lower edge 9 to the bottom 2, for instance by means of the part 50 that is attached to the bottom 2 of the tray, and which part 50 at the same time effectuates that the compartment 7, that is intended for the sauce or mayonnaise, is provided with an extra inner covering 50 of paperboard. This inner cov-

ering 50 can eventually be glued to the side walls 3a, 3b via the lip 51. Along the attachment at its lower edge 9 to this inner covering 50 the partition part 4 is foldable from out of the first position into the second position. Further also the front wall 3c can be provided with an extra inner covering 17 of paperboard, so that leak through is extensively countered.

[0025] As can be seen in the figures 5, 6, 10 and 11 a connection strip 18 is provided, which is connected with a first outer end 19 to a side wall 3a, 3b and with a second outer end 20 is connected to a side edge 10, 11 of the partition part 4 for the formation of a seal between the side edge 10, 11 and the side wall 3a, 3b.

[0026] The connection strip 18 comprises a strip of material that is foldable, by means of which folding up respectively unfolding, the varying distance between the side edge 10, 11 of the partition part 4 and the side wall 3a, 3b during folding upwards and folding downwards of the partition part 4 can be bridged by the connection strip 18. In this manner the compartment 7 can be screened off without cracks from the compartment 6, so that a sauce or liquid cannot flow out from there.

[0027] The packaging according to the example of the embodiment last described can be manufactured in a simple manner by machine.

[0028] Figure 8 shows a piece of planar material, in this example of an embodiment paperboard or cardboard. The paperboard is divided along five parallel horizontal folding lines into six folding parts 22, 23, 24, 25, 26 and 27. A first folding part 22 is divided by two folding lines in a back wall section 28 and two affixing sections 29 and 30 provided on either side of the back wall section 28. A second folding part 23 is divided by two parallel vertical folding lines in a bottom section 31 and two side wall sections 32 and 33 provided on either side of the bottom section. A third folding part 24 is divided by two folding lines in a front wall section 34 and two affixing sections 35, 36 provided on either side of the front wall section. A fourth folding part 25 is intended for the formation of an inner front wall section 37. A fifth folding part 26 is divided by two parallel vertical folding lines in an inner bottom section 38 and two affixing sections 39, 40 provided on either side of the inner bottom section 38. A sixth folding part 27 is divided by two vertical folding lines in a partition part section 41 and two cover sections 42 and 43 provided on either side of the partition part section. The partition part section 41 is divided by two folding lines in a middle partition part section 41a and two side partition part sections 41b and 41c provided on either side thereof. Further, each cover section 42, 43 is divided by a folding line in an affixing section 42a resp. 43a and in a cover part section 42b resp. 43b.

[0029] When manufacturing the packaging from out of this plano the front wall section 34 (the third folding part 24) and/or the inner bottom section 38 (the fifth folding part 26) as well as the affixing sections 42a, 43a, 29 and 30 are provided on the top side with glue, in figure 8 shown with the letter G.

[0030] After this, as is shown in figure 9, the inner front wall section 37 (the fourth folding part 25) is folded onto the front wall section 34 (the third folding part 24), and the inner bottom section 38 (the fifth folding part 26) is placed on the bottom section 31 (the second folding part 23). The side wall sections 39 and 40 of the fifth folding part 26 are glued with their under sides to the inner side of the side wall sections 32, 33. Also the affixing sections 42a, 43a are glued onto the inner side of the side wall sections 32, 33. After this the side wall sections 31, 32, the front wall section 34 (with on it the inner front wall section 37) and the back wall section 28 are folded upwards relative to the bottom section 31, see figure 10, and the affixing sections 29, 30 that are provided onto the back wall section 28 are glued to the side wall sections 32, 33. The affixing sections 35, 36 of the front wall section 34 are wrapped around the side wall sections 32, 33 and glued thereto.

[0031] As can be seen in the figures 8 and 9, the folding lines provided in between the front wall section 34 and the affixing sections 35, 36 provided on either side thereof, and the folding lines provided in between the back wall section 28 and the affixing sections 29, 30 provided on either side of the back wall section are tapered, such that these folding lines widen from each other. Owing to this the tray that is manufactured from out of the paperboard forms a tapered packaging.

[0032] The figures 10 and 11 show the packaging. In figure 10 the partition part 4 lies flat on the bottom; in figure 11 the partition part 4 is folded upwards.

[0033] It is clear that the inner front wall section 37 and the inner bottom section 38, which, during the manufacturing of the packaging, are mounted onto the front wall section 34 respectively the bottom section 31, provide, in the finished packaging, for a double layer of paperboard in the compartment 7 for the liquid foodstuffs.

[0034] With the invention a packaging is obtained with an interior that may or may not be used if the tray has to be divided into two compartments, for instance for French fries with or without sauce.

[0035] The partition part 4 of the tray lies flat on the bottom and for use of hot and cold sauces, can simply be folded upwards. The folding mechanism makes use of the natural tension in the cardboard.

[0036] Owing to its construction the tray is suitable for hot, fat sauces without these sauces greasing through or leaking through to the other compartment 6.

[0037] In addition to the foregoing the figures 12, 13, 14 and 15 are discussed.

[0038] The figures 14 and 15 show perspective views of an example of an embodiment of the packaging according to the invention. The embodiment shown in these figures 14 and 15 is the same as that shown in the figures 5, 6 and 7 and the figures 10 and 11, with the understanding that the lips 51 that are glued to the side walls 3a, 3b (figure 5) and the first outer ends 19 of the connection strip 18 that are glued to the side walls 3a, 3b (figure 6) in the figures 14 and 15 are formed in one piece

of material 60. Further the measurements of this piece of material 60 are such, that the inner sides of the side walls 3a, 3b in the compartment 7 for non-solid foodstuffs are completely covered by this piece of material 60. In this manner therefore not only the bottom 2 in the compartment 7 and the upwards standing front wall 3c, but also the side walls 3a, 3b, completely are provided with the double layer or inner covering.

[0039] Figure 12 shows a top view of a piece of planar material for use with the method for the manufacture of the packaging shown in the figures 14 and 15, while figure 13 shows a top view of a manufacturing step of the method for the manufacture of this packaging.

[0040] The embodiment shown in this figure 12 of the piece of planar material is the same as that shown in figure 8, with the understanding that the affixing sections 39 and 42a shown in figure 8 in the embodiment shown in figure 12 are formed out of one piece of material 61. In a likewise manner the affixing sections 40 and 43a shown in figure 8 in figure 12 are formed out of one piece of material 62.

[0041] Just as has been described with regard to the figures 8 and 9 during the manufacturing of the packaging from out of the piece of planar material of figure 12 the front wall section 34 (the third folding part 24) and/or the inner bottom section 38 (the fifth folding part 26) as well as the affixing sections 61, 62, 29 and 30 are provided on the top with glue, shown in figure 12 with the letter G. After this, as is shown in figure 13, the inner front wall section 37 (the fourth folding part 25) is folded over the front wall section 34 (the third folding part 24), and the inner bottom section 38 (the fifth folding part 26) is placed upon the bottom section 31 (the second folding part 23). The affixing sections 61, 62 are glued to the inner side of the side wall sections 32, 33. After this the side wall sections 31, 32, the front wall section 34 (with on it the inner front wall section 37) and the back wall section 28 are folded upwards relative to the bottom section 31, see figure 14, and the affixing sections 29, 30 that are provided to the back wall section 28, are glued to the side wall sections 32, 33. The affixing sections 35, 36 of the front wall section 34 are wrapped around the side wall sections 32, 33 and glued thereto. The figures 14 and 15 show the packaging. In figure 14 the partition part 4 lies flat on the bottom; in figure 15 the partition part 4 is folded upwards.

It is clear that the inner front wall section 37 and the inner bottom section 38, which, during the manufacturing of the packaging, are glued onto the front wall section 34 respectively the bottom section 31, as well as the affixing sections 61, 62, which, during the manufacturing of the packaging, are glued onto the side wall section 32 respectively 33, provide, in the finished packaging, for a double layer of paperboard in the compartment 7 for the liquid foodstuffs.

[0042] In figure 16 an embodiment is shown which is the same as that shown in the figures 5, 6, 14 and 15, with the understanding that a partition part 4a and a par-

tion part 4b are included, and by means of which the tray can be divided into the compartments I, II and III, for taking up the various, solid or non-solid, foodstuffs, such as snacks, fries, sauce, cookies, fruit, greenery and such like. The piece of planar material used for the manufacture of this packaging corresponds to that which is shown in the figures 8 and further, with the understanding that at the side of the folding part 22, positioned opposite the folding part 23, a series of folding parts is provided which, as far as regards form and subdivision, correspond to the series of folding parts 25, 26 and 27 in figure 8. The folding over and glueing of these folding parts and the parts thereof takes place in corresponding manner.

15 List of references in the description.

[0043]

1	tray
20 2	bottom
3	side wall
3a	side wall
3b	side wall
3c	upwards standing front wall
25 3d	upwards standing back wall
4	partition part
4a	partition part
4b	partition part
5	tab
30 6	compartment for solid food stuff
7	compartment for non-solid food stuff
8	plate shaped part
9	lower edge
10	side edge
35 11	side edge
12	top edge
13	strip
14	protuberance
15	recess
40 16	recess
17	inner covering
18	connection strip
19	first outer end
20	second outer end
45 21	---
22	first folding part
23	second folding part
24	third folding part
25	fourth folding part
50 26	fifth folding part
27	sixth folding part
28	back wall section
29	affixing section
30	affixing section
55 31	bottom section
32	side wall section
33	side wall section
34	front wall section

35	affixing section
36	affixing section
37	inner front wall section
38	inner bottom section
39	affixing section
40	affixing section
41	partition part section
41a	middle partition part section
41b	side partition part section
41c	side partition part section
42	cover section
42a	affixing section
42b	cover part section
43	cover section
43a	affixing section
43b	cover part section
44-49	---
50	part inner covering
51	lip
52-59	---
60	one piece of material
61	one piece of material / affixing section
62	one piece of material / affixing section
G	glue
I	compartment
II	compartment
III	compartment

Claims

1. Packaging for foodstuffs, more in particular for snacks, formed by a tray with a bottom and a side wall standing upwards from the bottom, **characterized in that** a partition part is provided that is operable from out of a first position, in which the partition part lies flat on the bottom, into a second position, in which the partition part is standing upwards, such that this divides the tray in a compartment for solid foodstuffs or snacks and into a compartment for non-solid foodstuffs, such as a sauce or mayonnaise.
2. Packaging according to claim 1, **characterized in that** the partition part is formed by a plate shaped part having a lower edge, two side edges and an upper edge, whereby the part is attached at its lower edge to the bottom and along this attachment is foldable from out of the first position into the second position.
3. Packaging according to claim 1 or 2, **characterized in that** at least one side edge and at least one side wall are provided with co-operating engaging means for the bringing about in the second position of an attachment of the partition part to the side wall, such that the partition part is more or less retained in the second position.

4. Packaging according to claim 1,2 or 3, **characterized in that** the engaging means provided onto the partition part are formed by a protuberance and the engaging means provided onto the side wall are formed by a recess or slot.
5. Packaging according to claim 1 or 2, **characterized in that** at least one connection strip is provided, which is connected with a first outer end to a side wall and which is connected with a second outer end to a side edge of the partition part for the formation of a seal between the side edge and the side wall.
6. Packaging according to claim 5, **characterized in that** the connection strip comprises, between the first outer end and the second outer end, a strip of material which can be rolled up or folded up, by which rolling up/folding up respectively unrolling/unfolding, the varying distance between the side edge and the side wall during operating of the partition part from the first position to the second position and back again can be bridged.
7. Packaging according to claim 5 or 6, **characterized in that** the partition part and the connection strip comprise one or more folding parts, which folding parts by a moving of the partition part from the first position to the second position and back again, can fold against each other and away from each other.
8. Packaging according to one of the preceding claims, **characterized in that** the part of the packaging that is intended for the formation of the compartment for non solid foodstuffs is made from a material having a greater thickness than the material that is used for the remainder of the packaging.
9. Packaging according to one of the preceding claims, **characterized in that** the part of the packaging that is intended for the formation of the compartment for non solid foodstuffs is made from a double layer of material.
10. Packaging according to one of the preceding claims, **characterized in that** the packaging is made from paperboard or cardboard.
11. Packaging according to claim 10, **characterized in that** the part of the packaging that is intended for the formation of the compartment for non solid foodstuffs is made from a double layer of material of paperboard or cardboard.
12. Method for the manufacture of a packaging according to one of the claims 5, 6, 7, 8, 9, 10 or 11, **characterized in that** a piece of planar material is divided into six folding parts along five parallel horizontal folding lines, whereby a first folding part is divided

by two folding lines in a back wall section and two affixing sections provided on either side of the back wall section, whereby a second folding part is divided by two parallel vertical folding lines in a bottom section and two side wall sections provided on either side of the bottom section, whereby a third folding part is divided by two folding lines in a front wall section and two affixing sections provided on either side of the front wall section, whereby a fourth folding part is intended for the formation of an inner front wall section, whereby a fifth folding part is divided by two parallel vertical folding lines in an inner bottom section and two affixing sections provided on either side of the inner bottom section, and whereby a sixth folding part is divided by two vertical folding lines in a partition part section and two cover sections provided on either side of the partition part section, whereby the partition part section is divided by two folding lines in a middle partition part section and two side partition part sections provided on either side of the middle partition part section, and further each cover section is divided by a folding line in an affixing section and a cover part section, after which the front wall section and/or the inner bottom section as well as the affixing sections are provided with glue, after which the inner front wall section is folded onto the front wall section, after which the inner bottom section is placed on the bottom section, the affixing sections of the fifth folding part are glued to the side wall sections, and the affixing sections of the cover sections are glued onto the side wall sections, after which the side walls, the front wall section and the back wall section are folded upwards relative to the bottom section and the affixing sections that are provided onto the front wall section and the back wall section are glued to the side walls.

13. Method according to claim 12, **characterized in that** the folding lines provided in between the front wall section and the affixing sections provided on either side of the front wall section, and the folding lines provided in between the back wall section and the affixing sections provided on either side of the back wall section are tapered, such, that these folding lines, as seen from the horizontal folding lines in between these sections and the bottom section, widen from each other.
14. Piece of planar material suitable for application with the method according to one of the preceding claims.
15. Packaging obtained by application of the method according to one of the preceding claims.

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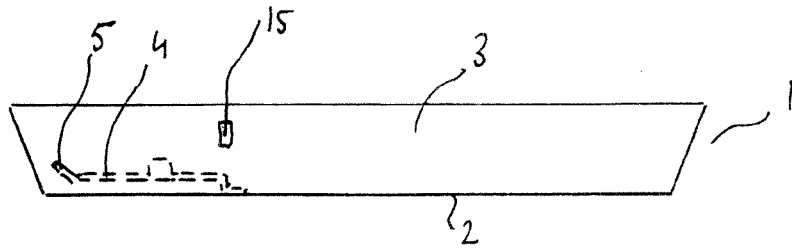


Fig. 1

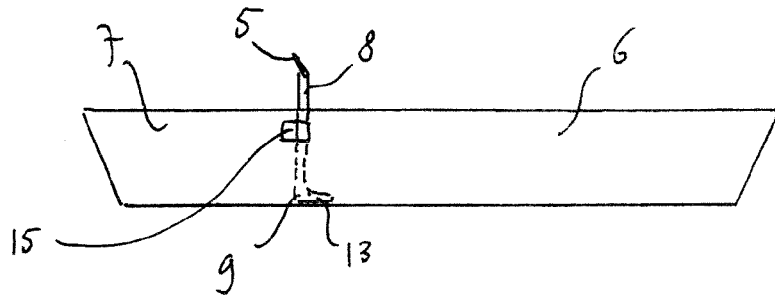


Fig. 2

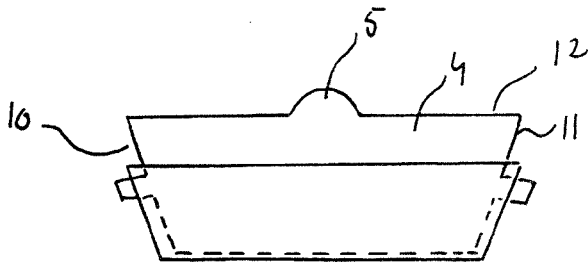


Fig. 3

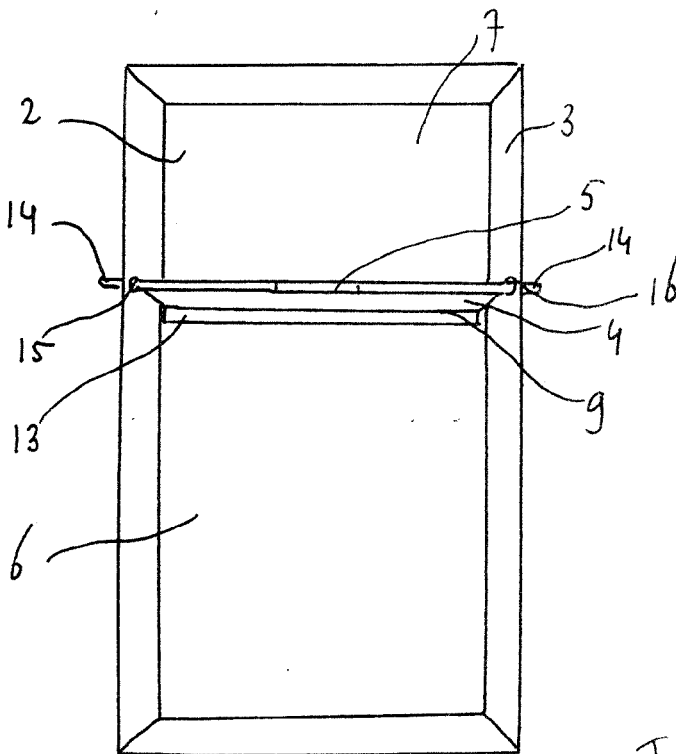
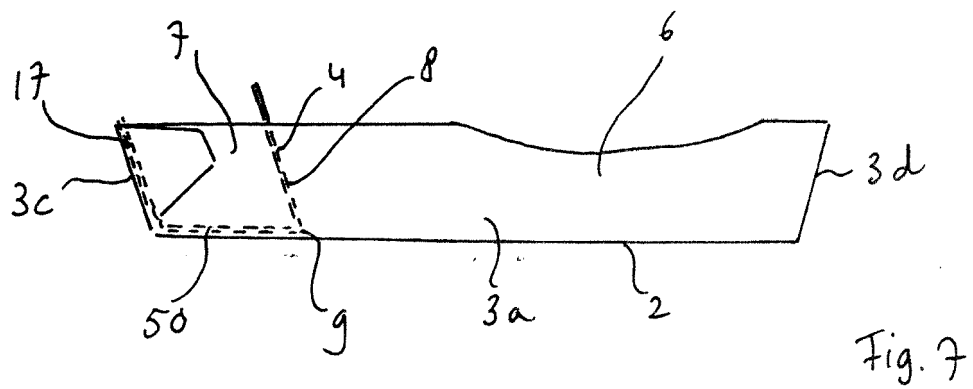
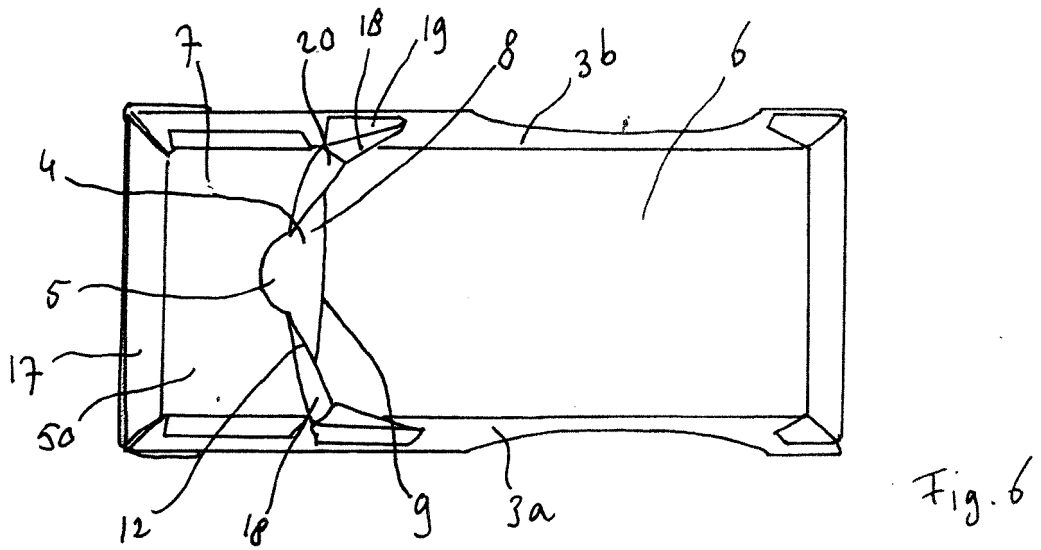
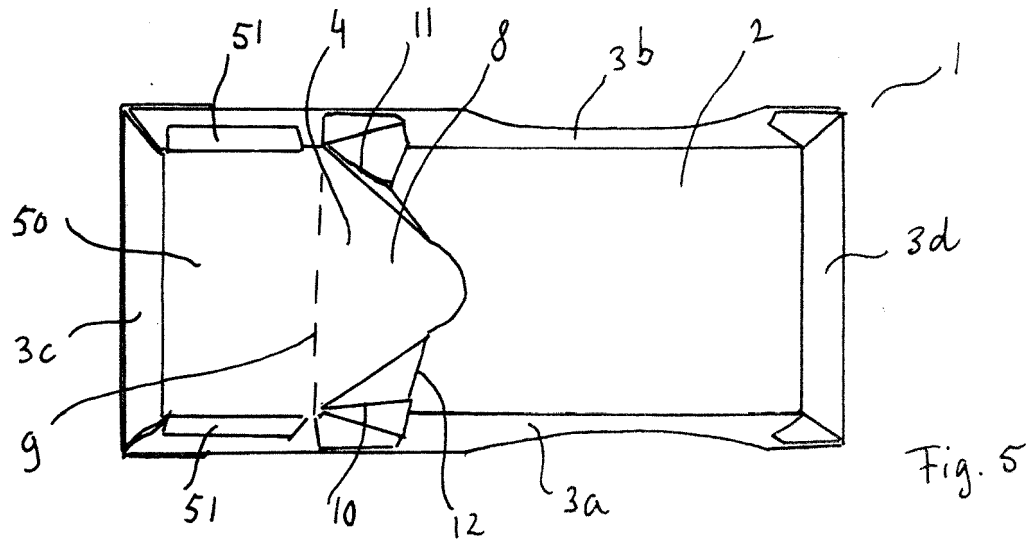


Fig. 4



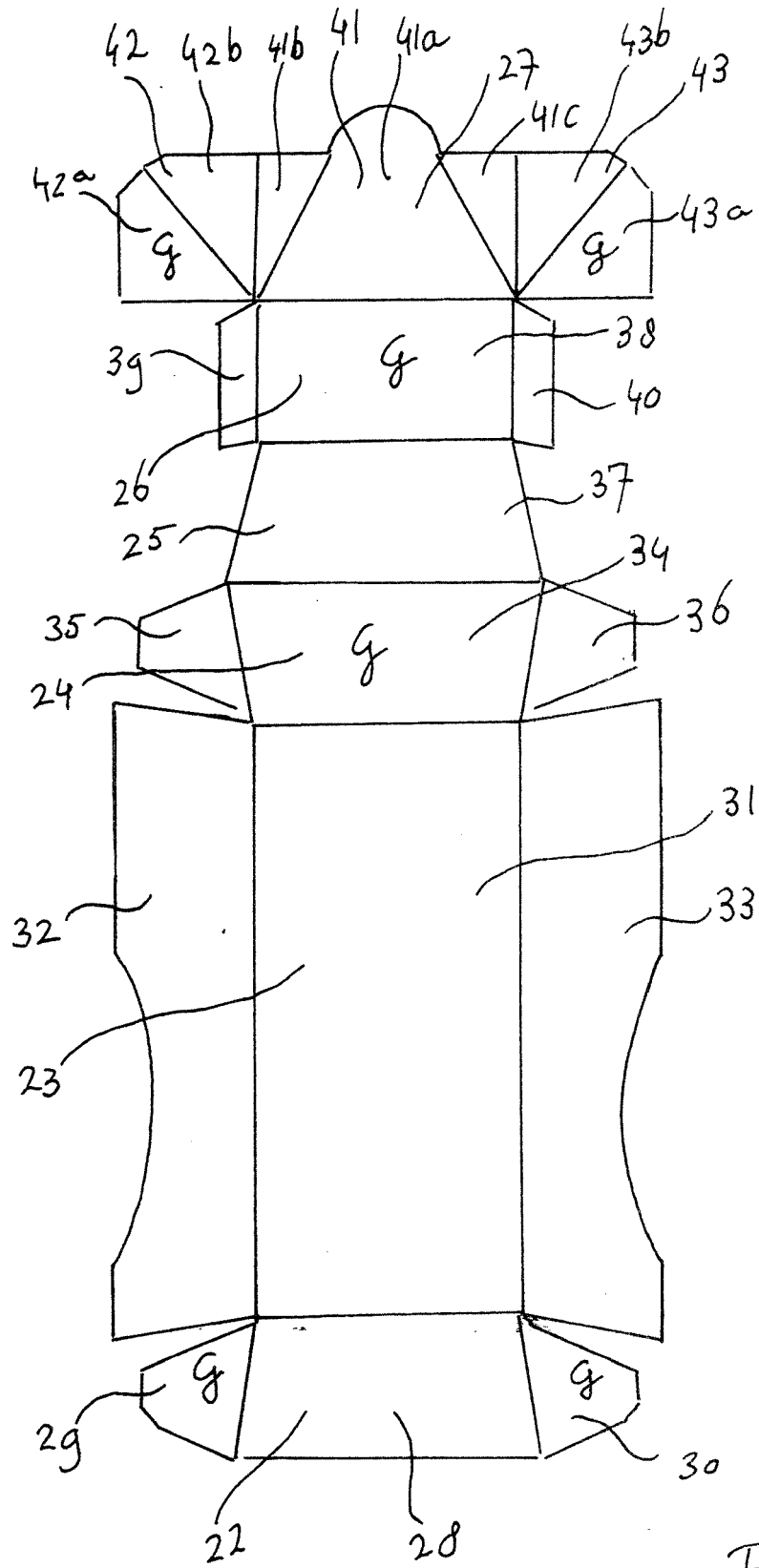
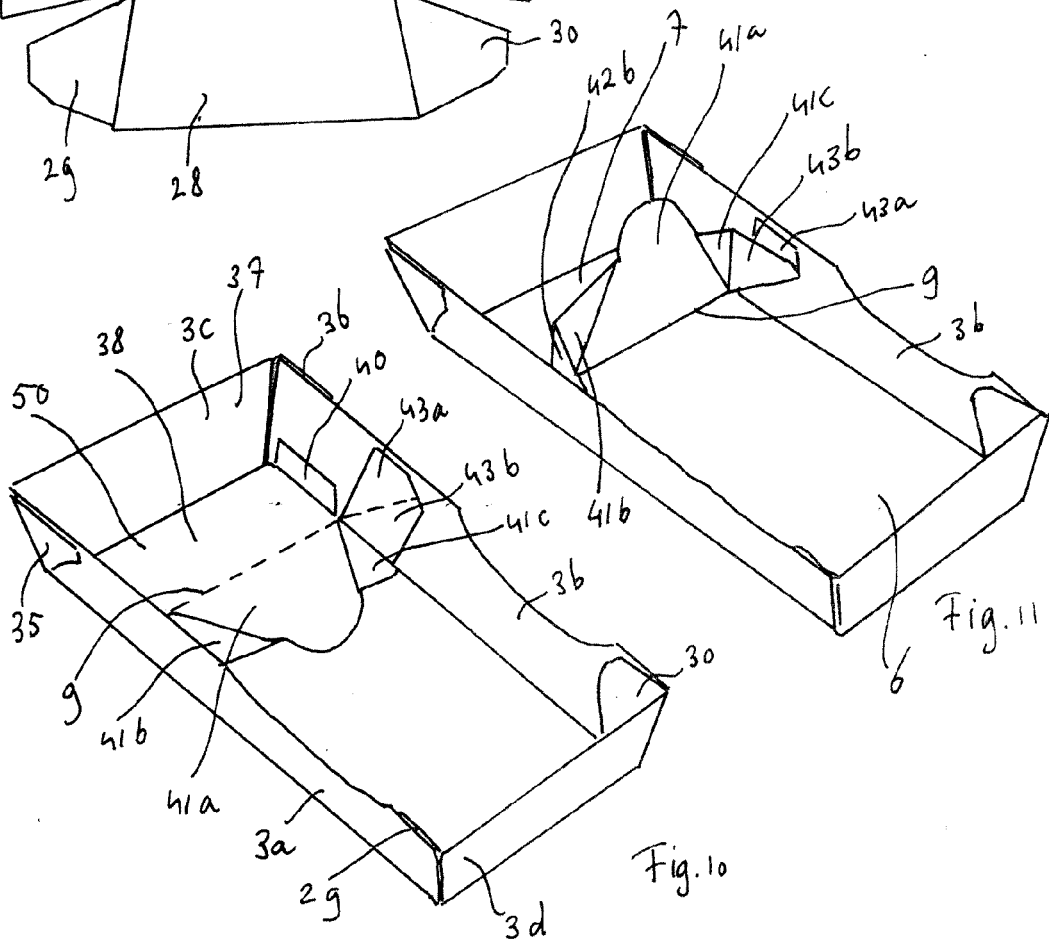
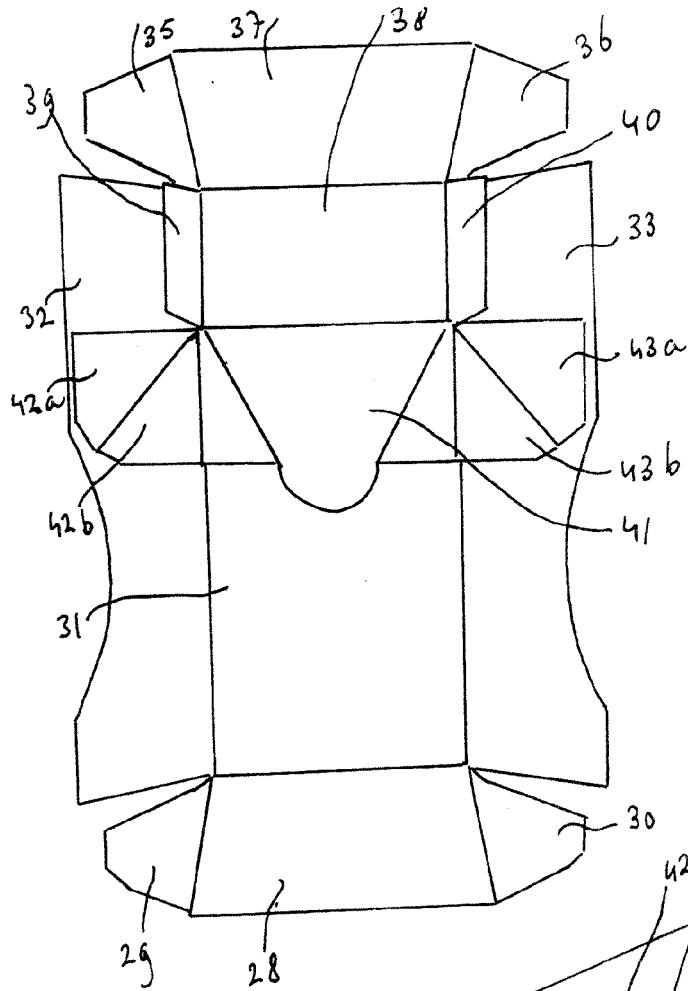


Fig. 8



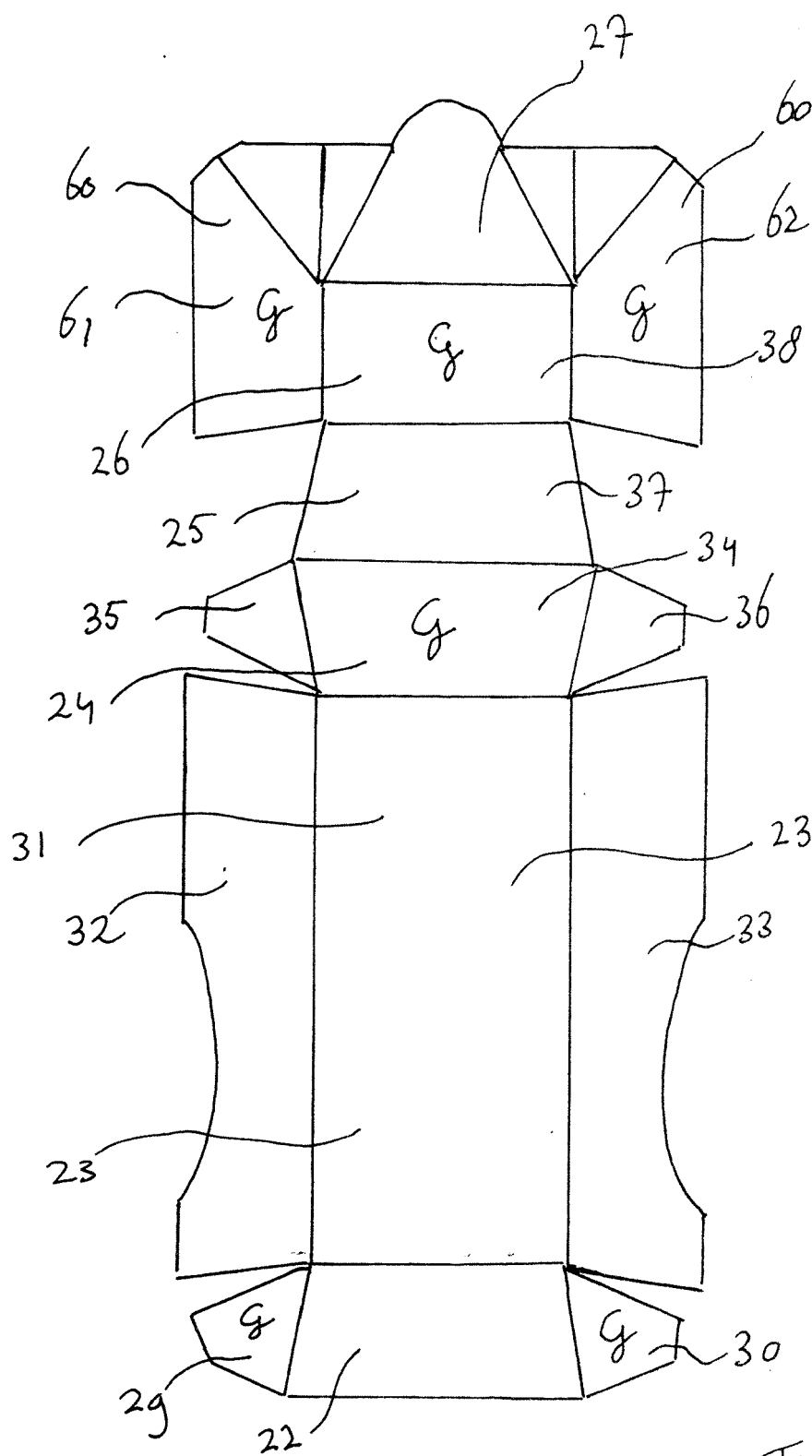


Fig. 12

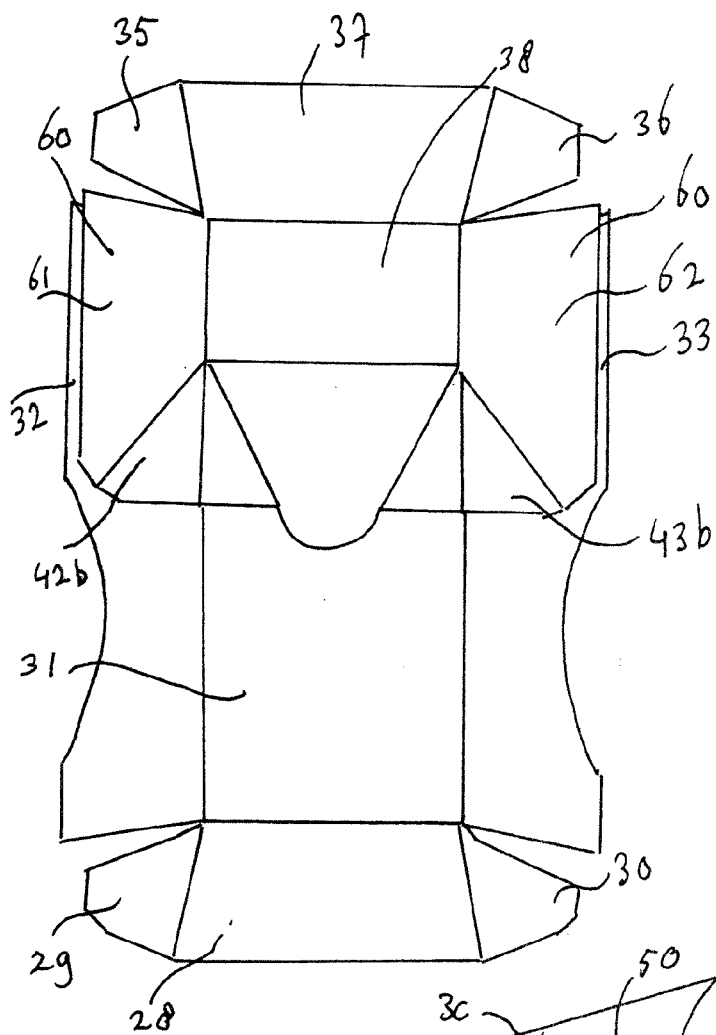


Fig. 13

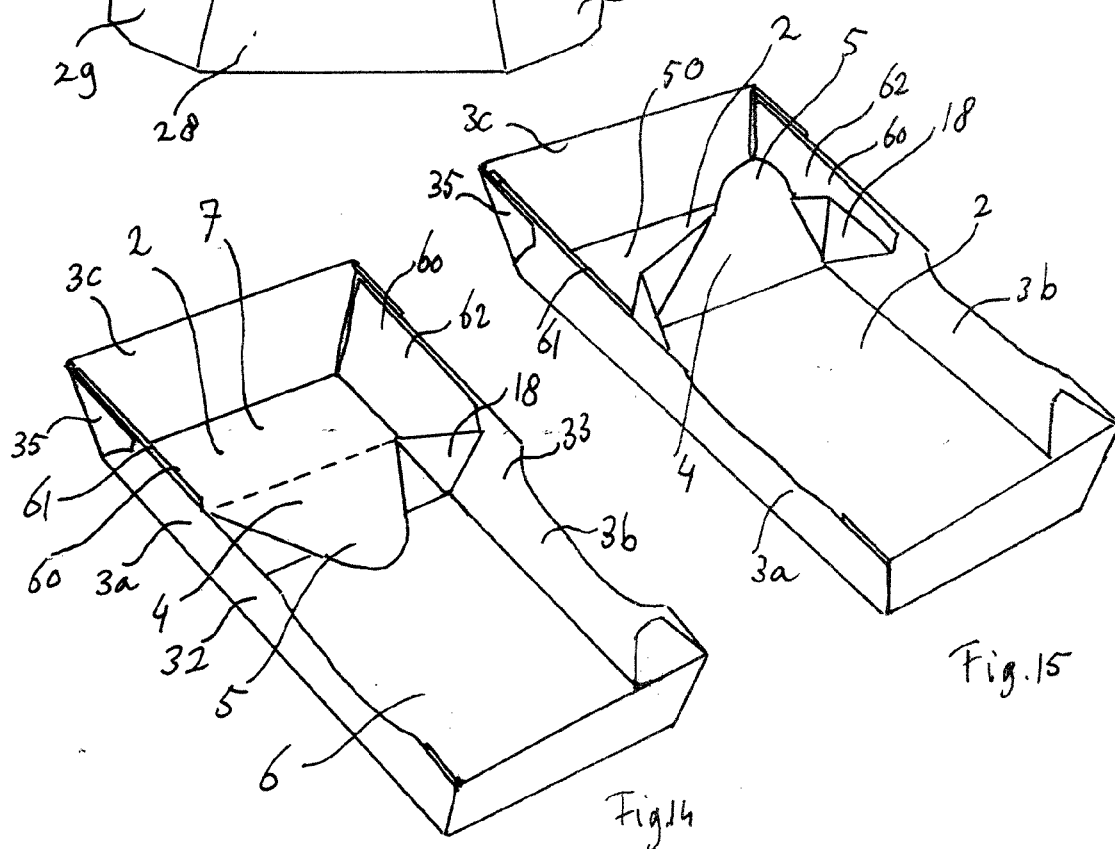


Fig. 15

Fig. 14

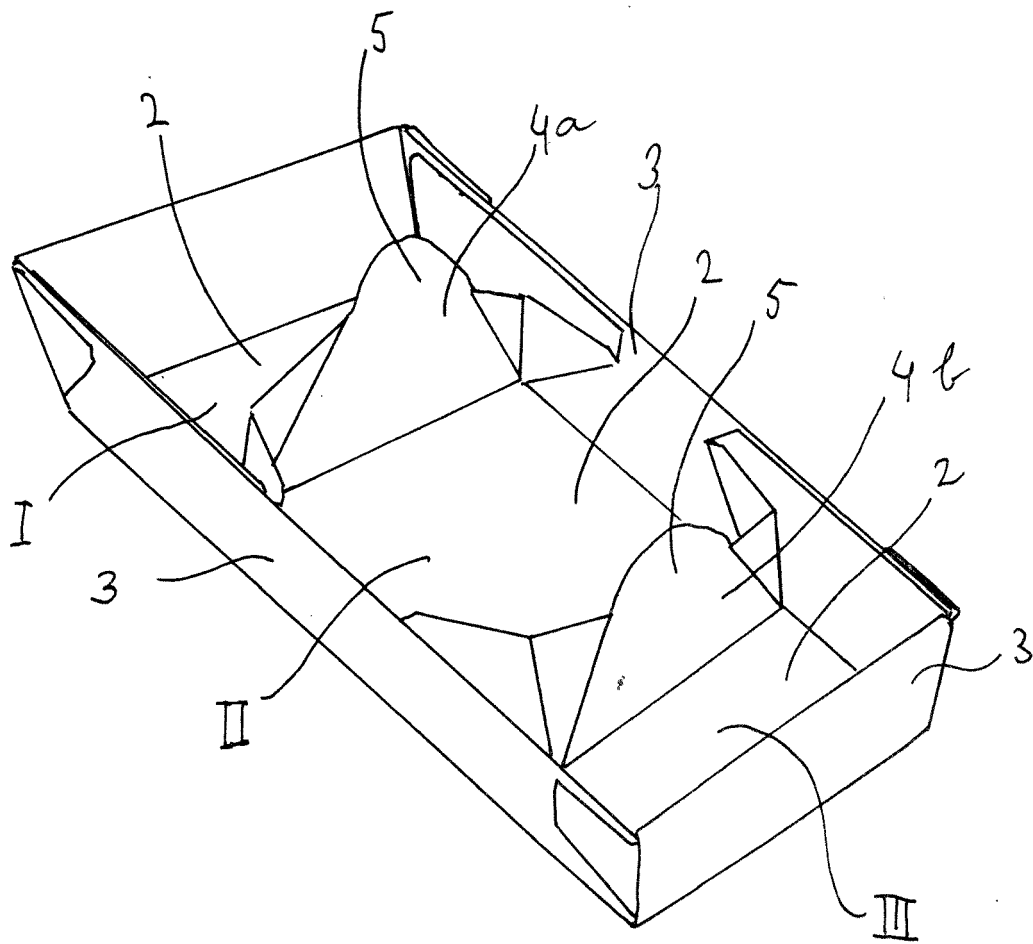


Fig. 16



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