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(54) **MAILING PACKAGE**

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Description

[0001] The present invention refers to a mailing package for postal dispatch and particularly to the design of a package for the shipping of various goods such as books, DVDs, and CDs.

[0002] Due to the increasing availability and acceptance of e-commerce stores for the average consumer, an increasing amount of products is purchased online and has to be subsequently shipped.

[0003] Those products have to be commissioned and packed in a shipping department of the e-commerce store and delivered by mail to the respective recipient.

[0004] Due to the enormous amount of products shipped every day, it is important that the packaging means are cheap and able to be stored without consuming too much space. Furthermore, it is important that the person packing the purchased goods in the respective package can quickly commission the goods and easily close the package.

[0005] However, the goods must be contained in the mailing package in such a manner that even if unusual loads are applied on the package during the mailing process, the package will not be damaged or opened, such that the therein comprised goods will not be lost partially or completely by slipping out of the mailing package and will be delivered in a sound condition to the purchaser. Furthermore the mailing package should be temper proof, showing evidence of non-authorized access.

[0006] A mailing package used in the prior art is presented in figures 1A to 7, further on called conventional mailing package.

[0007] The conventional mailing package has relatively short loading flaps, which when folded over the goods cover them only partially, leaving a gap (see figure 5, open gap between flaps 115 and 116). The flaps can slip under impact of shock out of the closed package. The consequence is partially or totally lost goods during transport. In addition the package can be subject to malicious access, without that unauthorized opening of the package can be detected after having put the flaps back into place.

[0008] The conventional mailing package consists of a pre-cut blank 101 according to figure 1A and figure 1B. The blank comprises a central portion 102, from which a left side flap 103 and a right side flap 104 are separated by means of crease lines. A bottom flap 109, being part of the pre-cut blank 101 is folded over onto the central portion 102. A perforation line 110 consists of only few material bridges, needed to allow folding over of the bottom flap 109 onto the central portion 102. Part 109 is separated by a strong perforation line 113, which contains only a few material bridges, maintaining both parts of flap 109 together, whilst being folded over onto the central portion 102. The bottom flap 109 comprises a left and right fixture area 111, 112. Referring to figures 2 and 3, the bottom flap 109 is folded on the central portion 102 and connected thereto by gluing in the portions adjacent

to the side flaps 103,104. Then the left and right side flaps 103 and 104 of the central portion 102 are folded over the bottom flap 109 and glued thereto. The bottom flap 109 comprises a strong perforation line 113 with only a few material bridges and a larger opening 114 in the middle thereof.

[0009] According to figure 3, a packer, i.e. a worker packing the package, can tear open the perforation line 113 by reaching through the opening 114 and pulling both halves of the bottom flap 109 to the left hand and right hand side. Thus, the two parts of the former bottom flap 109 form right and left packing flaps 115 and 116. Goods 117, which should be packaged, can be arranged on the central portion as shown in figure 4.

[0010] Then the packing flaps 115, 116 are folded over the goods 117, as shown in figure 5. The goods 117 together with the central portion 102 and packing flaps 115, 116 will be folded on a first part of the closure flap 105 as shown in figure 6. The remaining part of the closure flap 105 consists of a self closure adhesive strip 118, which will be fixed to the back side of the central portion 102 as shown in figure 7. Thus, the goods 117 are contained in a package and can be shipped.

[0011] A conventional mailing package of this type is disclosed in DE 200 07 888 U1.

[0012] However, this arrangement does not allow to pack goods 117 that exceed a certain height as shown in figure 4. Furthermore, the packing flaps 115, 116 can easily be removed from the package when subjected to higher loads, such that the packaging integrity is not guaranteed for certain higher or heavier goods.

[0013] The present invention provides a mailing package and a method for producing the same to overcome these disadvantages.

[0014] It is an object of the present application to provide an improved mailing package that comprises the benefits of the above-presented package, but is beyond that basic performance able to provide a more secure packing for even higher and heavier goods. Furthermore, the package has to be suitable to be produced at low cost and packed in a fast and intuitive manner.

[0015] This object is achieved by the subject matter of the independent claims. Preferred embodiments are the subject matter of the dependent claims.

[0016] A mailing package is provided, comprising a pre-cut blank having a central portion, a closure flap on the top side of said central portion, and left and right side flaps on the right and left sides of said central portion, respectively. The pre-cut blank further has a bottom flap on the bottom side of said central portion, said bottom flap comprising a first fixture area being arranged to be fixed to one of said side flaps, and a second fixture area being arranged to be fixed to the other of said side flaps. A first perforation line is disposed between said bottom flap and said central portion. The bottom flap further comprises a first and a second portion, wherein in between said first and second portions at a distance to the first perforation line a second perforation line is disposed. The

first and second portions are arranged to be folded at least partially on each other by folding along said second perforation line and the first portion of the bottom flap comprises said first fixture area and said second portion of said bottom flap comprises said second fixture area.

[0017] Due to the ability of the first and second portions of the bottom flap to be arranged on each other, a mailing package can be provided that provides longer packing flaps in a packing state, which are even able to be in an overlapping arrangement when the goods are already contained in between the packing flaps and the central portion. Further, the first and second perforation lines are arranged such that both perforation lines can be torn by lifting only the first portion of the bottom flap.

[0018] Preferably, the first and second perforation lines are parallel, particularly to enable rectangular packing flaps on a rectangular central portion in order to provide a rectangular mailing package. Further, the tearing process of the first and second perforation lines is facilitated if the perforation lines extend in a similar direction and is easiest when they are parallel.

[0019] The second portion of said bottom flap may comprise a first adhesive strip on its front side. This adhesive strip can be used to fix the first and second portions of said bottom flap, which later form the packing flaps to each other over the goods to provide a very stable and reliable package.

[0020] Crease lines can be defined in between the central portion and the closure flap to enable an easier folding of the closure flap over the remaining part of the mailing package.

[0021] The mailing package may be provided in a folded state, wherein the second portion of the bottom flap is arranged in between the central portion of the pre-cut blank and the first portion of the bottom flap by folding the pre-cut blank along the first and second perforation lines, wherein the first fixture portion is fixed to one side flap and the second fixture portion is fixed to the other side flap. This arrangement provides the benefit that when the first portion of the package is lifted, both perforation lines are torn apart with just one movement of the person packing the mailing package, therefore increasing the packing speed.

[0022] Preferably, the side flaps are folded such that said first fixture area is engaged in between said right side flap and a right side flange of said central portion, and said second fixture area is engaged in between said left side flap and a left side flange of said central portion. However, it is clear to a person skilled in the art that in the above arrangement the terms "left" and "right" can be exchanged, while still providing a concise teaching.

[0023] This folding manner provides the benefit that the left and right side flaps are arranged on the upper side of the first and second portions of the bottom flap, such that when these parts constitute the packing flaps a particularly stable connection in between the side flaps and packing flaps is provided. Usually, force is provided mainly from the goods inside the mailing package on the

packing flaps, which is transmitted over this connection only as shear stress.

[0024] Alternatively, the right side flaps may be folded on a right side flange of said central portion, and said first fixture area is arranged on the folded right side flap, and said second fixture area of said bottom flap is engaged in between said left side flap and a left side flange of the central portion. In this arrangement the terms "left" and "right" can of course also be exchanged. This configuration provides the benefit that a folded package structure of similar height with two layers for the folded bottom flap structure can be provided, as the side flaps engage the first and second portions of the bottom flap in those areas where the respective other of first and second portions is not provided. Thus, a desirable flat structure of the package is enabled, which is beneficial regarding space consumption for the supply of the package in the folded state.

[0025] The first and second fixture areas can be fixed by adhesive or fasteners to said side flaps. However, any connection means providing a sufficient connection strength can be applied.

[0026] Further, the bottom flap may comprise third and fourth fixture areas respectively on the opposite side of said first and second fixture areas, wherein in the folded state of the package these fixture areas can be fixed by adhesive or fasteners to the left and right side flanges of the central portion to provide additional stability.

[0027] The mailing package preferably further comprises a packing state in which the perforation lines are torn apart by lifting an opening end of the second portion opposite to the second fixture portion, while the first and second fixture areas are connected to the side flaps, such that first and second portions constitute the packing flaps. As the first and second portions are overlapping in the folded state, the packing flaps that are formed by the first and second portions are comparatively long, such that larger goods can be shipped in the mailing package while still being securely fixed.

[0028] The packing flaps are preferably arranged over the goods that are disposed on the front side of the central portion, wherein the packing flaps particularly extend over each other. This is possible as the packing flaps comprise a sufficient length due to the above-described arrangement, and a more stable mailing package is provided.

[0029] Said first adhesive strips can be used to fix the packing flaps to each other.

[0030] The package is closed by arranging the closure flap over the packing flaps and goods, wherein a closing end at the free end of the closure flap can be arranged at the back side of the central portion and fixed thereto. The closing ends of the closure flap may be connected to the closure flap by an opening perforation that is adapted to be torn apart to open the package. The connection in between the back side of the central portion and the closing end of the closure flap can be enabled by a second adhesive strip. The opening perforation enables that

the package can be opened very easily and quickly.

[0031] Additionally, the closure flaps may be fixed to the packing flaps by adhesive to provide an even more stable package structure.

[0032] The accompanying drawings are incorporated into and form a part of the specification for the purpose of explaining the principles of the invention. The drawings are not to be construed as limiting the invention to only the illustrated and described examples of how the invention can be made and used. Further features and advantages will become apparent from the following and more particular description of the invention, as illustrated in the accompanying drawings, wherein:

FIG. 1A is a front elevation of a pre-cut blank for a mailing package according to the prior art;

FIG. 1B is a side elevation of a pre-cut blank for the mailing package according to the prior art;

FIG. 2 is a perspective view of a partially folded pre-cut blank for the mailing package according to the prior art;

FIG. 3 is a perspective view of the mailing package according to the prior art in a folded state;

FIG. 4 is a perspective view of the mailing package according to the prior art in a packing state;

FIG. 5 is a perspective view of the mailing package according to the prior art in a further packing state;

FIG. 6 is a perspective view of the mailing package according to the prior art in an even further packing state;

FIG. 7 is a perspective view of the mailing package according to the prior art in a final packing state;

FIG. 8A is a front elevation of a pre-cut blank for a mailing package according to one embodiment of the invention;

FIG. 8B is a side elevation of a pre-cut blank for a mailing package according to one embodiment of the invention;

FIG. 9 is a perspective view of the partially folded pre-cut blank of the mailing package according to one embodiment of the invention;

FIG. 10 is a perspective view of the further folded pre-cut blank of the mailing package according to one embodiment of the invention;

FIG. 11 is a perspective view of the mailing package according to one embodiment of the invention in a

folded state;

FIG. 12 is a perspective view of the mailing package according to one embodiment of the invention in a packing state;

FIG. 13 is a perspective view of the mailing package according to one embodiment of the invention in a further packing state;

FIG. 14 is a perspective view of the mailing package according to one embodiment of the invention in an even further packing state;

FIG. 15 is the perspective view of the mailing package according to one embodiment of the invention in a final packing state.

[0033] The illustrative embodiments of the present invention will be described with reference to the figure drawings wherein like elements and structures are indicated by like reference numbers.

[0034] The mailing package according to the present invention is formed by a pre-cut blank as shown in figure 8A and 8B. The pre-cut blank may be formed from one continuous material sheet, such as cardboard, by cutting the desired geometry out of a blank sheet.

[0035] The mailing package comprises a central portion 2, which provides the base area or footprint (length x width) on which the goods that should be packaged can be placed. On the left and right sides of the central portion 2, left and right side flaps 3 and 4 are disposed. A closure flap 5 is disposed on top of the central portion 2, wherein crease lines 6 are defined in a portion of the closure flap 5 adjacent to the central portion 2. The crease lines 6 are defined to provide several parallel folding lines, such that an easy folding of the closure flap 5 with respect to the central portion 2 is possible.

[0036] The closure flap 5 further comprises side flaps 7, 8, which can be folded onto the closure flap 5 providing more strength at the outer edge of the closure flap 5. Furthermore, the folded structure prevents the cutting edge of the material from being on the outside of the mailing package, thus preventing a person handling the package from suffering possible paper cuts.

[0037] On the lower side of the central portion 2 a bottom flap 9 is provided comprising a first portion 10 adjacent to the central portion 2 of the blank 1 and a second portion 11 in a distance to the central portion 2.

[0038] The first portion 10 of the bottom flap 9 is connected by a first perforation line 12 to the central portion 2, and the second portion 11 is connected by a second perforation line 13 to the first portion 10. The perforation lines 12, 13 are preferably manufactured by partially cutting the material in between the central portion 2, first portion 10, and second portion 11, while small material bridges remain in between these portions to provide enough stability that the first and second perforation lines

12, 13 can be used as folding lines without tearing apart.

[0039] On the right side of the first portion 10 of the bottom flap 9, a first corrugated board strip with first and third fixture areas 14, 16, i.e. gluing surfaces, is provided that projects further to the right side than the second portion 11. On the second portion 11 a second corrugated board strip with second and fourth fixture areas 15, 17, i.e. gluing surfaces, is provided that projects further to the left side than the first portion 10.

[0040] The central portion 2 comprises a right side flange 18 and a left side flange 19 on its front side, which are adapted to be able to be fixed to the third and fourth fixture areas 16, 17.

[0041] The corrugated board strip with gluing surfaces 14 (back side) and 16 (front side) serves as a fixation base for the first portion 10 of the bottom flap 9, later constituting a first packing flap 22, which is glued in a sandwich position on the side flange 18, i.e. a gluing surface, and covered by the side flap 4, i.e. a bent over protection strip, which is fixed on top of the first portion 10, at the base of the packing flap 22, by means of a gluing surface on the side flap 4. The corrugated board strip with gluing surfaces 15 (back side) and 17 (front side) serves as a fixation base for the second portion 11, later constituting a second packing flap 23, which is glued in a sandwich position on the side flange 19, i.e. a gluing surface, covered by the side flap 5, i.e. a bent over protection strip, which is fixed on top of the second portion 11, at the base of the second packing flap 23 by means of a gluing surface on the side flap 3. The front side is defined as the face of the blank facing the viewer in figure 8A, while the back side is defined as the face of the blank in figure 8A being directed away from the viewer.

[0042] The fixture areas 14 (back side), 16 (front side) on the first packing flap 22 and 15 (back side), 17 (front side) on the second packing flap 23 serve to fix the packing flaps 22 and 23 on the central portion 2. In order to achieve this, the second portion 11 needs to be folded on the first portion 10 (see figure 9). Both the first and second portion 10 and 11 will then be folded on central portion 2 (see figure 10). In this position first portion 10 will be fixed in a sandwich position to the central portion 2 by gluing the third fixture area 16 to the side flange 18, covered by the folded over side flap 4 fixed with a gluing surface to the first fixture area 14 of the first portion 10. Second portion 11 will be fixed in a sandwich position to the central portion 2 by gluing fourth fixture surface 17 to the side flange 19, covered by the folded over side flap 3 fixed with a gluing surface to second fixture area 15 of the second portion 11.

[0043] Before being provided in a shipping department, the blank 1 has to be folded to a folded state of the mailing package to enable packing of goods in a fast manner. To obtain the folded state, the second portion 11 of the bottom flap 9 is folded along the second perforation line 13 on the top face of the first portion 10 of the bottom flap 9, as can be seen in figure 9. Thus, the first and third fixture areas 14, 16 extend over the second

portion 11 and the second and fourth fixture areas 15, 17 extend over the first portion 10 of the folded bottom flap 9. The folded bottom flap 9 is then folded on the top face of the central portion 2, such that the second portion 11 of the bottom flap 9 is in between the first portion 10 of the bottom flap 9 and the central portion 2 (figure 10). Then, the side flaps 3, 4 of the central portion 2 are folded on top of the folded bottom flap 9, such that they are in contact with the first and second fixture areas 14, 15 (figure 11). The third and fourth fixture areas 16, 17 are in contact with the side flanges 18, 19 of the central portion 2. All the fixture areas 14, 15, 16, 17, the side flanges 18, 19, and side flaps 3, 4 may be provided with adhesive to provide a secure connection. Alternatively, clamps can be used that connect the side flaps 3, 4, fixture areas 14, 15, 16, 17, and central portion 2 in a mechanical manner.

[0044] Furthermore, the side flaps 7 and 8 of the closure flap 5 are folded to the inside. The folding of the side flaps 3, 4, 7, 8 of the central portion 2 and closure flap 5 can be executed in one production step to reduce the production time.

[0045] Thus, the package is provided in a folded state according to figure 11. This folded state is generally flat, such that the package can be easily stacked while being delivered from the mailing package supplier to the shipping department where the actual packing of the mailing packages takes place.

[0046] The packing process will be described in the following. At the beginning, the packer takes out one of the folded packages according to figure 11, and grabs and lifts the opening end 20 of the first portion 10 of the folded bottom flap 9. This is facilitated as the first portion 10 can be grabbed via an opening 21. As the first portion 10 is lifted to the right side into a vertical position, the first and second perforation lines 12, 13 are torn apart while the connection of the side flap 4 to the first portion 10 remains. Thus, the first portion is in a state as illustrated in figure 12.

[0047] Furthermore, as the second perforation line 13 is already torn, the second portion 11 of the bottom flap 9 can be lifted upwards as well, while being connected to the side flap 3 as shown in figure 12. To more easily access the second portion 11, it may be provided with an opening similar to the opening 21 of the opening end 20 of the first portion 10. Thus, as it may be seen in figure 12, the first and second portions 10, 11 of the bottom flap provide first and second packing flaps 22 and 23, which provide a length L_1 . This length L_1 is longer in comparison to the length of the packing flaps provided by the prior art as indicated with L_{PA} in figure 4. The packing flaps 22, 23 cover almost the entire central portion 2 of the package.

[0048] The mailing package according to the invention has loading flaps which are twice as long as those of the above described conventional mailing package. This allows to cover the goods to be shipped by the two packing flaps being fold one on top of the other, not leaving any gap between the flaps and therefore securing the pack-

age much more.

[0049] During the packing process, goods 24, such as books or DVDs, are arranged on the central portion 2 (figure 12). Then the second packing flap 23 is folded over the goods, while crease lines 26 may be provided to facilitate the folding process. The first packing flap 22 is folded downwards at one of the crease lines 25, such that it overlaps with the second packing flap 23 (figure 13).

[0050] To further improve the stability of the mailing package, the second portion 11 of the bottom flap 9 may be provided with an adhesive strip 27 on its front side as shown in figure 8A, extending parallel to the fixture areas or turned by 90 ° into a cross directional orientation. The first adhesive strip 27, i.e. a self closure adhesive strip, is covered in the manufacturing process by a protective liner, which protects it against unintended gluing to other corrugated surfaces when the mailing packages are stacked on each other for shipping purposes. Thus, when the first portion 10 is lifted in figure 11, the first adhesive strip 27 is provided on the second packing flap 23. After the second packing flap 23 is folded over the goods 24, the protective liner is removed from the first adhesive strip 27 and the first packing flap 22 can be fixed with its overlapping part to the second packing flap 23 by said first adhesive strip 27. This position of the first adhesive strip 27 prevents the goods 24 from being contaminated by glue.

[0051] If on one of the packing flaps the additional self closure adhesive strip 27 is applied (see figure 13), allowing to glue together both loading flaps, the mailing package becomes perfectly temper proof. The self closure adhesive strip 27 can be length oriented as shown in figure 13 or cross oriented. Cross orientation will allow to apply the self closure adhesive strip on the blank 1 at the same time as the later described second adhesive strip 31 by which the mailer package will be closed. Proceeding this way will save one machine run and therefore save manufacturing cost.

[0052] Alternatively, the first adhesive strip 27 may be provided on the back side of the first portion 10.

[0053] When the packing process is in the state of figure 13, the central portion 2 together with the goods 24 and packing flaps 22, 23 is folded along one of said crease lines 6, such that the formerly upper part of the packing flaps 22 and 23 is in contact with a first portion 28 of the closure flap 5. The remaining part of the closure flap 5 is folded along one of the crease lines 29, such that the closing end 30 of the closure flap 5 is brought into contact with the central portion 2 and connected therewith. To enable this connection, a second adhesive strip 31 is applied on the closing end 30 of the closure flap 5.

[0054] Similar to the first adhesive strip 27, the second adhesive strip 31 may already be provided during the manufacturing process of the pre-cut blank 1 and covered with a protective liner that has to be removed before connecting the closing end 30 and the back side of the

central portion 2. To open the package, an opening perforation or a ripper tape 32 is provided in between the closure flap 5 and the closing end 30 that can be easily torn apart by a person opening the package.

[0055] To provide additional stability, the closure flap can be glued to the packing flaps 22 and 23.

[0056] Generally, the mailing package according to the invention is formed out of an integral pre-cut blank of corrugated or plain cardboard. However, different materials such as polymers can be used as well. Any flute orientation, cross orientation and length orientation of the corrugated board may be applied.

[0057] Furthermore, the different portions and flaps of the blank may be separate blanks, which are connected together by connection means, such as adhesive.

[0058] The mailing package according to the invention may as well be manufactured without side flaps 3,4,7 and 8 as depicted in the present embodiment. Advantage of such a reduced blank size is the economy of the corresponding corrugated surface, which will not be used.

[0059] The side flaps 3, 4 may just represent side areas of the central portion 2, indicated in the present embodiment as side flanges 18,19, whereto first and second fixture areas in the position of the third and fourth fixture areas 16,17, according to the above embodiment, are fixed. This enables reducing cost by reduced blank size and corresponding economies in corrugated surface.

[0060] While the invention has been described with respect to the physical embodiments constructed in accordance therewith, it will be apparent to those skilled in the art that various modifications, variations, and improvements of the present invention may be made in light of the above teachings and within the purview of the appended claims without departing from the intended scope of the invention. In addition, those areas in which it is believed that those of ordinary skill in the art are familiar have not been described herein in order to not unnecessarily obscure the invention described herein. Accordingly, it is to be understood that the invention is not to be limited by the specific illustrative embodiments, but only by the scope of the appended claims.

Claims

1. A mailing package, comprising a pre-cut blank having:

- a central portion (2) having a left side, a right side, a top side and a bottom side;
 - a closure flap (5) adjacent to the top side of said central portion;
 - a left and a right side flap (3, 4) adjacent to the left and right side of said central portion (2) respectively; and
 - a bottom flap (9) adjacent to the bottom side of said central portion (2),
- said bottom flap (9) comprising

a first fixture area (14) being arranged to be fixed to one of said side flaps (4),
and
a second fixture area (15) being arranged to be fixed to the other of said side flaps (3);
wherein in between said bottom flap (9) and said central portion (2) a first perforation line (12) is disposed, and
wherein said bottom flap (9) further comprises:

a first portion (10) being adjacent to the central portion (2);
a second portion (11); and
a second perforation line,

characterized in that

the second perforation line (13) is disposed in between said first and second portions (10, 11) and at a distance to the first perforation line (12),
and
the first and second portions (10, 11) are arranged to be folded at least partially on each other along said second perforation line (13),
and
wherein said first portion (10) comprises said first fixture area (14),
and said second portion (11) comprises said second fixture area (15).

2. The mailing package according to claim 1, wherein the first and second perforation lines (12, 13) are parallel.
3. The mailing package according to claim 1 or 2, wherein said second portion (11) of said bottom flap (9) comprises a first adhesive strip (27).
4. The mailing package according to one of the previous claims, wherein first crease lines (6) are defined in between said central portion (2) and said closure flap (5), wherein each of said first crease lines (6) and said first perforation line (12) are parallel.
5. The mailing package according to one of the previous claims, wherein in a folded state the second portion (11) of the bottom flap (9) is arranged in between the central portion (2) of the pre-cut blank (1) and the first portion (10) of the bottom flap (9) by folding the pre-cut blank (1) along the first and second perforation lines (12, 13), and
wherein the first and second fixture areas (14, 15) are fixed to the side flaps (4, 3) respectively.
6. The mailing package according to claim 5, wherein in the folded state of the package said side flaps (3, 4) are folded such that said first fixture area (14) is engaged in between said right side flap (4) and a right side flange (18) of said central portion (2), and said second fixture area (15) is engaged in between said left side flap (3) and a left side flange (19) of said central portion (2).
7. The mailing package according to claim 5, wherein in the folded state of the package the right side flap (4) is folded on a right side flange (18) of said central portion (2), and said first fixture area (14) is arranged on the folded right side flap (4), and said second fixture area (15) of said bottom flap (9) is engaged in between said left side flap (3) and a left side flange (19) of said central portion (2).
8. The mailing package according to claim 6 or 7, wherein the bottom flap (9) comprises third and fourth fixture areas (16, 17) respectively on the opposite side of said first and second fixture areas (14, 15), and in the folded state of the package said third fixture area (16) is fixed by adhesive or fasteners to the right side flange (18), and said fourth fixture area (17) is fixed by adhesive or fasteners to the left side flange (19).
9. The mailing package according to one of the claims 5 to 8, wherein in a packing state the perforation lines (12, 13) are torn apart by lifting an opening end (20) of the first portion (10) opposite to the first fixture area (14), while the first and second fixture areas (14, 15) are connected to the side flaps (3, 4), such that said first and second portions (10, 11) form packing flaps (22, 23).
10. The mailing package according to claim 9, wherein the packing flaps (22, 23) can be arranged on goods (24) disposed on the front side of the central portion (2), wherein the packing flaps (22, 23) are particularly extending over each other.
11. The mailing package according to claim 10, wherein the closure flap (5) can be arranged over the packing flaps (22, 23) and goods (24), wherein a closing end (30) at the free end of said closure flap (5) can be arranged at the back side of said central portion (2) and fixed thereto, particularly by a second adhesive strip (31), and wherein the closing end (30) of the closure flap (5) is connected to the closure flap (5) by an opening perforation (32), which is adapted to be torn apart for opening the package.
12. The mailing package according to one of the claims 9 to 11, wherein the closure flap (5) is fixed to the packing flaps (22, 23) by adhesive.
13. A method for producing a mailing package, comprising the steps of:
 - a) providing a pre-cut blank having:

a central portion (2) having a left side, a right side, a top side and a bottom side;
 a closure flap (5) adjacent to the top side of said central portion (2);
 left and right side flaps (3,4) adjacent to said left and right sides of said central portion (2); and
 a bottom flap (9) adjacent to the bottom side of said central portion (2),
 wherein in between said bottom flap (9) and said central portion (2) a first perforation line (12) is disposed;
 wherein said bottom flap (9) comprises a first portion (10) adjacent to said central portion (2),
 a second perforation line (13), and
 a second portion (11) at a distance to said central portion (2); and
 wherein the second perforation line (13) is disposed at a distance to the first perforation line (12);

- b) folding said second portion (11) of said bottom flap (9) generally on said first portion (10) along said second perforation line (13), such that a fixture area (14,15) of each of said first and second portions (10,11) projects over the respective other of first and second portions (10,11);
 c) folding the folded bottom flap (9) over said central portion (2) along said first perforation line (12);
 d) connecting said fixture areas (14,15) of said first and second portions (10,11) of said folded bottom flap (9) each to one of said side flaps (3,4),

such that a folded state of the package is provided.

14. The method according to claim 13, further comprising the step of:

e) tearing apart said first portion (10) from said second portion (11) and said central portion (2) along said first and second perforation lines (12,13) provided in between said first portion (10) and central portion (2), respectively said first portion (10) and second portion (11), wherein said first and second portions (10,11) constitute right and left packing flaps (22,23) at said central portion (2),

such that a packing state of the package is provided.

15. The method according to claim 14, further comprising the steps of:

f) providing goods (24) on the front side of said central portion (2) and folding said packing flaps

(22,23) over said goods (24), wherein the packing flaps (22,23) are arranged on each other and connected to each other by a first adhesive strip (27) provided on the former second portion (11) of the bottom flap (9), which is now constituting a packing flap (23),
 g) folding said closure flap (5) on said packing flaps (22,23), and
 h) fixing said closure flap (5) to the back side of said central portion (2) by a second adhesive strip (31).

Patentansprüche

1. Versandverpackung, die einen vorgeschneittenen Zuschnitt umfasst, der hat:

einen Mittelabschnitt (2) mit einer linken Seite, einer rechten Seite, einer oberen Seite und einer unteren Seite;
 eine Verschlusslasche (5), die an die obere Seite des Mittelabschnitts angrenzt;
 eine linke und eine rechte Seitenlasche (3, 4), die an die linke bzw. die rechte Seite des Mittelabschnitts (2) angrenzen; und
 eine untere Lasche (9), die an die untere Seite des Mittelabschnitts (2) angrenzt,
 wobei die untere Lasche (9) umfasst:

einen ersten Befestigungsbereich (14), der so eingerichtet ist, dass er an einer der Seitenlaschen (4) befestigt wird, und
 einen zweiten Befestigungsbereich (15), der so eingerichtet ist, dass er an der anderen der Seitenlaschen (3) befestigt wird;

wobei zwischen der unteren Lasche (9) und dem Mittelabschnitt (2) eine erste Perforationslinie (12) angeordnet ist, und
 die untere Lasche (9) des Weiteren umfasst:

einen ersten Abschnitt (10), der an den Mittelabschnitt (2) angrenzt;
 einen zweiten Abschnitt (11); und
 eine zweite Perforationslinie,

dadurch gekennzeichnet, dass

die zweite Perforationslinie (13) zwischen dem ersten und dem zweiten Abschnitt (10, 11) und in einem Abstand zu der ersten Perforationslinie (12) angeordnet ist, und
 der erste und der zweite Abschnitt (10, 11) so eingerichtet sind, dass sie entlang der zweiten Perforationslinie (13) wenigstens teilweise aufeinander gefaltet sind, und
 wobei der erste Abschnitt (10) den ersten Befestigungsbereich (14) umfasst, und

- stigungsbereich (14) umfasst, und der zweite Abschnitt (11) den zweiten Befestigungsbereich (15) umfasst.
2. Versandverpackung nach Anspruch 1, wobei die erste und die zweite Perforationslinie (12, 13) parallel sind. 5
 3. Versandverpackung nach Anspruch 1 oder 2, wobei der zweite Abschnitt (11) der unteren Lasche (9) einen ersten Klebestreifen (27) umfasst. 10
 4. Versandverpackung nach einem der vorangehenden Ansprüche, wobei erste Falzlinien (6) zwischen dem Mittelabschnitt (2) und der Verschlusslasche (5) ausgebildet sind und alle ersten Falzlinien (6) und die erste Perforationslinie (12) parallel sind. 15
 5. Versandverpackung nach einem der vorangehenden Ansprüche, wobei in einem gefalteten Zustand der zweite Abschnitt (11) der unteren Lasche (9) zwischen dem Mittelabschnitt (2) des vorgeschrittenen Zuschnitts (1) und dem ersten Abschnitt (10) der unteren Lasche (9) angeordnet wird, indem der vorgeschrittene Zuschnitt (1) entlang der ersten und der zweiten Perforationslinie (12, 13) gefaltet wird, und, wobei der erste und der zweite Befestigungsbereich (14, 15) jeweils an den Seitenlaschen (4, 3) befestigt werden. 20
 6. Versandverpackung nach Anspruch 5, wobei in dem gefalteten Zustand der Verpackung die Seitenlaschen (3, 4) so gefaltet sind, dass der erste Befestigungsbereich (14) zwischen der rechten Seitenlasche (4) und einem rechten Seitenrand (18) des Mittelabschnitts (2) in Eingriff kommt, und der zweite Befestigungsbereich (15) zwischen der linken Seitenlasche (3) und einem linken Seitenrand (19) des Mittelabschnitts (2) in Eingriff kommt. 25
 7. Versandverpackung nach Anspruch 5, wobei in dem gefalteten Zustand der Verpackung die rechte Seitenlasche (4) auf einen rechten Seitenrand (18) des Mittelabschnitts (2) gefaltet ist, und der erste Befestigungsbereich (14) an der gefalteten rechten Seitenlasche (4) angeordnet ist, und der zweite Befestigungsbereich (15) der unteren Lasche (9) zwischen der linken Seitenlasche (3) und einem linken Seitenrand (19) des Mittelabschnitts (2) in Eingriff kommt. 30
 8. Versandverpackung nach Anspruch 6 oder 7, wobei die untere Lasche (9) einen dritten und einen vierten Befestigungsbereich (16, 17) an der dem ersten bzw. dem zweiten Befestigungsbereich (14, 15) gegenüberliegenden Seite umfasst und in dem gefalteten Zustand der Verpackung der dritte Befestigungsbereich (16) mit Klebstoff oder Befestigungseinrichtungen 35
 9. an dem rechten Seitenrand (18) befestigt ist, und der vierte Befestigungsbereich (17) mit Klebstoff oder Befestigungseinrichtungen an dem linken Seitenrand (19) befestigt ist. 40
 9. Versandverpackung nach einem der Ansprüche 5 bis 8, wobei in einem Packzustand die Perforationslinien (12, 13) auseinander gerissen werden, indem ein Öffnungsende (20) des ersten Abschnitts (10) gegenüber dem ersten Befestigungsbereich (14) angehoben wird, während der erste und der zweite Befestigungsbereich (14, 15) mit den Seitenlaschen (3, 4) so verbunden sind, dass der erste und der zweite Abschnitt (10, 11) Packlaschen (22, 23) bilden. 45
 10. Versandverpackung nach Anspruch 9, wobei die Packlaschen (22, 23) an Waren (24) angeordnet werden können, die an der Vorderseite des Mittelabschnitts (2) angeordnet sind, und sich die Packlaschen (16) insbesondere übereinander erstrecken. 50
 11. Versandverpackung nach Anspruch 10, wobei die Verschlusslasche (5) über den Packlaschen (22, 23) und Waren (24) angeordnet werden kann, ein verschließendes Ende (30) an dem freien Ende der Verschlusslasche (5) an der Rückseite des Mittelabschnitts (2) angeordnet und daran befestigt werden kann, und zwar insbesondere mit einem zweiten Klebestreifen (31), und das verschließende Ende (30) der Verschlusslasche (5) mit der Verschlusslasche (5) durch eine Öffnungs-Perforation (32) verbunden ist, die so eingerichtet ist, dass sie aufgerissen wird, um die Verpackung zu öffnen. 55
 12. Versandverpackung nach einem der Ansprüche 9 bis 11, wobei die Verschlusslasche (5) mit Klebstoff an den Packlaschen (18) befestigt wird.
 13. Verfahren zum Herstellen einer Versandverpackung, das die folgenden Schritte umfasst:
 - a) Bereitstellen eines vorgeschrittenen Zuschnitts, der hat:
 - einen Mittelabschnitt (2) mit einer linken Seite, einer rechten Seite, einer oberen Seite und einer unteren Seite;
 - eine Verschlusslasche (5), die an die obere Seite des Mittelabschnitts angrenzt;
 - eine linke und eine rechte Seitenlasche (3, 4), die an die linke bzw. die rechte Seite des Mittelabschnitts (2) angrenzen; und
 - eine untere Lasche (9), die an die untere Seite des Mittelabschnitts (2) angrenzt, wobei zwischen der unteren Lasche (9) und dem Mittelabschnitt (2) eine erste Perforationslinie (12) angeordnet ist;

wobei die untere Lasche (9) umfasst:

einen ersten Abschnitt (10), der an den Mittelabschnitt (2) angrenzt,
eine zweite Perforationslinie (13), und
einen zweiten Abschnitt (11) in einem Abstand zu dem Mittelabschnitt (2);
und wobei die zweite Perforationslinie (13) in einem Abstand zu der ersten Perforationslinie (12) angeordnet ist;

(b) Falten des zweiten Abschnitts (11) der unteren Lasche (9) entlang der zweiten Perforationslinie (13) im Allgemeinen auf den ersten Abschnitt (10), so dass ein Befestigungsbereich (14, 15) des ersten sowie des zweiten Abschnitts (10, 11) über den jeweils anderen von dem ersten und dem zweiten Abschnitt (10, 11) vorsteht;

(c) Falten der gefalteten unteren Lasche (9) über den Mittelabschnitt (2) entlang der ersten Perforationslinie (12);

(d) Verbinden der Befestigungsbereiche (23) des ersten und des zweiten Abschnitts (24) der gefalteten unteren Lasche (9) jeweils auf eine der Seitenlaschen (3, 4),

so dass ein gefalteter Zustand der Verpackung geschaffen wird.

14. Verfahren nach Anspruch 13, das des Weiteren den folgenden Schritt umfasst:

(e) Abreißen des ersten Abschnitts (10) von dem zweiten Abschnitt (11) und dem Mittelabschnitt (2) entlang der ersten und der zweiten Perforationslinie (12, 13), die zwischen dem ersten Abschnitt (10) und dem Mittelabschnitt (2) bzw. dem ersten Abschnitt (10) und dem zweiten Abschnitt (11) vorhanden sind, wobei der erste und der zweite Abschnitt (10, 11) eine rechte und eine linke Packlasche (22, 23) an dem Mittelabschnitt (2) bilden,
so dass ein Packzustand der Verpackung hergestellt wird.

15. Verfahren nach Anspruch 14, das des Weiteren die folgenden Schritte umfasst:

f) Bereitstellen von Waren (24) an der Vorderseite des Mittelabschnitts (2) und Falten der Packlaschen (22, 23) über die Waren (24), wobei die Packlaschen (22, 23) aufeinander angeordnet und durch einen ersten Klebestreifen (27) miteinander verbunden werden, der an dem vorherigen zweiten Abschnitt (11) der unteren Lasche (9) vorhanden ist, der nun eine Packlasche (23) bildet,

g) Falten der Verschlusslasche (5) auf die Packlaschen (22, 23), und

h) Befestigen der Verschlusslasche (5) an der Rückseite des Mittelabschnitts (2) mit einem zweiten Klebestreifen (31).

Revendications

1. Emballage d'expédition comprenant une pièce pré-découpée qui présente :

- une partie centrale (2) avec un côté gauche, un côté droit, un côté supérieur et un côté inférieur ;

- un rabat de fermeture (5) voisin du côté supérieur de la partie centrale ;

- des rabats latéraux gauche et droit (3, 4) voisins des côtés gauche et droit de la partie centrale (2), respectivement ; et

- un rabat inférieur (9) voisin du côté inférieur de la partie centrale (2),

le rabat inférieur (9) comprenant

- une première zone de fixation (14) conçue pour être fixée à l'un des rabats latéraux (4), et

- une deuxième zone de fixation (15) conçue pour être fixée à l'autre rabat latéral (3) ;

étant précisé qu'une première ligne de perforation (12) est disposée entre le rabat inférieur (9) et la partie centrale (2), et que le rabat inférieur (9) comprend par ailleurs :

- une première partie (10) voisine de la partie centrale (2) ;

- une deuxième partie (11) ; et

- une deuxième ligne de perforation, **caractérisé en ce que** la deuxième ligne de perforation (13) est disposée entre les première et deuxième parties (10, 11) et à une certaine distance de la première ligne de perforation (12), et

les première et deuxième parties (10, 11) sont conçues pour être pliées au moins partiellement l'une sur l'autre le long de la deuxième ligne de perforation (13),

étant précisé que la première partie (10) comprend la première zone de fixation (14),

et que la deuxième partie (11) comprend la deuxième zone de fixation (15).

2. Emballage d'expédition selon la revendication 1, dans lequel les première et deuxième lignes de perforation (12, 13) sont parallèles.

3. Emballage d'expédition selon la revendication 1 ou

- 2, dans lequel la deuxième partie (11) du rabat inférieur (9) comprend une première bande adhésive (27).
4. Emballage d'expédition selon l'une des revendications précédentes, dans lequel des premières rainures (6) sont définies entre la partie centrale (2) et le rabat de fermeture (5), chacune des premières rainures (6) et la première ligne de perforation (12) étant parallèles.
5. Emballage d'expédition selon l'une des revendications précédentes, dans lequel en position pliée, la deuxième partie (11) du rabat inférieur (9) est disposée entre la partie centrale (2) de la pièce prédécoupée (1) et la première partie (10) dudit rabat inférieur (9) grâce au pliage de la pièce prédécoupée (1) le long des première et deuxième lignes de perforation (12, 13), et les première et deuxième surfaces de fixation (14, 15) sont fixées aux rabats latéraux (4, 3), respectivement.
6. Emballage d'expédition selon la revendication 5, dans lequel dans la position pliée de l'emballage, les rabats latéraux (3, 4) sont pliés de telle sorte que la première zone de fixation (14) soit engagée entre le volet latéral droit (4) et un rebord latéral droit (18) de la partie centrale (2), et que la deuxième zone de fixation (15) soit engagée entre le rabat latéral gauche (3) et un rebord latéral gauche (19) de la partie centrale (2).
7. Emballage d'expédition selon la revendication 5, dans lequel dans la position pliée de l'emballage, le rabat latéral droit (4) est plié sur un rebord latéral droit (18) de la partie centrale (2), et la première zone de fixation (14) est disposée sur le rabat latéral droit (4) plié, et la deuxième zone de fixation (15) du rabat inférieur (9) est engagée entre le rabat latéral gauche (3) et un rebord latéral gauche (19) de la partie centrale (2).
8. Emballage d'expédition selon la revendication 6 ou 7, dans lequel le rabat inférieur (9) comprend des troisième et quatrième zones de fixation (16, 17) sur la face opposée aux première et deuxième zones de fixation (14, 15), respectivement, et dans la position pliée de l'emballage la troisième zone de fixation (16) est fixée par adhésif ou par attaches au rebord latéral droit (18), et la quatrième zone de fixation (17) est fixée par adhésif ou par attaches au rebord latéral gauche (19).
9. Emballage d'expédition selon l'une des revendications 5 à 8, dans lequel en position d'emballage, les lignes de perforation (12, 13) se déchirent grâce au soulèvement d'une extrémité d'ouverture (20) de la première partie (10) à l'opposé de la première zone de fixation (14), tandis que les première et deuxième zones de fixation (14, 15) sont reliées aux rabats latéraux (3, 4) de telle sorte que les première et deuxième parties (10, 11) forment des rabats d'emballage (22, 23).
10. Emballage d'expédition selon la revendication 9, dans lequel les rabats d'emballage (22, 23) peuvent être disposés sur des produits (24) placés sur la face avant de la partie centrale (2), les rabats d'emballage (22, 23) s'étendant en particulier l'un sur l'autre.
11. Emballage d'expédition selon la revendication 10, dans lequel le rabat de fermeture (5) peut être disposé sur les rabats d'emballage (22, 23) et les produits (24), une extrémité de fermeture (30) prévue à l'extrémité libre du rabat de fermeture (5) peut être disposée sur la face arrière de la partie centrale (2) et fixée à celle-ci, en particulier à l'aide d'une bande adhésive (31), et l'extrémité de fermeture (30) du rabat de fermeture (5) est reliée au rabat de fermeture (5) grâce à une perforation d'ouverture (32) qui est apte à être déchirée pour l'ouverture de l'emballage.
12. Emballage d'expédition selon l'une des revendications 9 à 11, dans lequel le rabat de fermeture (5) est fixé aux rabats d'emballage (22, 23) par un adhésif.
13. Procédé pour produire un emballage d'expédition, comprenant les étapes qui consistent à :
- a) prévoir une pièce prédécoupée présentant
- une partie centrale (2) avec un côté gauche, un côté droit, un côté supérieur et un côté inférieur ;
 - un rabat de fermeture (5) voisin du côté supérieur de la partie centrale (2) ;
 - des rabats latéraux gauche et droit (3, 4) voisins des côtés gauche et droit de la partie centrale (2) ; et
 - un rabat inférieur (9) voisin du côté inférieur de la partie centrale (2), une première ligne de perforation (12) étant disposée entre le rabat inférieur (9) et la partie centrale (2), le rabat inférieur (9) comprenant
 - une première partie (10) voisine de la partie centrale (2),
 - une deuxième ligne de perforation (13), et
 - une deuxième partie (11) située à une certaine distance de la partie centrale (2) ; et

étant précisé que la deuxième ligne de perforation (13) est disposée à une certaine distance de la première ligne de perforation (12) ;

5

b) plier la deuxième partie (11) du rabat inférieur (9) globalement sur la première partie (10) le long de la deuxième ligne de perforation (13), de telle sorte qu'une première zone de fixation (14, 15) de chaque première et deuxième partie (10, 11) dépasse des première et deuxième parties (10, 11) respectives ;

10

c) plier le rabat inférieur (9) plié sur la partie centrale (2) le long de la première ligne de perforation (12) ;

15

d) relier les zones de fixation (14, 15) des première et deuxième parties (10, 11) du rabat inférieur (9) plié à chacun des rabats latéraux (3, 4), de sorte qu'on obtient un état plié de l'emballage.

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14. Procédé selon la revendication 13, comprenant également l'étape qui consiste à :

e) déchirer la première partie (10) pour la séparer de la deuxième partie (11) et de la partie centrale (2) le long des première et deuxième lignes de perforation (12, 13) prévues respectivement entre la première partie (10) et la partie centrale (2), et entre la première partie (10) et la deuxième partie (11), les première et deuxième parties (10, 11) constituant les rabats d'emballage droit et gauche (22, 23) sur la partie centrale (2),

25

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de sorte qu'on obtient une position d'emballage de l'emballage.

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15. Procédé selon la revendication 14, comprenant également les étapes qui consistent à :

f) prévoir des produits (24) sur la face avant de la partie centrale (2) et plier les rabats d'emballage (22, 23) sur les produits (24), les rabats d'emballage (22, 23) étant disposés l'un sur l'autre et reliés l'un à l'autre par une bande adhésive (27) prévue sur l'ancienne deuxième partie (11) du rabat inférieur (9), qui constitue désormais un rabat d'emballage (23),

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45

g) plier le rabat de fermeture (5) sur les rabats d'emballage (22, 23), et

50

h) fixer le rabat de fermeture (5) à la face arrière de la partie centrale (2) à l'aide d'une deuxième bande adhésive (31).

55

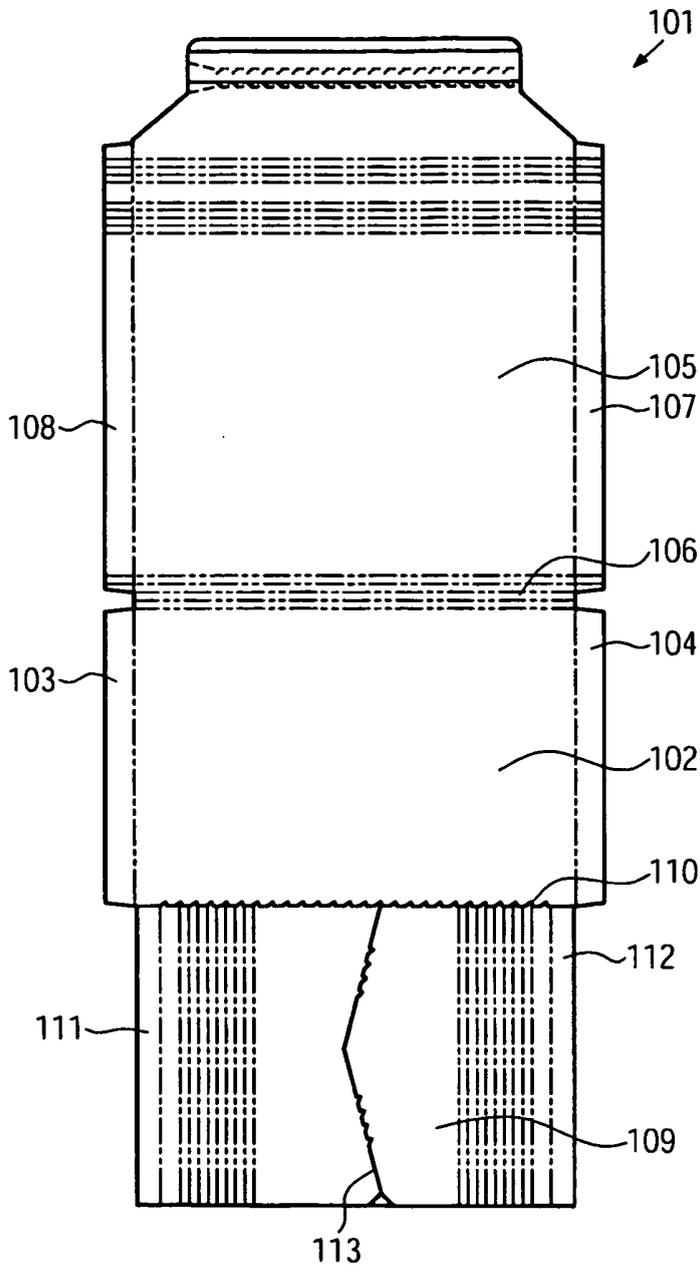


FIG. 1A



FIG. 1B

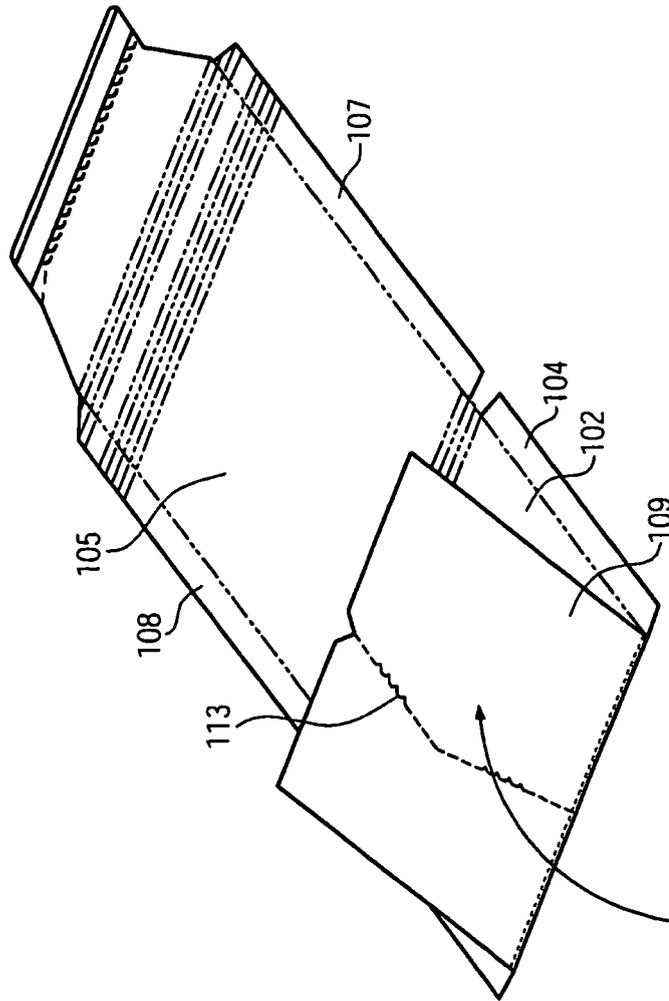


FIG. 2

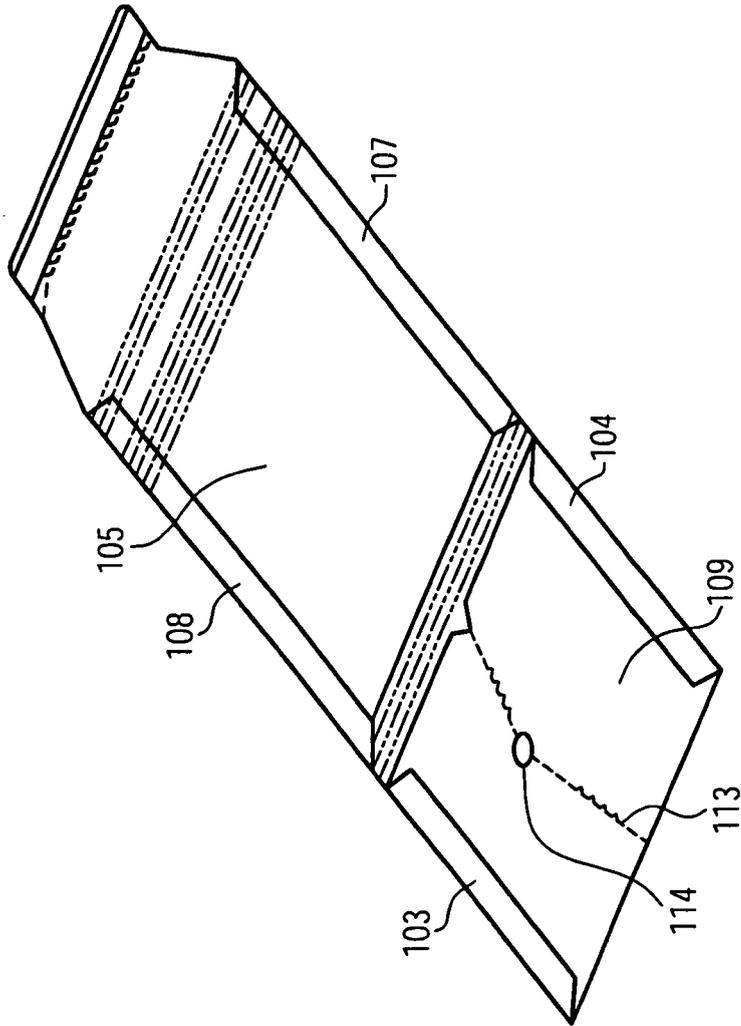


FIG. 3

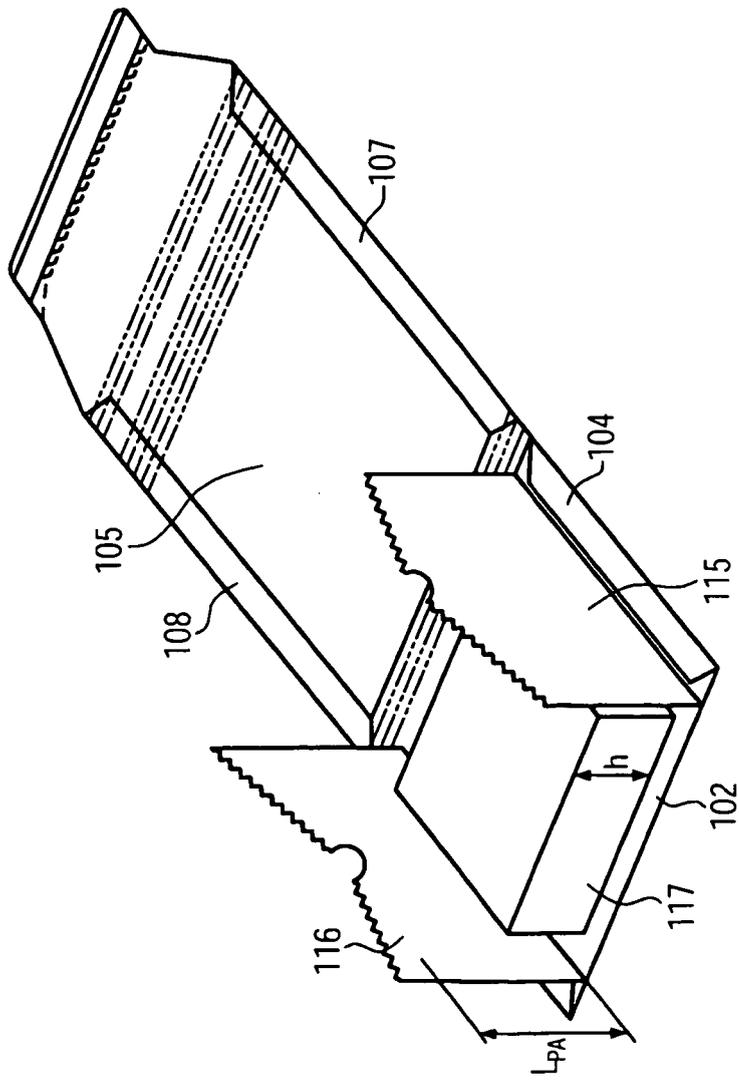


FIG. 4

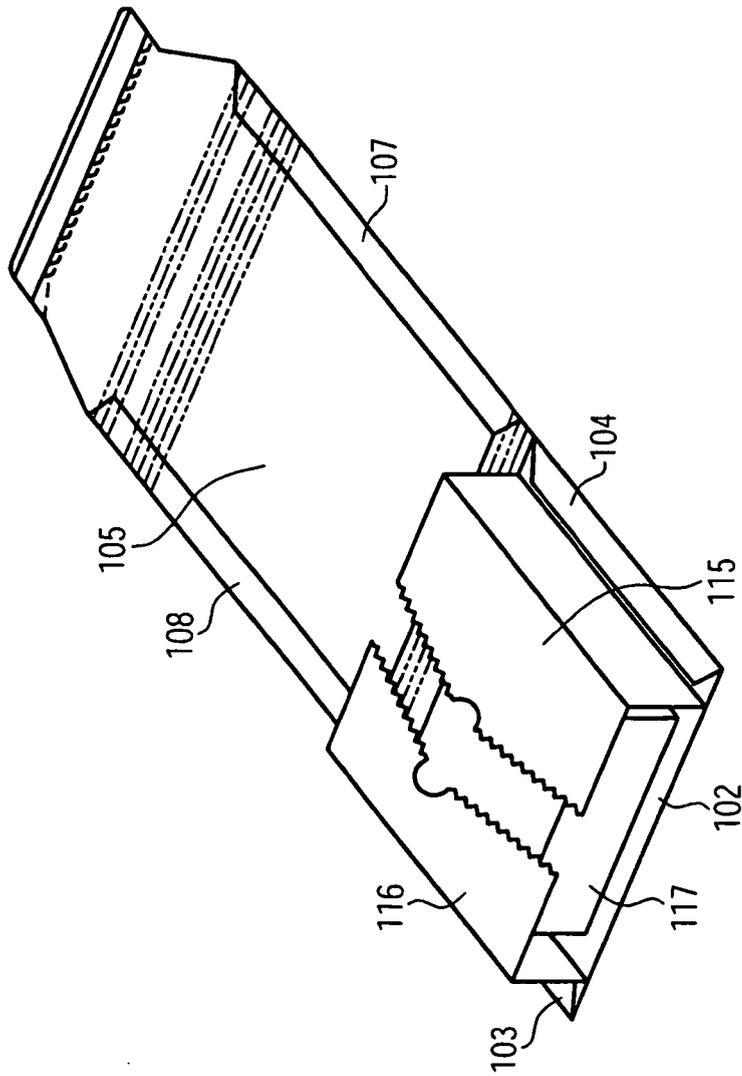


FIG. 5

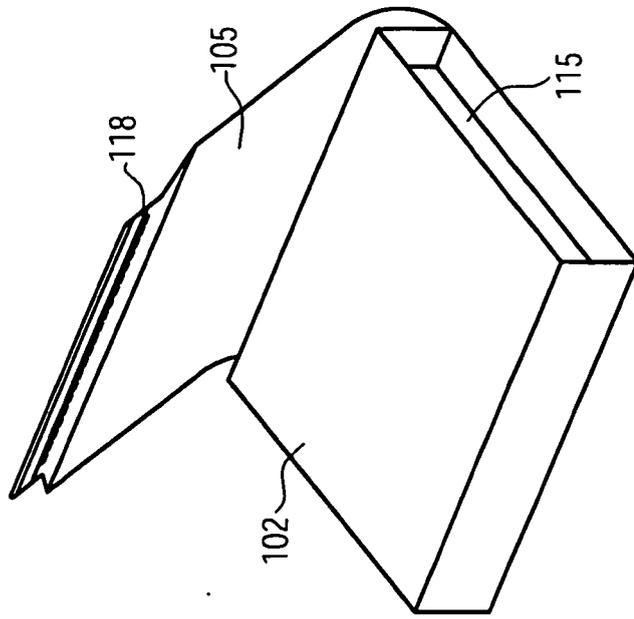


FIG. 6

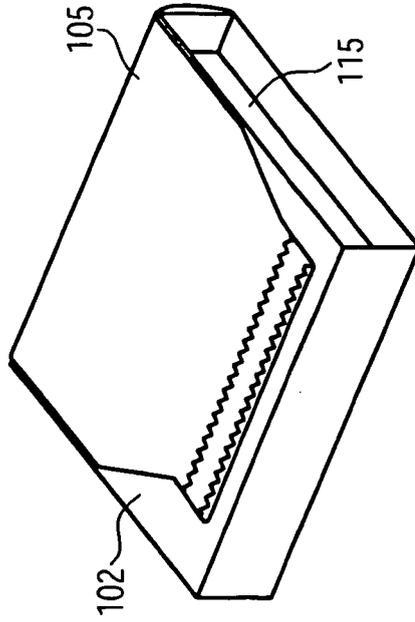


FIG. 7

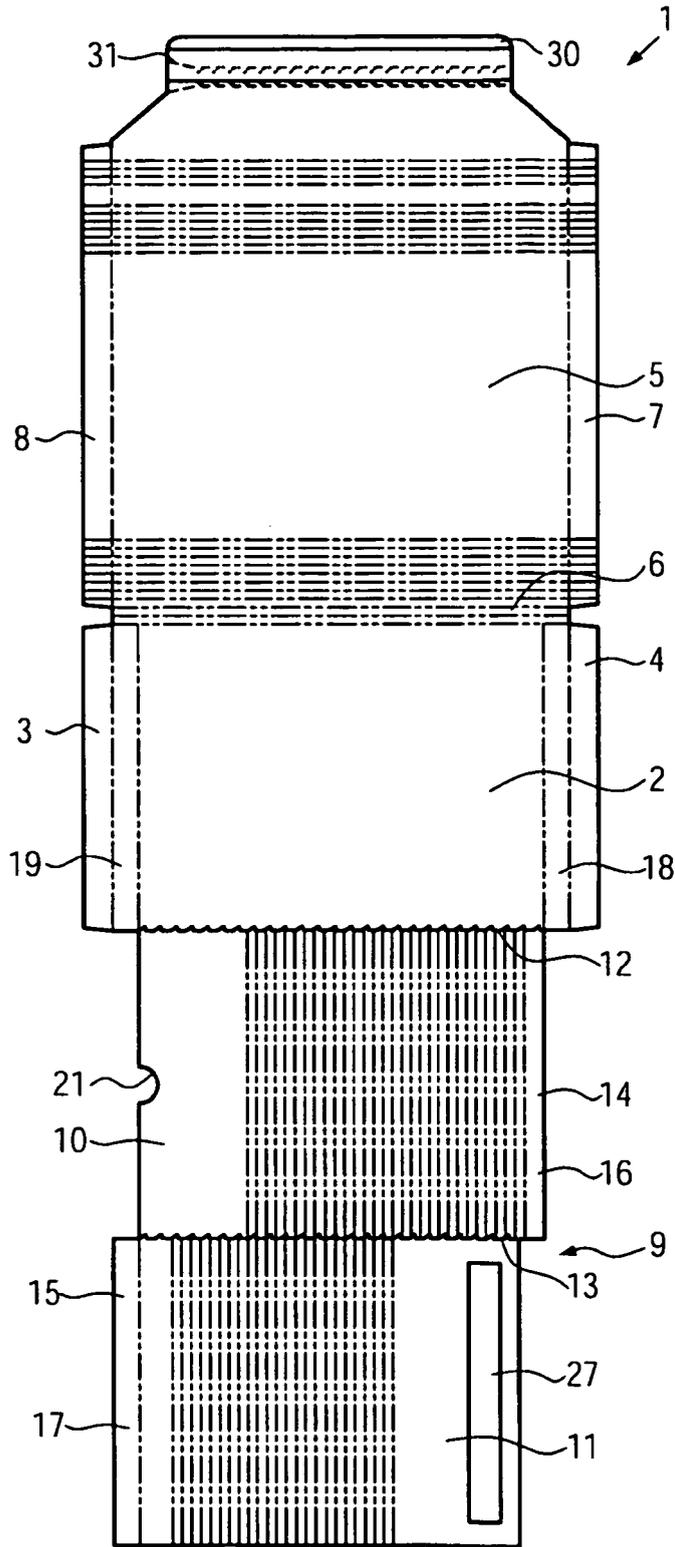


FIG. 8A



FIG. 8B

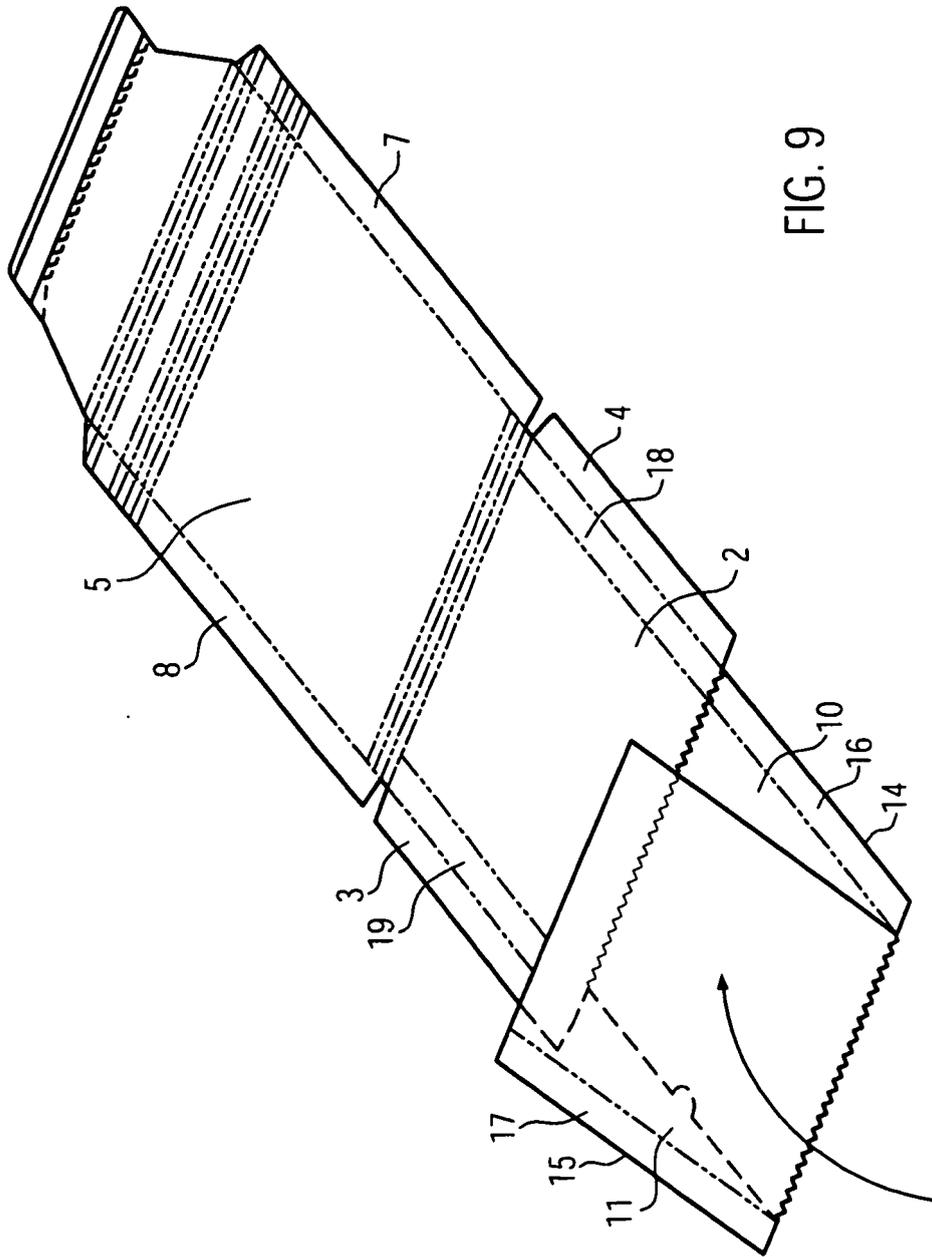


FIG. 9

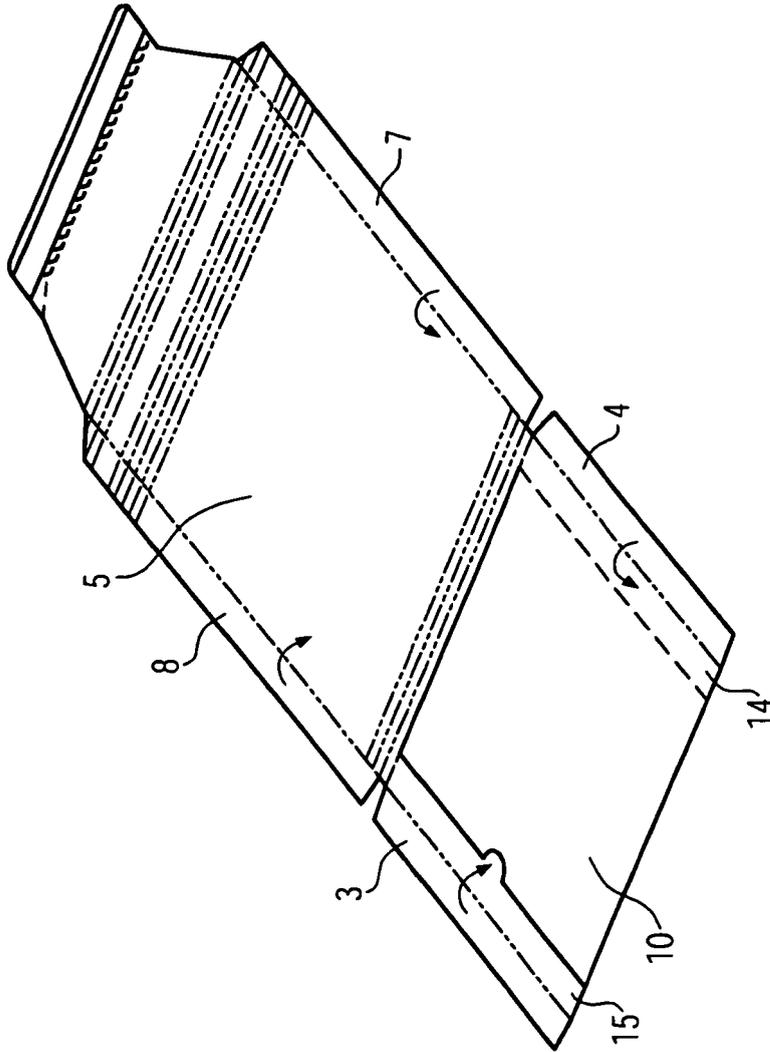


FIG. 10

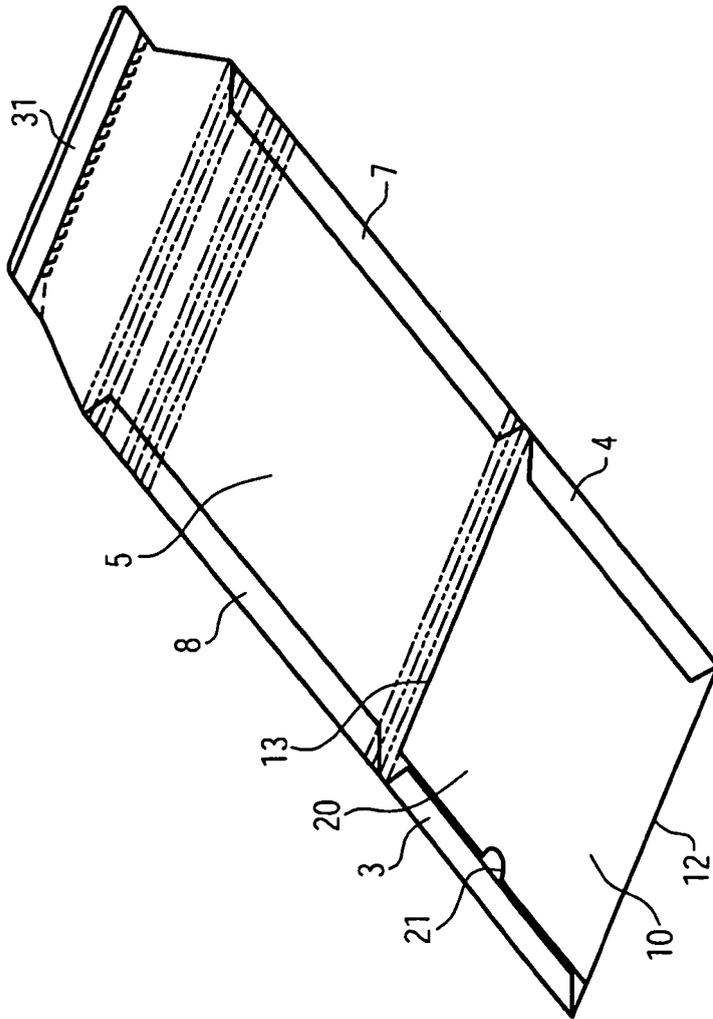


FIG. 11

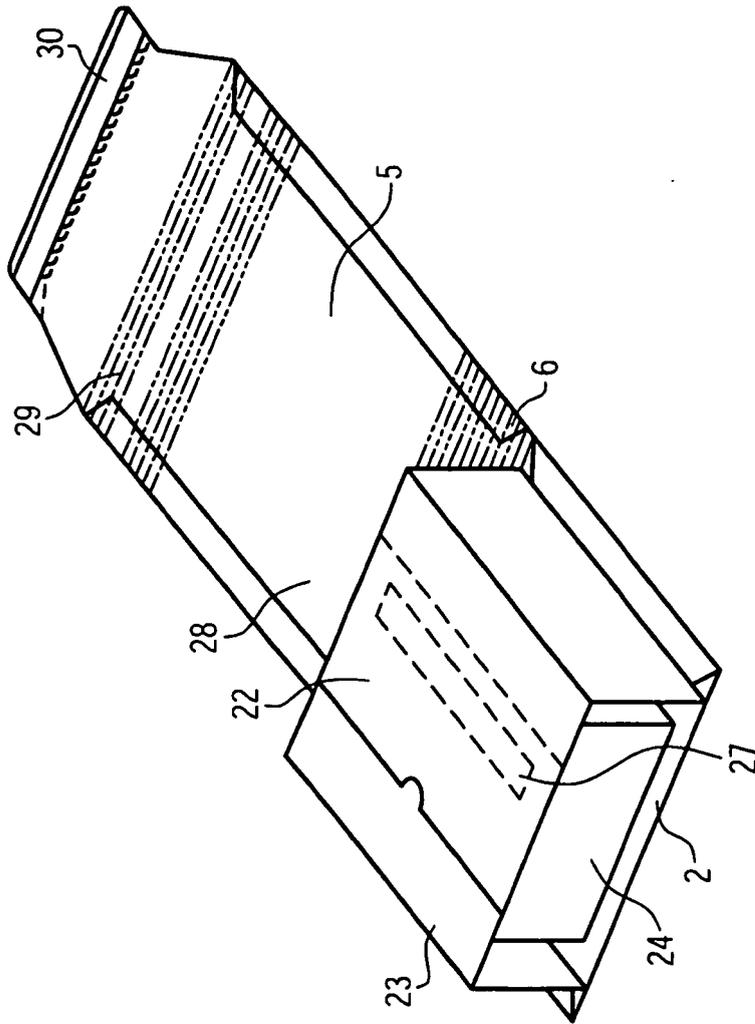


FIG. 13

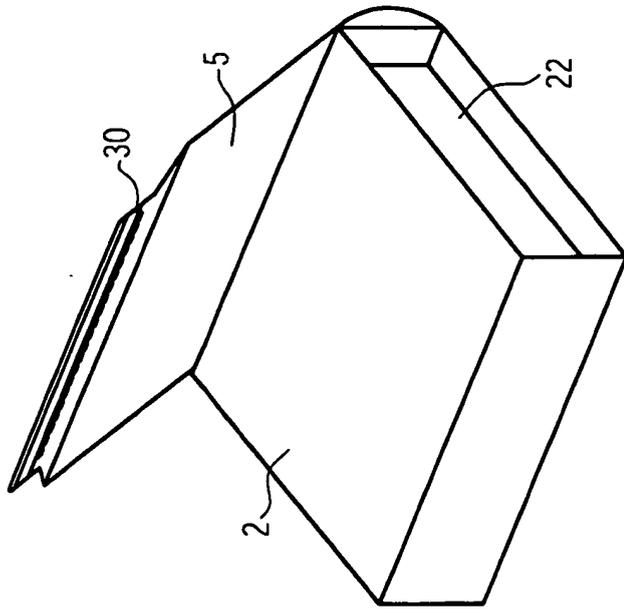


FIG. 14

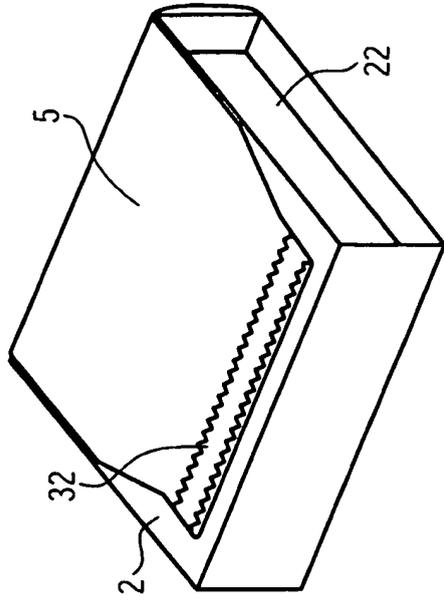


FIG. 15

REFERENCES CITED IN THE DESCRIPTION

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