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(54) **A CONTAINER FOR FOOD**

LEBENSMITTELBEHÄLTER

RÉCIPIENT POUR ALIMENTS

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Description

[0001] This invention relates to a container for receiving a food product and in particular the invention is concerned with containers that can be formed by folding a shaped blank of paper, paperboard, cardboard or a similar material.

[0002] A first aspect of the present invention provides a partially assembled container as defined in the appended claim 1.

[0003] This novel container construction provides a partially formed container that has a number of advantages over known constructions such as, for example, those disclosed in GB 2398557 and GB 2321236. In particular it can be moved quickly and easily between a flat configuration to an erect configuration without the need for tabs or tongues to be inserted in pre-cut slots or additional gluing. The container "pops up" from the flat configuration to the erect configuration when the sides of the flat container are pulled apart. Also, the partially formed container makes very efficient use of the blank material, thereby decreasing costs. Further, the partially formed container can be transported in the flat condition, and then erected easily by the food producer.

[0004] The first and second hinge parts lie in substantially the same plane when the container is in a substantially flat condition, and the first hinge part and said one end wall sandwich the second hinge part when the container is in a substantially erect condition.

[0005] According to the invention the hinge means additionally comprises a third hinge part hingedly connected to the second hinge part and rigidly connected to the said end wall. The third hinge part is hingedly connected to the second hinge part and rigidly connected to the said end wall such that the said end wall is sandwiched by the second and third hinge parts.

[0006] The provision of the third hinge part complicates the construction of the container slightly, but its provision is advantageous because it improves the integrity of the seal between the second hinge part and the said end wall to improve the shelf life of the food product contained in the finished container.

[0007] The third hinge part and the surface of the end wall to which it is connected may substantially congruent so that the third hinge part of the hinge means and the said end wall provide a basal surface for the container with double thickness. This double thickness basal surface helps to prevent or delay leakage for the contents of the food product from the container.

[0008] The hinge means are preferably integral with the said side wall. This feature simplifies the blank from which the partially formed container is constructed, and it helps to improve the integrity of the finished container.

[0009] The partially assembled container is particularly suited to a relatively automated process where the container is opened by machinery provided for that purpose such that a food product can then be inserted manually or by further machinery, and this development is realised

by adopting a two stage construction process in which:

- 1) the third hinge part is fastened to the said end wall and the partially fastened container is folded into a substantially flat configuration;
- 2) the partially fastened container is stored and transported to a food producer or user;
- 3) the partially fastened container is opened; and
- 4) the container is erected by bringing the hinge parts into abutment, or by securing the first hinge part to one of the triangular side walls and then securing the hinge parts in the abutting configuration.

[0010] The partially fastened container described in step (1) is suitable for transportation and storage prior to use. The partially fastened container can be folded quickly and easily by apparatus provided for that purpose and then the container can be secured in its erect condition ready for receipt of a food product by fastening the first and second hinge parts as described in step (iii). The configuration of the partially formed container allows steps (ii) and (iii) to be accomplished at high production speeds on known forms of folding and fastening apparatus, or apparatus of that type with simple and inexpensive modifications. These benefits are achieved because the partially fastened container lies flat, making it easier for the machinery to pick and denest it.

[0011] It is preferred that the third hinge part is secured to the inner face of the end wall, such that the end wall and the first hinge part sandwich the second and third hinge parts. In this configuration the sandwich pack provides four blank external faces and this simplifies printing onto those external surfaces with advertising, nutritional information or other matter.

[0012] Overall the combination of these features allow a container to be formed from a blank with very minimal scoring of the joints to provide a good shelf life performance, and also enable the partially assembled container to be made up easily into a flat configuration for transportation and storage and opened equally easily into an erect configuration for insertion of a food product. The three part hinge arrangement provides an excellent seal and extended shelf life for the food product,

[0013] The present invention also provides a blank according to claim 5

[0014] A clear understanding of the present invention will be gained from the following detailed description, given by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a plan view of a container according to the invention;

Figures 2 and 3 are plan views of the blank in an intermediate stage of construction;

Figure 4 is a plan view of a partially assembled container in a flat configuration;

Figures 5 and 6 are perspective views of a partially assembled container between a flat configuration

and an erect configuration;

Figures 7 and 8 are perspective views of a partially assembled container in an erect configuration;

Figure 9 is an underside view of the partially assembled container of Figures 7 and 8;

Figure 10 is a plan view of a blank according to a second embodiment of the invention with an integral lid;

Figures 11 and 12 are perspective and underside views respectively of the blank shown in Figure 10 assembled into a container, with Figure 11 showing the lid open and Figure 12 showing the lid closed.

Figure 13 is a plan view of a container according to an example;

Figures 14, 15 and 16 are views of the blank shown in Figure 13 in an intermediate stage of construction; Figure 17 is a perspective view of a partially assembled container in an erect configuration;

Figure 18 is a plan view of a container according to a further example;

Figures 19, 20 and 21 are views of the blank shown in Figure 18 in an intermediate stage of construction; and

Figure 22 is a perspective view of a partially assembled container in an erect configuration.

[0015] The container blank or skillet shown in Figure 1, and generally designated 1, may consist of paper, paperboard, cardboard or a similar material. A pair of congruent isosceles-shaped side walls 2a and 2b are alternately arranged with and hingedly connected to generally rectangular end walls 3a and 3b. (The end walls may be rectangular, but they are preferably trapezoidal so that in the fully assembled container they taper inwardly towards an apex to allow a number of assembled containers to be stacked together.)

[0016] The end walls have opposed major and minor edges, designated 4a and 4b respectively. Both of the major edges 4a of the end walls 3a are flanked by the congruent edges of the side walls 2a and 2b. Side wall 3b has one of its major edges 4a integrally formed with a congruent edge of side wall 2b.

[0017] A hinge arrangement integrally formed with side wall 2a has three parts: generally rhombic flap or tab 5; a triangular central part or panel 6; and a three sided part or panel 7. These three parts are integrally formed and connected by fold lines. Panel 7 is integrally formed with side wall 2a. The flap 5 is hingedly connected to the minor edge 4a of end wall 3a and this hinge point forms the apex of the finished triangular prism-shaped container.

[0018] All of the connecting lines shown in Figure represent valley or hill folds with valley folds shown with icon A and hill folds shown with icon B. Icon C shown between flap 5 and end wall 3a represent a cut line.

[0019] Oral flaps or tabs 8a to 8e formed with side walls 2, the end walls and the panel 7 cooperate in the assembled container to define a flange which is surrounds the mouth 9 of the container.

[0020] Turning now to Figure 2, the hinge arrangement 5,6,7 is folded to overlie the side and end walls 2a, 3a. End wall 3b is then brought into abutment with the exposed surfaces of the flap 5 by folding the side wall 2b about its central fold line as shown in Figure 3. The abutting surfaces of the flap 5 and the end wall 3b, both designated as S1 in Figure 2, are glued together to form a permanent join. These surfaces S1 are substantially (but not completely) congruent to form a double thickness wall. This double thickness wall can be used as the base on the finished container to provide addition resistance against the egress of the food product housed within the container.

[0021] As shown in Figure 3, the blank is further folded about the join between the tab 5 and the central panel 6 to bring part of the end wall 3b into abutment with the exposed surface of the central panel 6. The abutting surfaces of the first element 6 and the end wall 3b, both designated as S2 in Figure 3, are glued together to form a permanent join and thereby sandwich part of the end wall 3b between the flap 5 and the central panel 6. The resultant partially formed container is shown in Figure 4, and this configuration represents the partially formed container in its flat configuration.

[0022] The configuration of the container means that when it is opened by, say, pulling the side walls 2a and 2b in opposite directions, the container naturally opens out into an erect configuration ready for receiving a food product, such as a sandwich. The movement of the container between the flat configuration shown in Figure 4 and the erect configuration shown in Figure 7 is depicted, as far as it is possible to do so, in Figures 5 and 6.

[0023] In the erect configuration the panel 7 and the end wall 3b sandwich the central panel 6, and the container can be fixed in a fully formed configuration by permanently joining the abutting parts of these panels 6,7. Alternatively, or in addition, part of the panel 7 will abut the part of the end wall 3b and the container can be fixed in a fully formed condition by joining these abutting surfaces. In an alternative embodiment a catch or detent mechanism can be provided so that the partially assembled container can be mechanically fastened in an erect condition without the use of glue or other permanent fastening.

[0024] The oral flanges 8a and 8e overlap in the erect configuration and these may also be glued or otherwise fastened together. Alternatively one of these flanges could be omitted from the blank.

[0025] The preferred embodiment of the invention, which is depicted in Figures 1 to 9 and described above, has a hinge arrangement made up from three parts.

The use of the flap 5 is advantageous because it improves the integrity of the seal between the hinge arrangement and the end wall 3b, and it also provides a double thickness basal surface in the finished container.

[0026] In the second embodiment shown in Figures 10, 11 and 12, and integral lid 10 is provided in place of the oral flap 8d adjacent side wall 2a. The lid is used to

close the opening 9 in the finished container after the food product has been inserted. The lid 10 has an opening 11 which is covered by a transparent film 12 to enable the contents of the assembled container to be viewed after the peripheral end of the lid is sealed to the oral flange 8. The blank and container configuration allow the lid to be provided without a fold lines passing through the lid.

[0027] In the examples shown in Figures 13 to 22, like parts are numbered in the same sequence as the first end second embodiments, but the sequencing starts at 100 rather than at 1 in the third embodiment, and 200 in the fourth embodiment.

[0028] It should be noted that, in contrast to the first and second embodiments, the fold line between the triangular central part or panel (106, 206) and the three sided part or panel (107,207) in the third and fourth embodiments is a hill fold. This enables the hinge arrangement to be located internally in the erect container, and this modification could be applied to the first and second embodiments.

[0029] The construction of the examples of the container involve the same steps, but the containers of these developments are particularly suited to a "pick and place" arrangement where the container is stored and shipped in a flat pack form, and then the construction finished at the site of the food producer by opening the container and securing the hinge arrangement. This second stage in the construction process of opening the container from a substantially flat condition and securing the hinge parts in secure abutment is well suited to automation. The hinge parts can be secured by an appropriate means such as gluing, heat sealing or RF welding.

[0030] A food product such as a sandwich can then be placed in the erected container by hand or by apparatus designed for that purpose, and the opening to the container closed and seal with a lid or suitable covering.

[0031] In the example, the hinge parts and the end wall provide a quadruple layer of paperboard, and this can be used as the base of the container to stop or slow down the egress of any moisture or liquid that might be contained in the sandwich.

Also the construction of this development allows the hinge parts to lie within the container leaving four blank panels on which marketing information can be placed.

[0032] In the further example, the hinge parts also lie within the container leaving four blank panels on which marketing information can be placed.

[0033] The invention is not restricted to the embodiments of the invention explicitly described herein, and modifications within the scope of the invention described in the claims will be apparent to the person skilled in the art. For example, references to sections of the blank being glued should be understood to encompass any form of fastening including RF welded by application of a suitable coating to the surfaces that are being joined.

Claims

1. A partially assembled container for receiving a food product and formed from a partially fastened folded blank (1), the container having triangular side walls (2a,2b) and substantially rectangular end walls (3a,3b) to enable the formation a generally triangular prism-shaped container with an opening for receiving the food product, wherein hinge means comprising a first hinge part (7) hingedly connected to a second hinge part (6) are provided between one of said side walls (2a) and one of said end walls (3b), **characterised in that** the hinge means additionally comprises a third hinge part (5) hingedly connected to the second hinge part (6) and that the partially assembled container is formed by rigidly connecting the third hinge part (5) to the said end wall (3b) and rigidly connecting the second hinge part (6) to said one end wall (3b) such that the said end wall (3b) is sandwiched by the second and third hinge parts (5,6); and is moveable between a substantially flat position, in which the first and second hinge parts (6,7) lie in substantially the same plane, for storage and transportation and a substantially erect position, in which the first and second hinge parts (6,7) overlies one another, for receiving a food product.
2. A partially assembled container as claimed in claim 1, wherein the third hinge part (5) and the surface of the end wall (3b) to which it is connected are substantially congruent.
3. A partially assembled container as claimed in any one of the preceding claims, wherein the hinge means are integral with the said side wall (2a).
4. A partially assembled container as claimed in any one of the preceding claims, wherein an integrally formed lid (10) is provided for covering the opening in the container when it is in its erect condition.
5. A blank (1) for forming a container for receiving a food product, the blank (1) having triangular side walls (2a,2b) and substantially rectangular end walls (3a,3b) to enable the formation of a generally triangular prism-shaped container with an opening for receiving the food product, the blank (1) further comprising hinge means, the hinge means comprising a first hinge part (7) hingedly connected to a second hinge part (6) and arranged between one of said side walls (2a) and one of said end walls (3b) **characterised in that** the hinge means additionally comprises a third hinge part (5) hingedly connected to the second hinge part (6) and the blank (1) enables a partially assembled container to be formed, the partially assembled container being as claimed in any preceding claim.

6. A method of forming a container from a blank (1) according to claim 5, the method comprising the following steps:

- 1) folding the hinge means to overlie the one of said side walls (2a) and the other of said end walls (3a);
- 2) bringing the one of said end walls (3b) into abutment with the exposed surfaces of the third hinge part (5) by folding the other of said side walls (2b) about a central fold line thereof;
- 3) gluing the abutting surfaces of the third hinge part (5) and the one of said end walls (3b) together to form a permanent join;
- 4) folding the blank (1) about the connection between the third hinge part (5) and the second hinge part (6) to bring part of the one of said end walls (3b) into abutment with the exposed surface of the second hinge part (6);
- 5) gluing the abutting surfaces of the second hinge part (6) and the one of said end walls (3b) together to form a permanent join and thereby sandwich part of the one of said end walls (3b) between the third hinge part (5) and the second hinge part (6);
- 6) pulling the side walls (3a,3b) in opposite directions, such that the container naturally opens out into an erect state.

7. A method of forming a container from a blank (1) according to claim 5, the method comprising the following steps:

- 1) bringing the one of said end walls (3b) into abutment with the exposed surfaces of the third hinge part (5) by folding the other of said side walls (2b) about a central fold line thereof;
- 2) fastening the third hinge part (5) to the inner surface of the one of said end walls (3b) and folding the partially fastened container into a substantially flat configuration;
- 3) storing the partially fastened container and transporting it to a food producer;
- 4) opening the partially fastened container;
- 5) erecting the container by bringing the first and second hinge parts (6,7) into abutment and fastening the hinge means in the abutting configuration ready for receipt of a food product.

Patentansprüche

1. Teilweise zusammengesetzter Behälter zum Aufnehmen eines Lebensmittelerzeugnisses, der aus einem teilweise geschlossenen, gefalteten Rohling (1) besteht, wobei der Behälter dreieckige Seitenwände (2a, 2b) und im Wesentlichen rechteckige Stirnwände (3a, 3b) hat, um die Ausbildung eines im

Allgemeinen dreikantprismenförmigen Behälters mit einer Öffnung zum Aufnehmen des Lebensmittelerzeugnisses zu ermöglichen, wobei eine Scharniereinrichtung, die einen ersten Scharnierteil (7) umfasst, der gelenkig mit einem zweiten Scharnierteil (6) verbunden ist, zwischen einer der Seitenwände (2a) und einer der Stirnwände (3b) vorhanden ist, **dadurch gekennzeichnet, dass** die Scharniereinrichtung zusätzlich einen dritten Scharnierteil (5) umfasst, der gelenkig mit dem zweiten Scharnierteil (6) verbunden ist, und dass der teilweise zusammengesetzte Behälter ausgebildet wird, indem der dritte Scharnierteil (6) starr mit der Stirnwand (3b) verbunden wird, und starres Verbinden des zweiten Scharnierteils (6) mit der einen Stirnwand (3b), so dass die Stirnwand (3b) von dem zweiten und dem dritten Scharnierteil (5, 6) eingeschlossen wird; und er zwischen einer im Wesentlichen flachen Position, in der der erste und der zweite Scharnierteil (6, 7) im Wesentlichen in der gleichen Ebene liegen, zur Aufbewahrung sowie zum Transport und einer im Wesentlichen aufgerichteten Position, in der der erste und der zweite Scharnierteil (6, 7) übereinanderliegen, zum Aufnehmen eines Lebensmittelerzeugnisses bewegt werden kann.

2. Teilweise zusammengesetzter Behälter nach Anspruch 1, wobei der dritte Scharnierteil (5) und die Fläche der Stirnwand (3b), mit der er verbunden ist, im Wesentlichen kongruent sind.
3. Teilweise zusammengesetzter Behälter nach einem der vorangehenden Ansprüche, wobei die Scharniereinrichtung integral mit der Seitenwand (2a) ausgebildet ist.
4. Teilweise zusammengesetzter Behälter nach einem der vorangehenden Ansprüche, wobei ein integral ausgebildeter Deckel (10) vorhanden ist, um die Öffnung in dem Behälter abzudecken, wenn er sich in seinem aufgerichteten Zustand befindet.
5. Rohling (1) zum Ausbilden eines Behälters zum Aufnehmen eines Lebensmittelerzeugnisses, wobei der Rohling (1) dreieckige Seitenwände (2a, 2b) und im Wesentlichen rechteckige Stirnwände (3a, 3b) hat, um die Ausbildung eines im Allgemeinen dreikantprismenförmigen Behälters mit einer Öffnung zum Aufnehmen des Lebensmittelerzeugnisses zu ermöglichen, der Rohling (1) des Weiteren eine Scharniereinrichtung umfasst und die Scharniereinrichtung einen ersten Scharnierteil (7) umfasst, der gelenkig mit einem zweiten Scharnierteil (6) verbunden ist und zwischen einer der Seitenwände (2a) und einer der Stirnwände (3b) angeordnet ist, **dadurch gekennzeichnet, dass** die Scharniereinrichtung zusätzlich einen dritten Scharnierteil (5) umfasst, der

gelenkig mit dem zweiten Scharnierteil (6) verbunden ist, und dass es der Rohling (1) ermöglicht, einen teilweise zusammengesetzten Behälter auszubilden, wobei der teilweise zusammengesetzte Behälter nach einem der vorangehenden Ansprüche ist.

6. Verfahren zum Ausbilden eines Behälters aus einem Rohling (1) nach Anspruch 5, wobei das Verfahren die folgenden Schritte umfasst:

- 1) Falten der Scharniereinrichtung, so dass sie über der einen der Seitenwände (2a) und der anderen der Stirnwände (3a) liegt;
- 2) Anlegen der einen der Stirnwände (3b) an die freiliegenden Flächen des dritten Scharnierteils (5) durch Falten der anderen der Seitenwände (2b) um eine mittlere Faltlinie derselben herum;
- 3) Verleimen der aneinander liegenden Flächen des dritten Scharnierteils (5) und der einen der Stirnwände (3b), um eine feste Verbindung auszubilden;
- 4) Falten des Rohlings (1) um die Verbindung zwischen dem dritten Scharnierteil (5) und dem zweiten Scharnierteil (6) herum, um einen Teil der einen der Stirnwände (3b) an die freiliegende Fläche des zweiten Scharnierteils (6) anzulegen;
- 5) Verleimen der aneinander liegenden Flächen des zweiten Scharnierteils (6) und der einen der Stirnwände (3b), um eine feste Verbindung auszubilden und so einen Teil der einen der Stirnwände (3b) zwischen dem dritten Scharnierteil (5) und dem zweiten Scharnierteil (6) einzuschließen;
- 6) Ziehen der Seitenwände (3a, 3b) in einander entgegengesetzte Richtungen, so dass sich der Behälter von selbst in einen aufgerichteten Zustand öffnet.

7. Verfahren zum Ausbilden eines Behälters aus einem Rohling (1) nach Anspruch 5, wobei das Verfahren die folgenden Schritte umfasst:

- 1) Anlegen der einen der Stirnwände (3b) an die freiliegenden Flächen des dritten Scharnierteils (5) durch Falten der anderen der Seitenwände (2b) um eine mittlere Faltlinie derselben herum;
- 2) Befestigen des dritten Scharnierteils (5) an der Innenfläche der einen der Stirnwände (3b) und Falten des teilweise geschlossenen Behälters in eine im Wesentlichen flache Form;
- 3) Aufbewahren des teilweise geschlossenen Behälters und Transportieren desselben zu einem Lebensmittelproduzenten;
- 4) Öffnen des teilweise geschlossenen Behälters;
- 5) Aufrichten des Behälters, indem der erste und der zweite Scharnierteil (6, 7) aneinander gelegt

werden und die Scharniereinrichtung in der anliegenden Form zur Aufnahme eines Lebensmittelzeugnisses bereit befestigt wird.

Revendications

1. Récipient partiellement assemblé destiné à recevoir un produit alimentaire et formé à partir d'une préforme pliée et partiellement attachée (1), le récipient ayant des parois latérales triangulaires (2a, 2b) et des parois axiales sensiblement rectangulaires (3a, 3b) pour permettre la formation d'un récipient en forme de prisme généralement triangulaire avec une ouverture pour recevoir le produit alimentaire, dans lequel un moyen de charnière comprenant une première partie de charnière (7) raccordée en charnière à une deuxième partie de charnière (6) est disposé entre l'une desdites parois latérales (2a) et l'une desdites parois axiales (3b), **caractérisé en ce que** le moyen de charnière comprend en outre une troisième partie de charnière (5) raccordée en charnière à la deuxième partie de charnière (6) et **en ce que** le récipient partiellement assemblé est formé en raccordant rigidement la troisième partie de charnière (6) à ladite paroi axiale (3b) et en raccordant rigidement la deuxième partie de charnière (6) à ladite une paroi axiale (3b) de sorte que ladite paroi axiale (3b) soit prise en sandwich entre les deuxième et troisième parties de charnière (5, 6) ; et peut être déplacé entre une position sensiblement plate, à laquelle les première et deuxième parties de charnière (6, 7) se trouvent sensiblement dans le même plan, pour le stockage et le transport et une position sensiblement déployée, à laquelle les première et deuxième parties de charnière (6, 7) sont superposées pour recevoir un produit alimentaire.
2. Récipient partiellement assemblé selon la revendication 1, dans lequel la troisième partie de charnière (5) et la surface de la paroi axiale (3b) à laquelle elle est raccordée sont sensiblement congruentes.
3. Récipient partiellement assemblé selon l'une quelconque des revendications précédentes, dans lequel le moyen de charnière est solidaire de ladite paroi latérale (2a).
4. Récipient partiellement assemblé selon l'une quelconque des revendications précédentes, dans lequel un couvercle formé solidairement (10) est disposé pour recouvrir l'ouverture du récipient lorsqu'il se trouve dans son état déployé.
5. Préforme (1) pour former un récipient destiné à recevoir un produit alimentaire, la préforme (1) ayant des parois latérales triangulaires (2a, 2b) et des parois axiales sensiblement rectangulaires (3a, 3b)

pour permettre la formation d'un récipient en forme de prisme généralement triangulaire avec une ouverture pour recevoir le produit alimentaire, la préforme (1) comprenant en outre un moyen de charnière, le moyen de charnière comprenant une première partie de charnière (7) raccordée en charnière à une deuxième partie de charnière (6) et agencé entre l'une desdites parois latérales (2a) et l'une desdites parois axiales (3b), **caractérisée en ce que** le moyen de charnière comprend en outre une troisième partie de charnière (5) raccordée en charnière à la deuxième partie de charnière (6) et la préforme (1) permet à un récipient partiellement assemblé d'être formé, le récipient partiellement assemblé étant selon l'une quelconque des revendications précédentes.

6. Procédé de formation d'un récipient à partir d'une préforme (1) selon la revendication 5, le procédé comprenant les étapes suivantes :

1) plier le moyen de charnière pour qu'il soit superposé sur l'une desdites parois latérales (2a) et l'autre desdites parois axiales (3a) ;
 2) mettre l'une desdites parois axiales (3b) en aboutement contre les surfaces exposées de la troisième partie de charnière (5) en pliant l'autre desdites parois latérales (2b) autour d'une ligne de pli centrale de celle-ci ;
 3) coller les surfaces d'aboutement de ladite troisième partie de charnière (5) et de l'une desdites parois axiales (3b) l'une sur l'autre pour former une jointure permanente ;
 4) plier la préforme (1) autour du raccordement entre la troisième partie de charnière (5) et la deuxième partie de charnière (6) pour mettre une partie de l'une desdites parois axiales (3b) en aboutement contre la surface exposée de la deuxième partie de charnière (6) ;
 5) coller les surfaces d'aboutement de la deuxième partie de charnière (6) et de l'une desdites parois axiales (3b) l'une sur l'autre pour former une jointure permanente et de ce fait prendre en sandwich une partie de l'une desdites parois axiales (3b) entre la troisième partie de charnière (5) et la deuxième partie de charnière (6) ;
 6) tirer les parois latérales (3a, 3b) dans des directions opposées de sorte que le récipient s'ouvre naturellement dans un état déployé.

7. Procédé de formation d'un récipient à partir d'une préforme (1) selon la revendication 5, le procédé comprenant les étapes suivantes :

1) mettre l'une desdites parois axiales (3b) en aboutement contre les surfaces exposées de la troisième partie de charnière (5) en pliant l'autre desdites parois latérales (2b) autour d'une ligne

de pli centrale de celle-ci ;
 2) attacher la troisième partie de charnière (5) sur la surface intérieure de l'une desdites parois axiales (3b) et plier le récipient partiellement attaché dans une configuration sensiblement plate ;
 3) stocker le récipient partiellement attaché et le transporter chez un producteur d'aliments ;
 4) ouvrir le récipient partiellement attaché ;
 5) déployer le récipient en mettant les première et deuxième parties de charnière (6, 7) en aboutement l'une contre l'autre et en attachant le moyen de charnière dans la configuration d'aboutement prêt pour la réception d'un produit alimentaire.

Fig. 1.

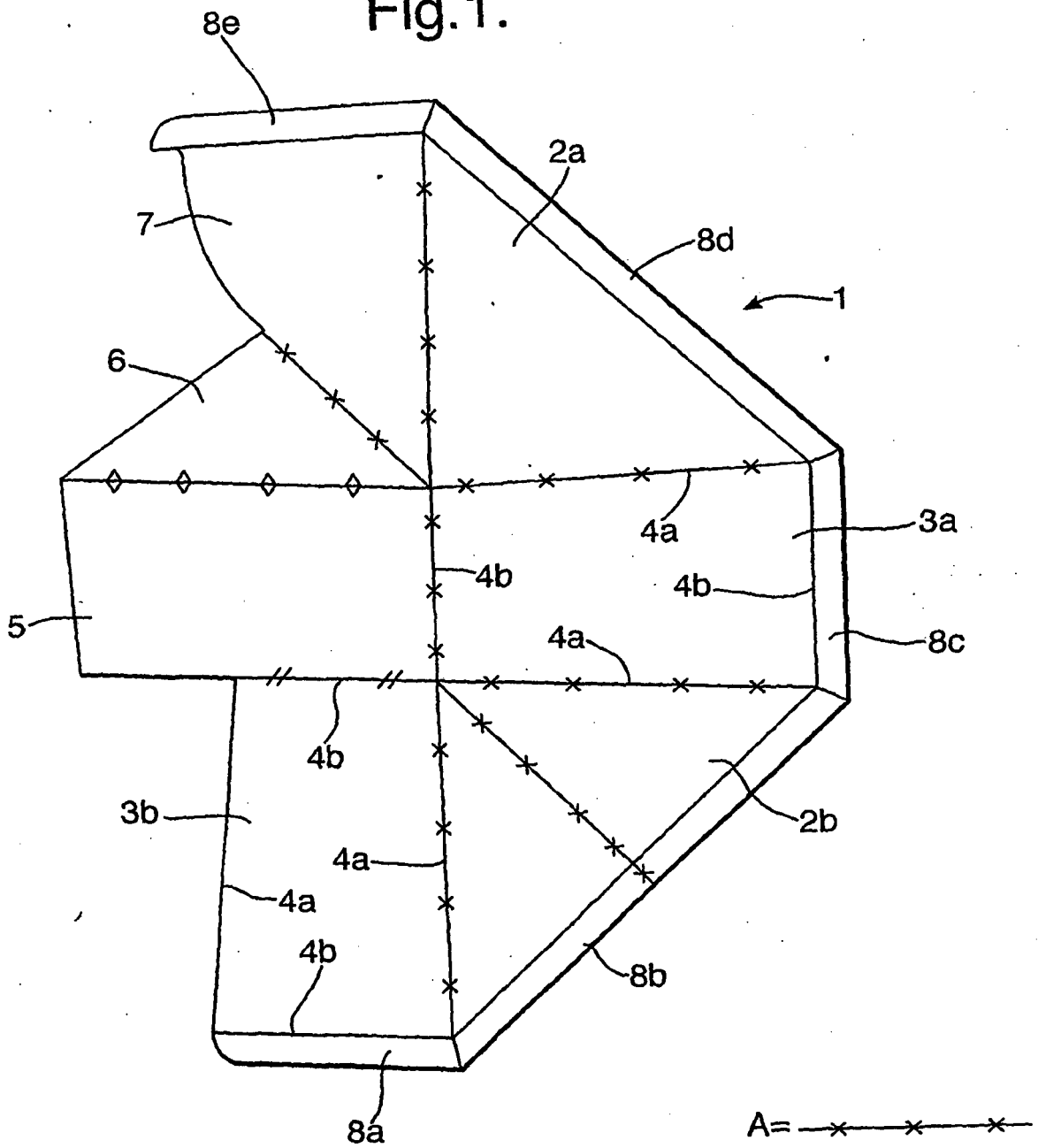


Fig.2.

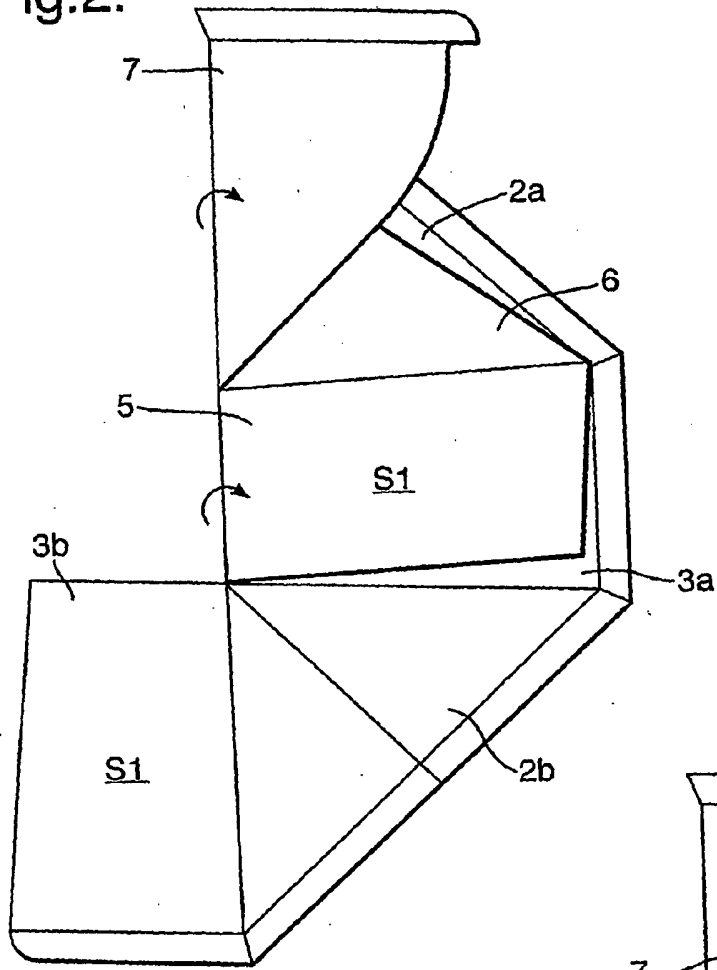


Fig.3.

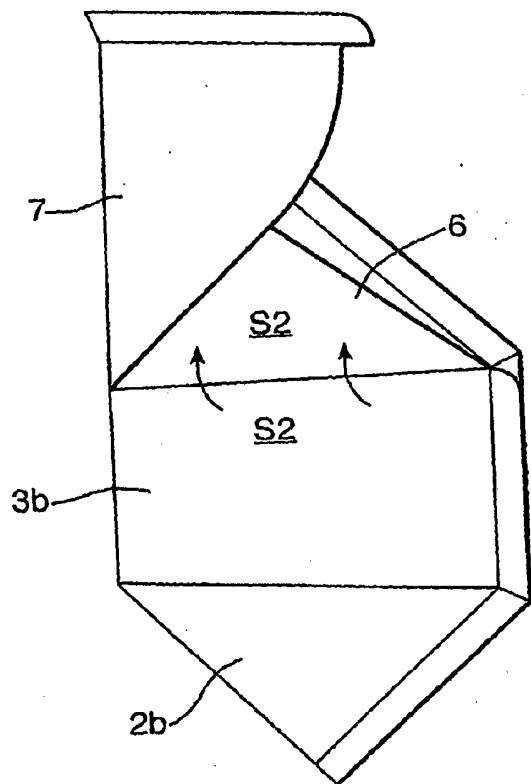


Fig.4.

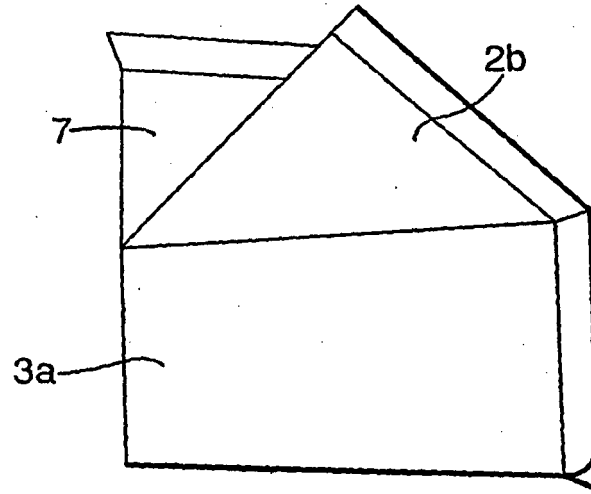


Fig.5.

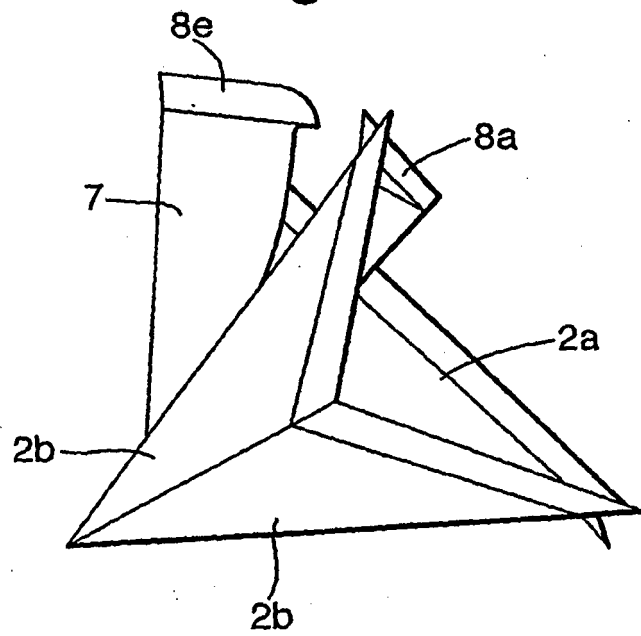


Fig.6.

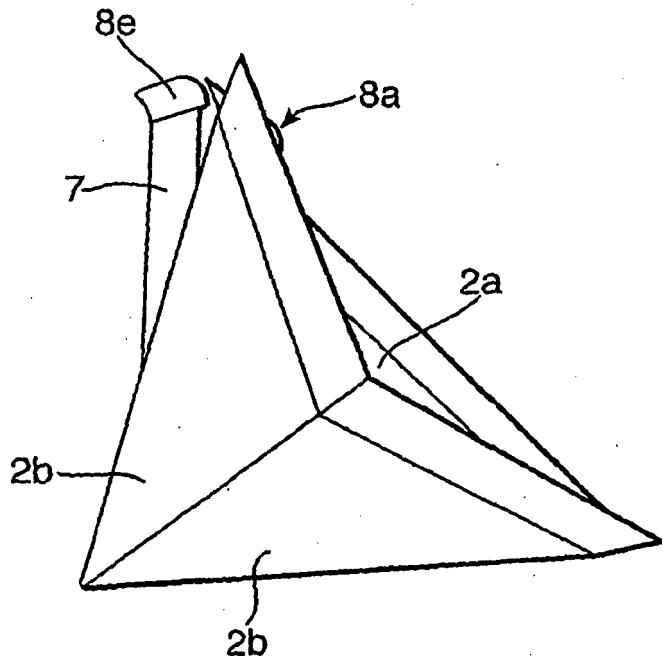


Fig.7.

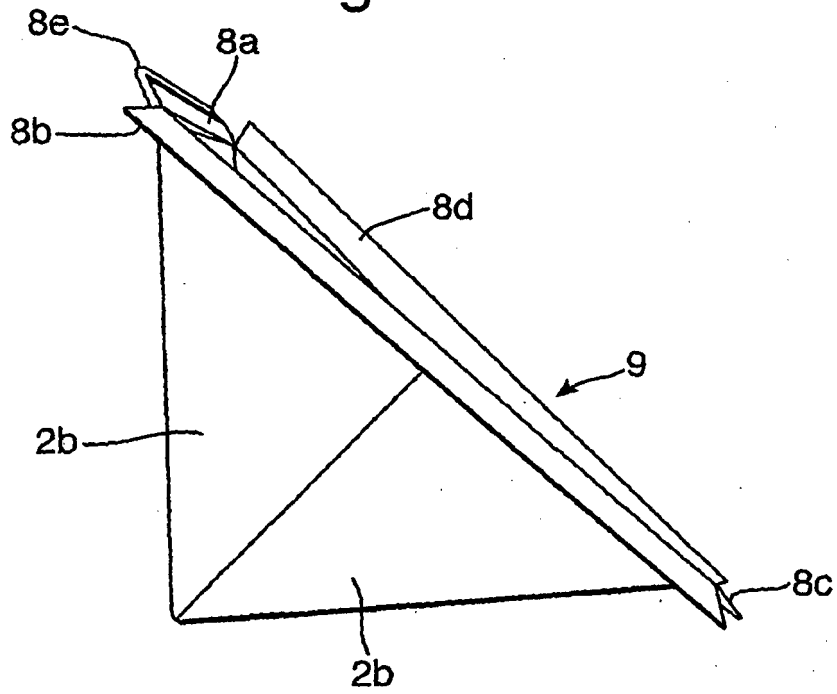


Fig.8.

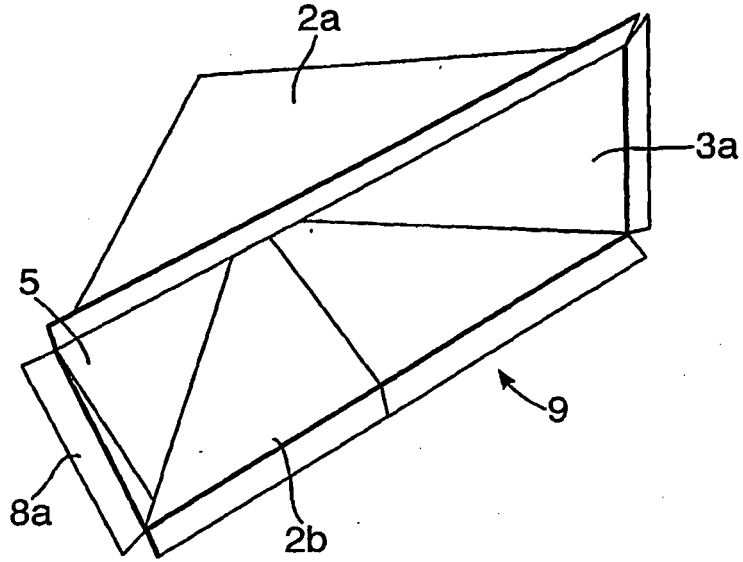


Fig.9.

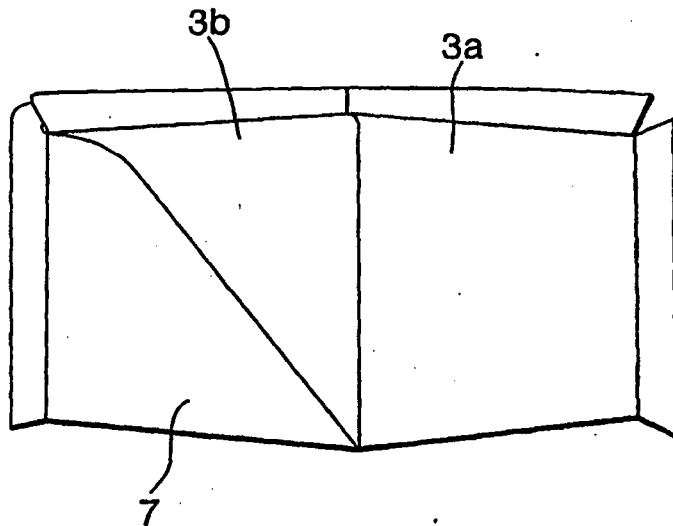


Fig.10.

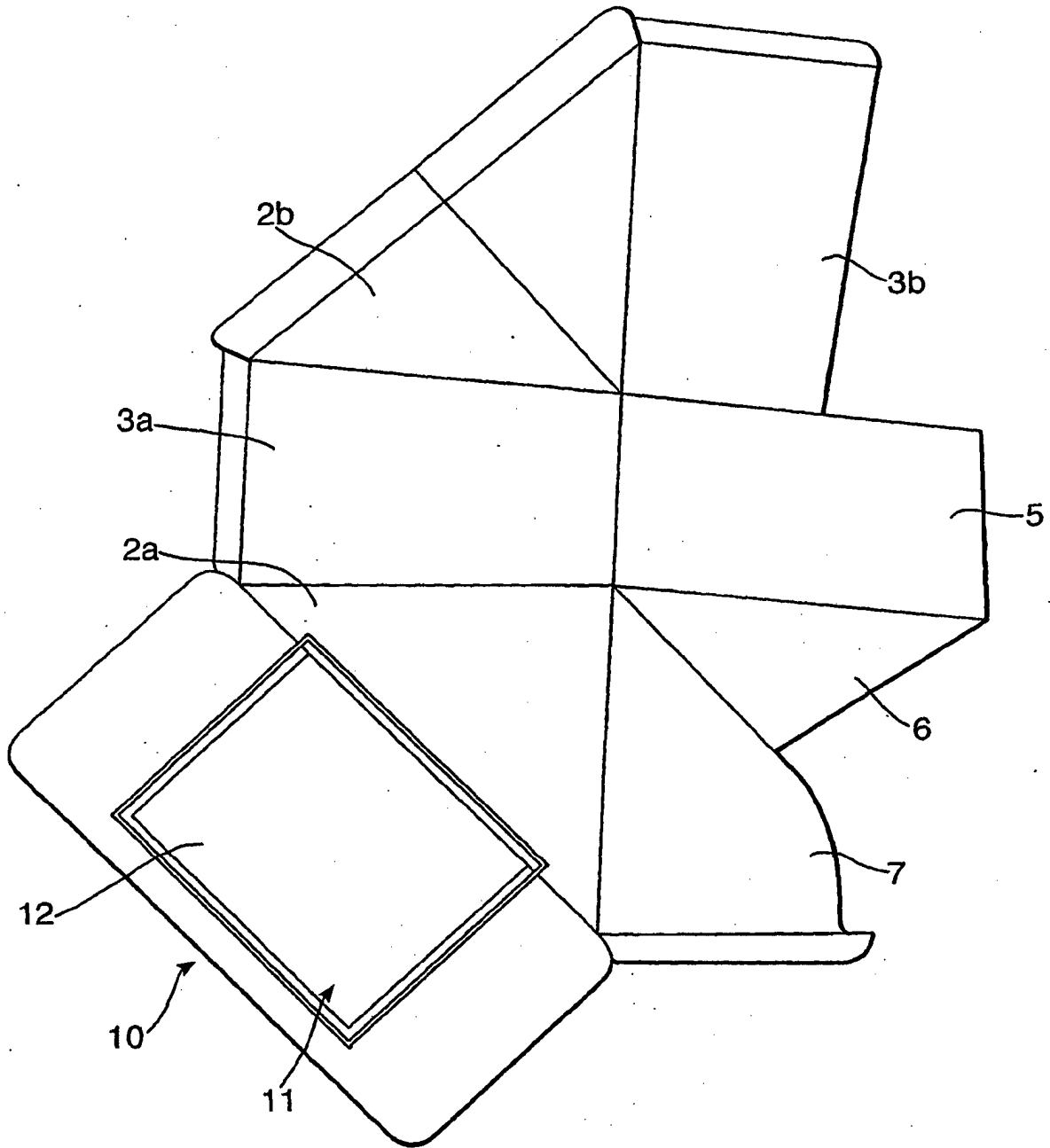


Fig.11.

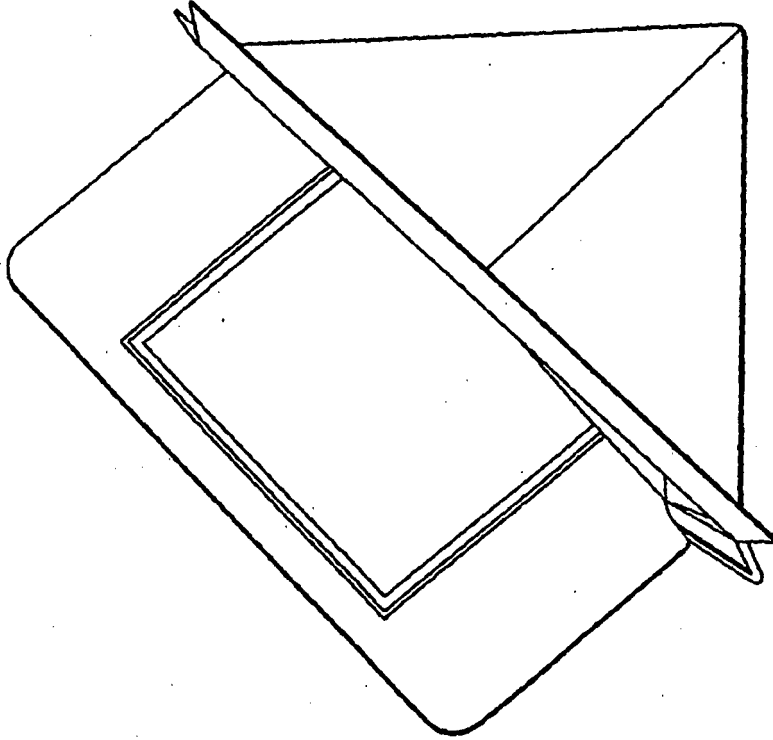


Fig.12.

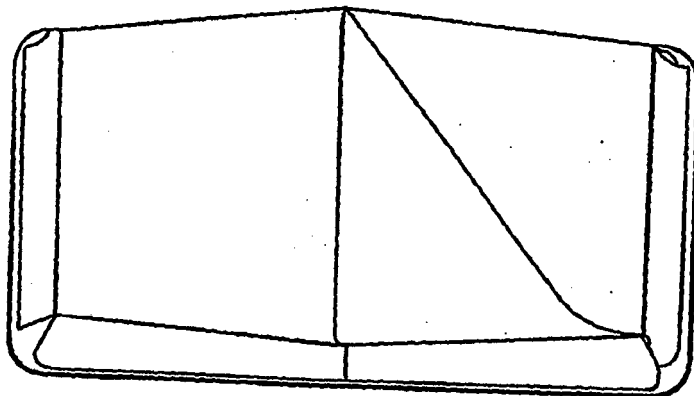


Fig.13.

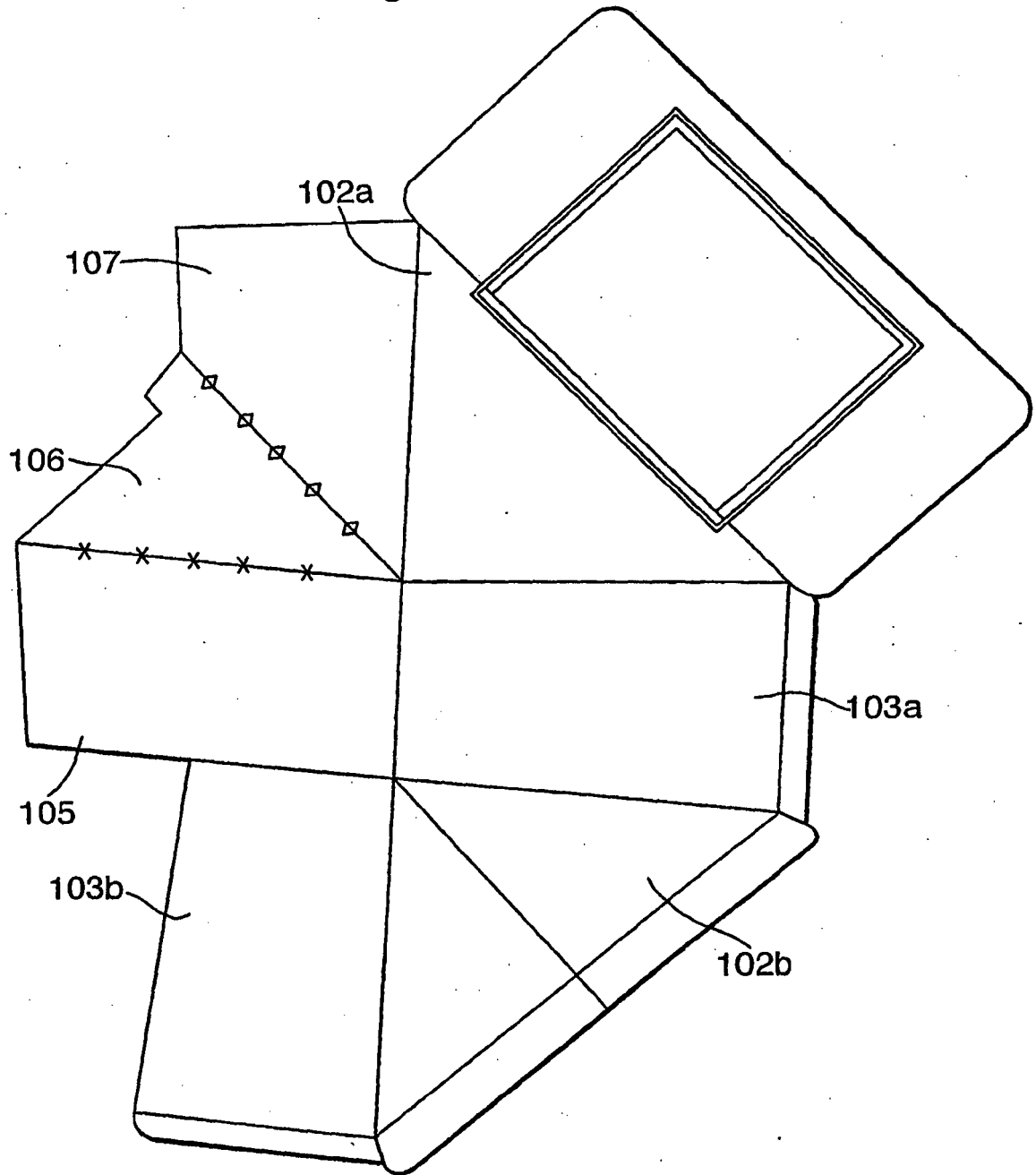


Fig.14.

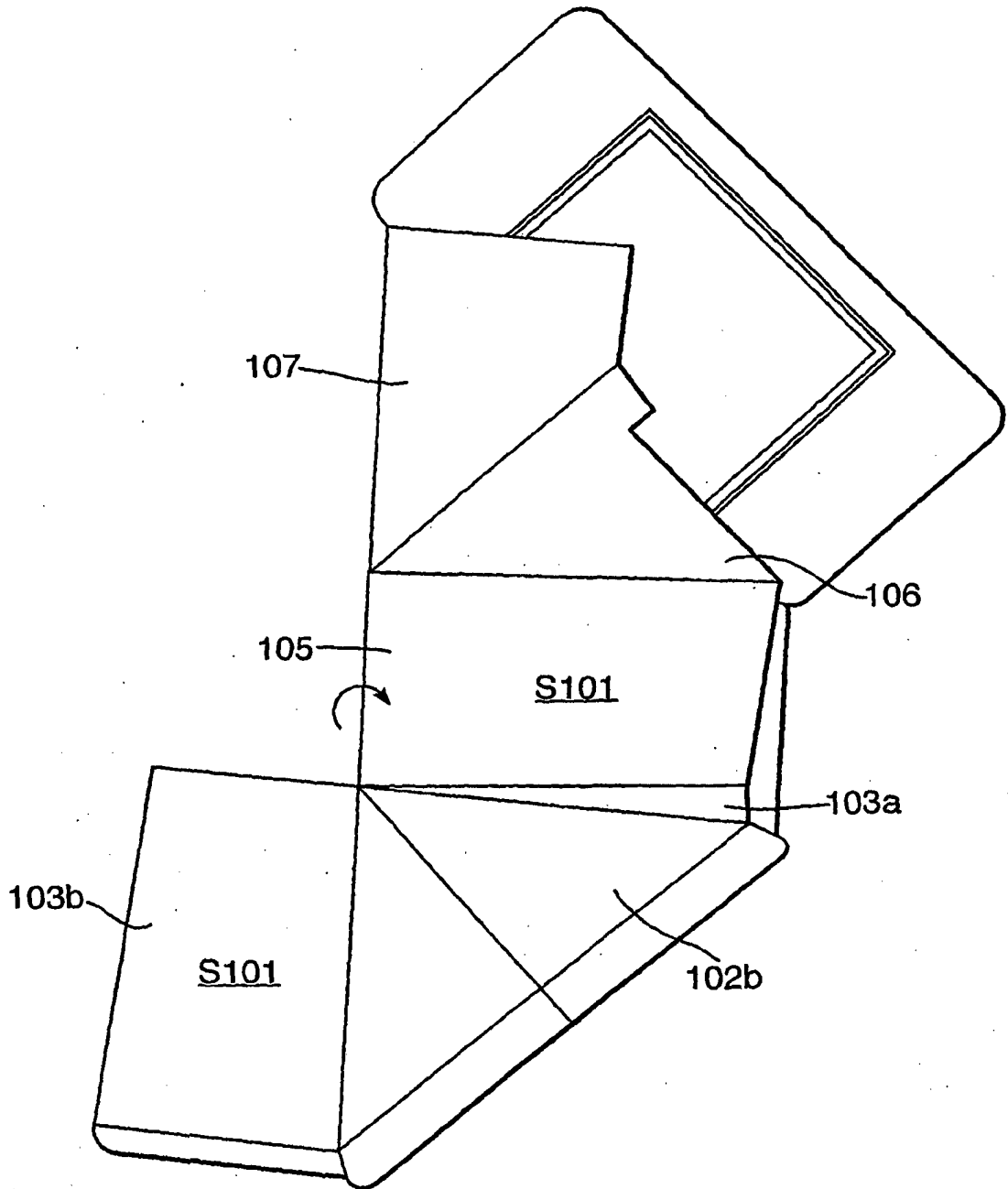


Fig.15.

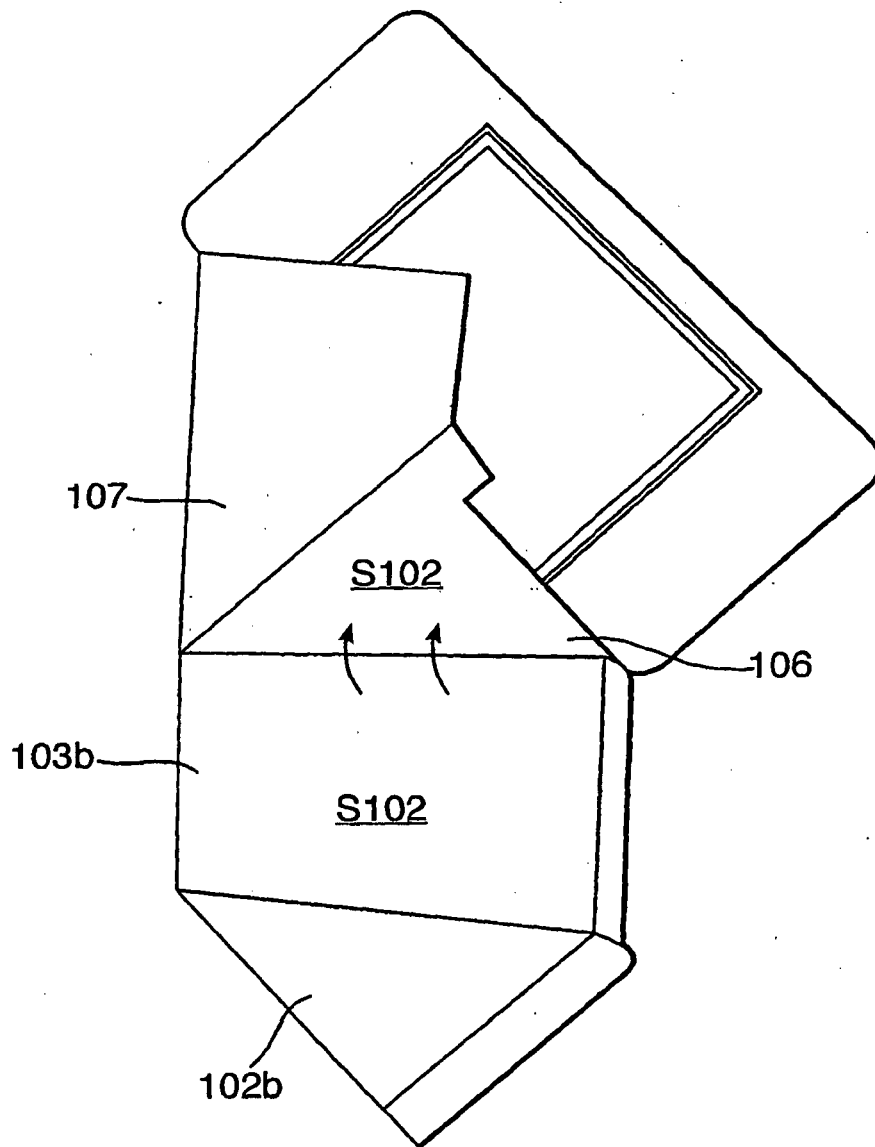


Fig.16.

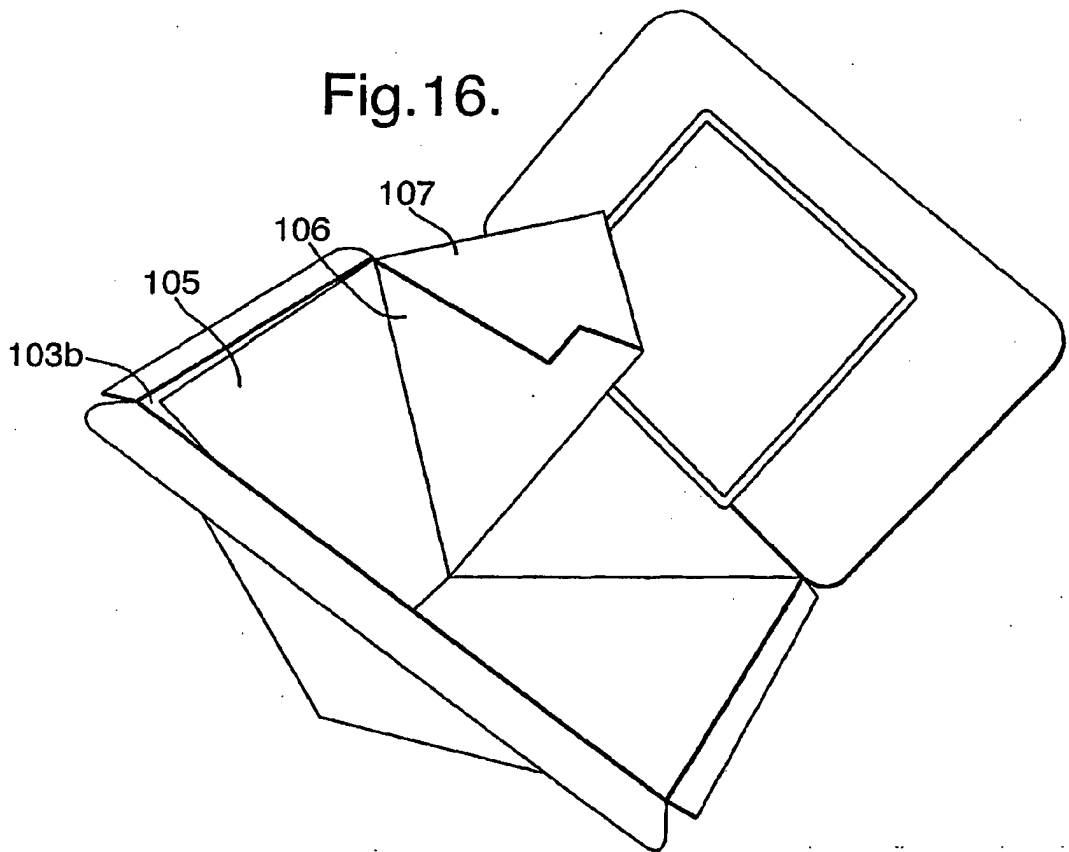


Fig.17.

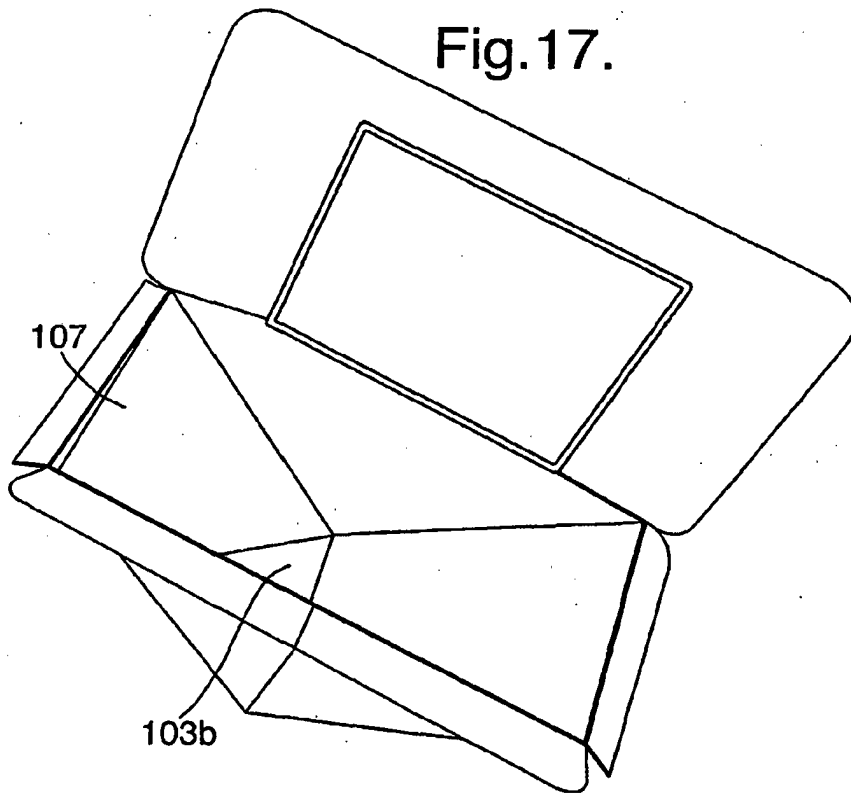


Fig. 18.

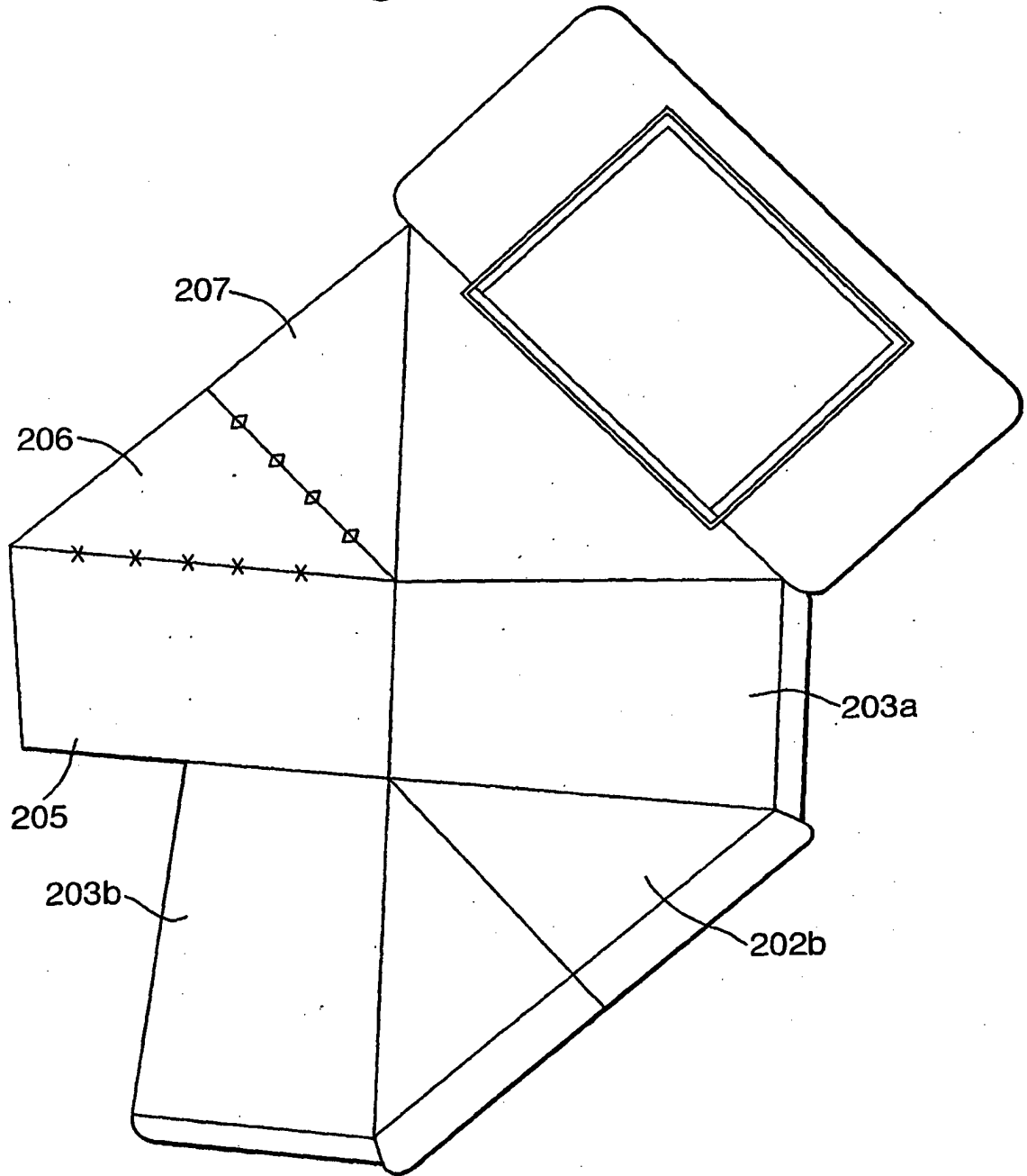


Fig.19.

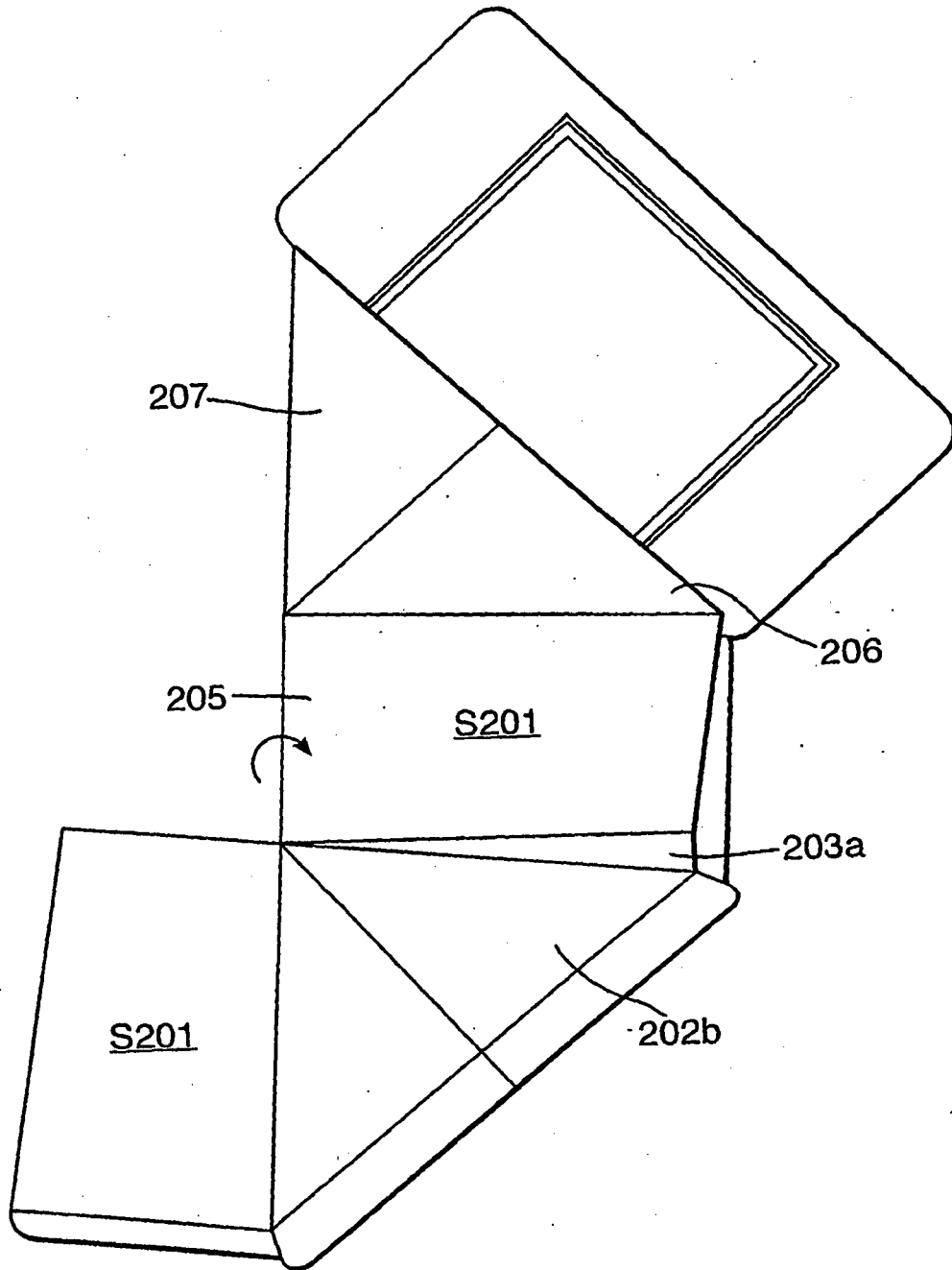


Fig.20.

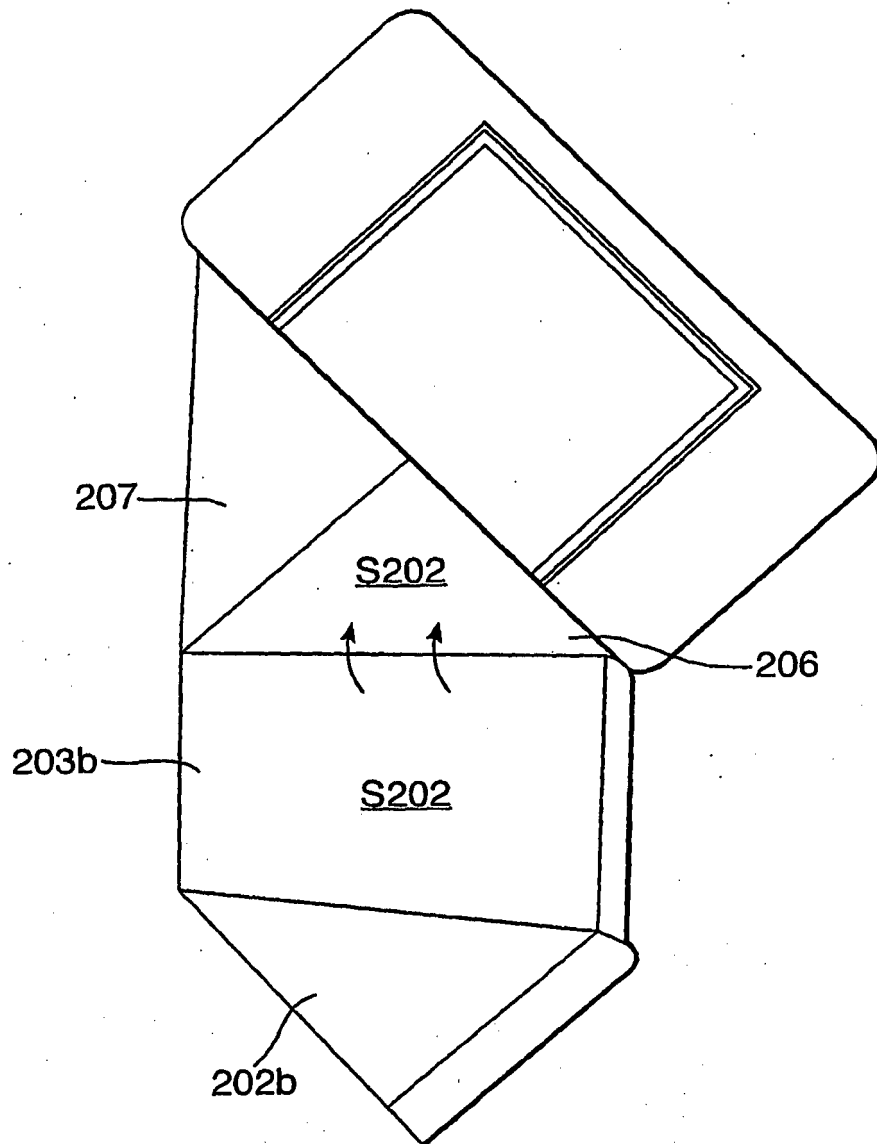


Fig.21.

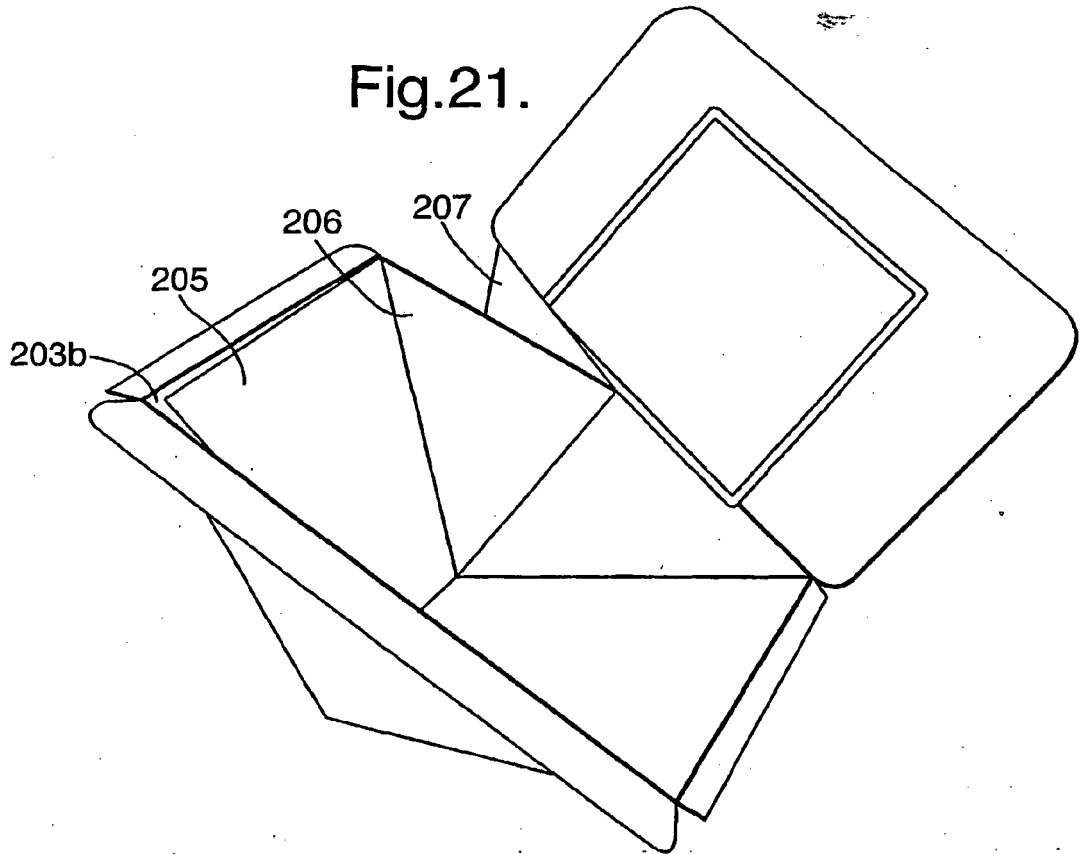
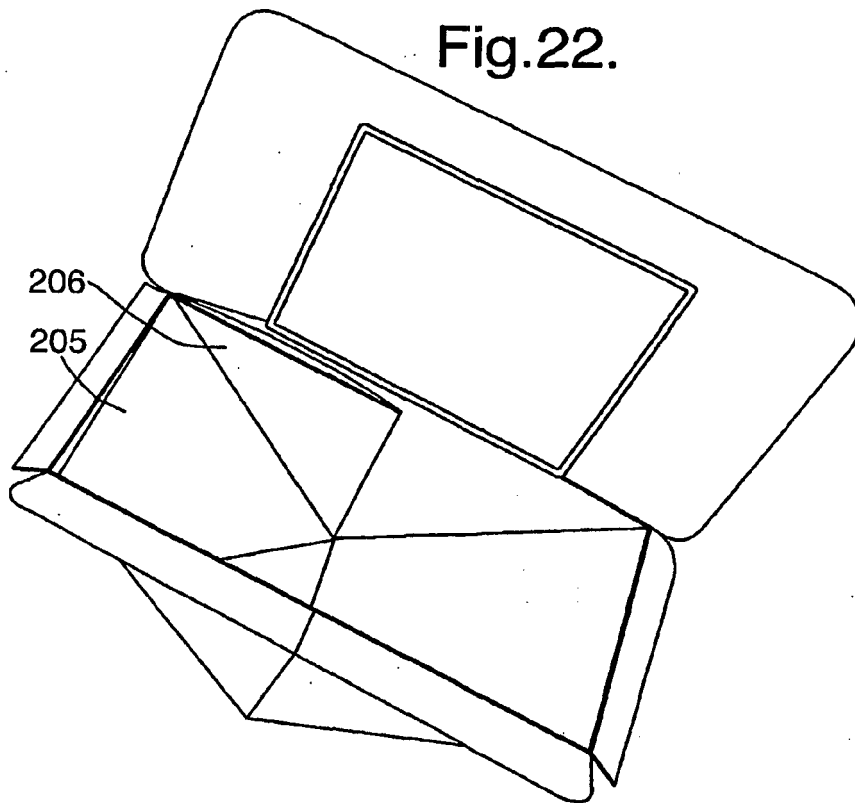


Fig.22.



REFERENCES CITED IN THE DESCRIPTION

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