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(54) **Paperboard container**

Kartonbehälter

Récipient en carton

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Description

[0001] The present invention relates to a paperboard container which can be used for packaging and displaying products, particularly confectionery products or the like.

[0002] In particular, the object of the invention is to provide a container having a supporting and protecting function for the product or article packaged in it, while also being capable of displaying the said product or article to consumers, by enabling its surface characteristics to be revealed.

[0003] Such containers are known for example from the documents GB-A- 1 038 999 and GB-A- 1 495 268.

[0004] The invention proposes a paperboard container of the aforementioned type, which can be produced from a sheet of card or similar sheet material, shaped and folded along scored lines, and having the characteristics defined in Claim 1.

[0005] In particular, two or more of the diagonal supporting walls are formed from a first supporting wall element and from a second auxiliary element, these elements being made in one piece and being pivotable along a scored line.

[0006] Further characteristics of the container according to the invention are defined in the dependent claims below and are illustrated by the following detailed description, which refers to the attached drawings, which are provided purely by way of example and without restrictive intent, and in which

- Fig. 1 is a perspective view of a container according to the invention, in the assembled configuration;
- Fig. 2 is a plan view of the plane development of a shaped piece of card from which the assembled container of Fig. 1 can be produced.

[0007] With reference to the drawings, a container according to the invention, indicated as a whole by the numeral 1, has a prismatic configuration with a base wall 4 and a top wall 2 acting as a lid, having a generally quadrangular or polygonal shape with at least four corners.

[0008] Between the base wall 4 and the lid 2 there extends a lateral wall 6, which can optionally be provided with an aperture or window and four vertical supporting walls 14a, 14b, 12a, and 12b in pairs, aligned along diagonal lines which link opposite vertices of the base wall 4.

[0009] The aforesaid supporting walls 14a, 14b, 12a, 12b, positioned along diagonal lines, act as supports for a specified article which is to be housed in the container. For this purpose, they have, towards the interior of the container, shaped profiles 102, 104, 106 and 108, whose configuration is designed to be at least partly complementary to meridian lines of the outer surface of the article which is to be supported and displayed by the container.

[0010] The container is particularly suitable for supporting an article of generally spherical or ovoid shape, and therefore the aforesaid profiles of the supporting walls are preferably shaped in the form of arcs of a circle or semi-ovoid curved lines respectively. The article is thus supported along meridian lines of its body by the inner profiles of the supporting walls.

[0011] Clearly, there are no particular limits on the configuration of the aforesaid inner profiles of the supporting walls, the scope of the invention naturally including the case in which these profiles are different from each other, when for example an article with an asymmetric body or at least without rotational symmetry is to be supported, and also the case in which the aforesaid profiles are defined by broken or segmented polygonal lines, which are complementary only in certain portions to the outer surface of the article.

[0012] In the embodiment according to the invention, the aforesaid inner profiles of the supporting walls are defined in such a way that the article is supported in a raised position with respect to the base wall 4 and/or in a lowered position with respect to the lid wall 2; however, it is possible for the said inner profiles to act only as a lateral supports of the article and not as vertical supports, so that the article can bear on the base wall.

[0013] The container of Fig. 1 can be produced from a sheet of card or similar sheet material, having the development shown in Fig. 2, which makes clear the further constructional characteristics described below.

[0014] In particular, the development of Fig. 2 shows a central region delimited by two main scored lines, parallel to each other and formed in one case by the segments 114, 116, 118, 120 and 122 and in the other case by the segments 124, 126, 128, 130 and 132.

[0015] In the said central region, cut lines 134 and 136 and scored lines 138 and 140 (Fig. 2) delimit the areas of the base wall 4, the lid wall 2, a portion of lid wall 8, the lateral wall 6 and the auxiliary supporting walls 10a and 10b.

[0016] Flap regions are provided on opposite sides of the said central region, and include, on the left-hand side of the development, the flap regions 20a and 22a, separated by a scored line 150, adjacent to the lid wall 2 and the supporting wall 12a, the regions 24a, 26a and 28a, separated by scored lines 152 and 154, adjacent to the base wall 4, the supporting wall 14a, adjacent to the lateral wall region 6 , and the flap regions 30a and 32a, separated by a scored line 156, adjacent to the portion of lid wall 8.

[0017] In the illustrated example, the flap region on the right-hand side of the development is a mirror image of the flap region on the left-hand side, and therefore corresponding regions and corresponding scored lines are indicated here by the same reference numerals, followed by the letter b.

[0018] As shown in Fig. 2, the regions indicated by 10a and 10b are separated by cut lines 160 and 162 (indicated by broken lines in Fig. 2) and have, respectively, an inner profile 102a, substantially matching the profile 102 of the supporting wall 12a, and an inner profile 104b, substan-

tially matching the profile 104 of the supporting wall 12b.

[0019] In the plane development, the aforesaid profiles 102a and 102b form an aperture 202. The numerals 204 and 206 indicate triangular apertures adjacent to the wall regions 10a and 10b.

[0020] As shown more fully below, the aforesaid wall regions 10a and 10b act as auxiliary supporting walls, being intended to be positioned on top of, and fixed by adhesion to, the supporting walls 12a and 12b respectively.

[0021] The reference numerals 208 indicate small triangular apertures for facilitating the folding of the flap regions adjacent to them along the respective scored lines.

[0022] The numeral 40 indicates a tab of the lid wall 2, which can be inserted into a cut-out 42 in the scored line 140 to close the container.

[0023] To assemble the container, the lateral flap regions are folded along the longitudinal scored lines 114 to 122 and 124 to 132 respectively, and turned through 180° to lie on top of the central region.

[0024] The flap regions 20a and 20b are fixed, preferably by gluing, to the regions of the lid wall 2 on which they are superimposed. Similarly, the flap regions 26a and 26b are fixed by gluing to the base wall 4 and the flap regions 32a and 32b are fixed by gluing to the terminal lid wall portion 8. The auxiliary supporting walls 10a and 10b are also fixed by gluing to the supporting walls 12a and 12b respectively.

[0025] The vertical assembly is then carried out by folding along the further transverse and oblique scored lines mentioned above. The flap regions 24a and 24b are also turned through 180° along the scored lines 152 and 152b and superimposed on surface portions of the flap regions 26a and 26b. Similarly, the'flap regions 28a and 28b are turned through 180° and superimposed on surface portions of the flap regions 26a and 26b. The flap regions 20a and 22a, folded along the scored line 150, and the flap regions 20b and 22b, folded along the scored line 105b, are superimposed on each other.

[0026] A similar operation is carried out in relation to the flap regions 30a and 30b, which are superimposed on the corresponding regions of the portion of wall 8. Following these operations, the supporting walls 14a and 14b are placed orthogonally with respect to the base wall 4, along diagonal lines, and thus the supporting walls 12a and 12b, fixed by adhesion to the auxiliary supporting walls 10a and 10b respectively, are also placed in the vertical position along diagonal lines.

[0027] Optionally, after the article has been inserted into the container, the strength of the container can be enhanced by providing further adhesion between superimposed walls and/or those in contact with each other. In the absence of this operation, however, the container can be closed in a stable configuration by inserting the tab 40 into the corresponding cut-out 42.

[0028] The assembled container thus takes the form of a right prism (Fig. 1) , with a base wall 4 defined by the scored lines 118, 128 and 138 and by cut lines 164 and 166. The two consecutive supporting walls formed by the superimposition and bonding (by gluing for example) of the walls 10a, 12a and 10b, 12b respectively, thus have twice the thickness of the other supporting walls 14a, 14b and the lateral wall 6, and give the container adequate structural resistance to the vertical load generated by the article which is to be supported and displayed.

[0029] The invention thus provides a paperboard container which can be produced by simple operations, which can be automated, of punching from a sheet of card and gluing, the container being able to meet the aesthetic and structural requirements for the support and display of articles of various shapes, particularly of confectionery products.

[0030] The aforesaid confectionery product preferably consists of a spherical, spheroidal or ovoid body, made for example from chocolate or similar confectionery material, housed in a hollow casing or shell, preferably made from thermoformed plastics material, which has a cavity formed within it whose shape is preferably complementary to the body of the confectionery product.

[0031] The said casing can be formed, for example, from two shaped half-shells, preferably transparent or translucent, which can be joined rim to rim. These half-shells are preferably hinged together with an integral film hinge along a portion of their rim profile, and are provided at the opposite side to the hinge area with coupling means, preferably of the mutually interlocking type, to enable the casing to be closed and opened.

[0032] In this embodiment, shaped elements can be provided, on the walls of the paperboard container, these elements being delimited by a profile which is pre-cut in sections, for example as indicated by T1, T2 and T3 in Fig. 2, and being usable by the consumer to form a decoration in conjunction with the said casing.

[0033] For example, the element T3 can be shaped in the form of 'an attaching element, whose arms B1 and B2 are intended to be inserted, after the confectionery product has been removed from the casing, between the two half-shells and to be locked inside the casing when it is closed by the use of the said means for engaging the two half-shells, leaving a pierced flap B3 outside the casing and thus enabling the casing to be suspended, on a Christmas tree for example.

[0034] The shaped elements T2 and T3 can be associated with each other to form a decoration, for example a Christmas tree, which can be inserted into the transparent casing and connected, if required, to an attaching element of the element T3.

[0035] It is also to be understood that, without prejudice to the previously described supporting characteristics of the paperboard container according to the invention as defined in the attached claims, it is possible to envisage variants of what is illustrated in the attached figures.

[0036] For example, the base wall, which in the assembled configuration of the container shown in Fig. 1

has a pentagonal shape, can have a polygonal shape with four or more than five sides, for example a star shape formed, for example, by making appropriate cuts.

[0037] Furthermore, each of the four lateral supporting walls 12a, 12b, 14a and 14b, which are aligned in pairs along diagonal lines, can consist of a double-thickness wall formed by the superimposition and gluing of a first supporting wall element and a second auxiliary supporting wall element made of one piece.

[0038] With reference to Fig. 2 for example, this result can be achieved by using a configuration similar to that of the wall 10 and 2 for the wall 6 and 8.

Claims

1. Paperboard container for packaging and displaying an article, particularly a confectionery product or the like, the container being produced from a sheet of card or similar sheet material, shaped and folded along scored lines, **characterized in that** in its assembled configuration as a container it has a flat base wall (4) and a top wall forming a lid (2) and at least four supporting walls (12a, 12b, 14a, 14b) which extend between the base wall (4) and the lid wall (2) in pairs substantially aligned along diagonal lines which link opposite vertices of the base wall, in which the said walls have a profile facing the interior of the container (102, 104, 106, 108) which can support, at least partially, the outer surface of the body of the said article, and in which each of at least two consecutive walls of the said supporting walls is formed from a first supporting wall element (12a or 12b) and from an auxiliary supporting wall element (10a or 10b respectively), superimposed on each other and fixed to each other by gluing.

2. Paperboard container according to Claim 1, **characterized in that** it comprises at least one lateral wall (6) orthogonal to the base, optionally having an aperture which extends between two consecutive walls (14a, 14b) of the said supporting walls.

3. Paperboard container according to Claim 2, **characterized in that** the base wall (4) and the lid wall (2) have a polygonal configuration with at least five sides.

4. Paperboard container according to any one of Claims 1 to 3, **characterized in that** the said base wall (4) is defined by a first wall element (4) on which flap elements (26a, 26b) are superimposed and fixed by gluing.

5. Paperboard container according to any one of the preceding claims, **characterized in that** the said profiles (102, 104, 106, 108) of the said supporting walls are shaped in such a way as to support and laterally retain the said article.

6. Paperboard container according to any one of the preceding claims, **characterized in that** the said profiles (102, 104, 106, 108) of the said supporting walls are shaped in such a way as to support the said article in a raised position with respect to the base wall (4) and/or in a lower position with respect to the lid wall (2).

7. Paperboard container according to any one of the preceding claims, including an article within it, **characterized in that** the said supporting walls (12a, 12b, 14a, 14b) have profiles (102, 104, 106, 108) facing the interior of the container and shaped with lines which are at least partially complementary to meridian lines of the body of the said article.

8. Confectionery product package including a paperboard container according to any one of Claims 1 to 7 and a confectionery product housed in the said container.

9. Confectionery product package according to Claim 8, in which the said confectionery product is in turn placed inside a casing of plastics material formed by two half-shells which can be joined rim to rim.

10. Confectionery product package according to Claim 9, **characterized in that** the said paperboard container has on its walls shaped elements (T1, T2, T3) delimited by partially precut profiles, which can be used in association with the said casing to form a decorative body.

Patentansprüche

1. Kartonbehälter zum Verpacken und Zeigen eines Gegenstands, insbesondere eines Konfektprodukts oder ähnlichem, wobei der Behälter aus einem Kartonbogen oder ähnlichem Schichtmaterial hergestellt, geformt und entlang angeritzter Linien gefaltet ist, **dadurch gekennzeichnet, dass** er in seinem zusammengebauten Zustand als Behälter eine flache Bodenwand (4) und eine einen Deckel (2) bildende obere Wand und mindestens vier Stützwände (12a, 12b, 14a, 14b) besitzt, die sich zwischen der Bodenwand (4) und der Deckelwand (2) paarweise erstrecken und im wesentlichen entlang diagonaler Linien ausgerichtet sind, die gegenüberliegende Spitzen der Bodenwand verbinden, wobei die Wände ein dem Inneren des Behälters zugewandtes Profil (102, 104, 106, 108) aufweisen, das zumindest teilweise die äußere Oberfläche des Körpers des Gegenstands tragen kann, und wobei jede von mindestens zwei aufeinander folgenden Wänden der Stützwände aus einem ersten Stützwandelement

(12a oder 12b) und aus einem Hilfsstützwandelement (10a bzw. 10b) gebildet ist, die jeweils übereinander gelegt und aneinander durch Verkleben befestigt sind.

2. Kartonbehälter nach Anspruch 1, **dadurch gekennzeichnet, dass** er mindestens eine Seitenwand (6) senkrecht zum Boden umfasst, die wahlweise eine Öffnung besitzt, die sich zwischen zwei aufeinander folgenden Wänden (14a, 14b) der Stützwände erstreckt.

3. Kartonbehälter nach Anspruch 2, **dadurch gekennzeichnet, dass** die Bodenwand (4) und die Deckelwand (2) eine polygonale Gestalt mit mindestens fünf Seiten aufweisen.

4. Kartonbehälter nach einem der Ansprüche 1 bis 3, **dadurch gekennzeichnet, dass** die Bodenwand (4) von einem ersten Wandelement (4) definiert wird, über das Laschenelemente (26a, 26b) gelegt und mithilfe von Verkleben daran befestigt sind.

5. Kartonbehälter nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die Profile (102, 104, 106, 108) der Stützwände auf solche Weise geformt sind, dass sie den Gegenstand tragen und seitlich halten.

6. Kartonbehälter nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** die Profile (102, 104, 106, 108) der Stützwände auf solche Weise geformt sind, dass sie den Gegenstand in einer in Bezug auf die Bodenwand (4) angehobenen Position und/oder in einer in Bezug auf die Deckelwand (2) niedrigeren Position halten.

7. Kartonbehälter nach einem der vorangehenden Ansprüche mit einem darin enthaltenen Gegenstand, **dadurch gekennzeichnet, dass** die Stützwände (12a, 12b, 14a, 14b) Profile (102, 104, 106, 108) besitzen, die dem Inneren des Behälters zugewandt sind und mit Linien geformt sind, die mindestens teilweise den Meridianlinien des Körpers des Gegenstands komplementär sind.

8. Verpackung für Konfektprodukte mit einem Kartonbehälter nach einem der Ansprüche 1-7 und einem in dem Behälter ungebrachten Konfektprodukt.

9. Verpackung für Konfektprodukte nach Anspruch 8, bei der das Konfektprodukt wiederum in eine Umhüllung aus Kunststoffmaterial platziert wird, die aus Halbschalen gebildet ist, welche Rand an Rand verbunden werden können.

10. Verpackung für Konfektprodukte nach Anspruch 9, **dadurch gekennzeichnet, dass** der Kartonbehälter auf seinen Wänden geformte Elemente (T1, T2, T3) aufweist, die von teilweise vorgeschnittenen Profilen begrenzt werden, welche in Verbindung mit der Umhüllung verwendet werden können, um einen dekorativen Körper zu bilden

Revendications

1. Récipient en carton pour emballer et présenter un article, en particulier un produit de confiserie ou analogue, le récipient étant produit à partir d'une feuille de type carte ou d'un matériau en feuille similaire, façonné et plié le long de lignes à pointillés, **caractérisé en ce que**, dans sa configuration assemblée en un récipient, il comporte une paroi de base plate (4) et une paroi supérieure formant un couvercle (2) et au moins quatre parois de support (12a, 12b, 14a, 14b) qui s'étendent entre la paroi de base (4) et la paroi de couvercle (2) en des paires sensiblement alignées le long de lignes en diagonale qui relient les sommets opposés de la paroi de base, dans lequel lesdites parois ont un profil (102, 104, 106, 108) tourné vers l'intérieur du récipient, qui peut supporter, au moins en partie, la surface externe du corps dudit article, et dans lequel chacune d'au moins deux parois consécutives desdites parois de support est formée à partir d'un premier élément de paroi de support (12a ou 12b) et à partir d'un élément de paroi de support auxiliaire (10a ou 10b respectivement), superposés l'un à l'autre et fixés l'un à l'autre par collage.

2. Récipient en carton selon la revendication 1, **caractérisé en ce qu'**il comprend au moins une paroi latérale (6) perpendiculaire à la base, comportant éventuellement une ouverture qui s'étend entre deux parois consécutives (14a, 14b) desdites parois de support.

3. Récipient en carton selon la revendication 2, **caractérisé en ce que** la paroi de base (4) et la paroi de couvercle (2) ont une configuration polygonale avec au moins cinq côtés.

4. Récipient en carton selon l'une quelconque des revendications 1 à 3, **caractérisé en ce que** ladite paroi de base (4) est définie par un premier élément de paroi (4) auquel des éléments de volets (26a, 26b) sont superposés et fixés par collage.

5. Récipient en carton selon l'une quelconque des revendications précédentes, **caractérisé en ce que** lesdits profils (102, 104, 106, 108) desdites parois de support sont façonnés de manière à supporter et retenir latéralement ledit article.

6. Récipient en carton selon l'une quelconque des re-

vendications précédentes, **caractérisé en ce que** lesdits profils (102, 104, 106, 108) desdites parois de support sont façonnés de manière à supporter ledit article dans une position surélevée par rapport à la paroi de base (4) et/ou dans une position plus basse par rapport à la paroi de couvercle (2).

7. Récipient en carton selon l'une quelconque des revendications précédentes, comprenant un article en son sein, **caractérisé en ce que** lesdites parois de support (12a, 12b, 14a, 14b) ont des profils (102, 104, 106, 108) tournés vers l'intérieur du récipient et façonnés avec des lignes qui sont au moins en partie complémentaires de lignes méridiennes du corps dudit article.

8. Emballage pour produit de confiserie comprenant un récipient en carton selon l'une quelconque des revendications 1 à 7 et un produit de confiserie logé dans ledit récipient.

9. Emballage pour produit de confiserie selon la revendication 8, dans lequel ledit produit de confiserie est, à son tour, placé à l'intérieur d'un boîtier en matière plastique formé par deux moitiés de coque qui peuvent être réunies bord à bord.

10. Emballage pour produit de confiserie selon la revendication 9, **caractérisé en ce que** ledit récipient en carton comporte, sur ses parois, des éléments façonnés (T1, T2, T3) délimités par des profils partiellement prédécoupés, qui peuvent être utilisés conjointement audit boîtier pour former un corps décoratif.

Fig.1

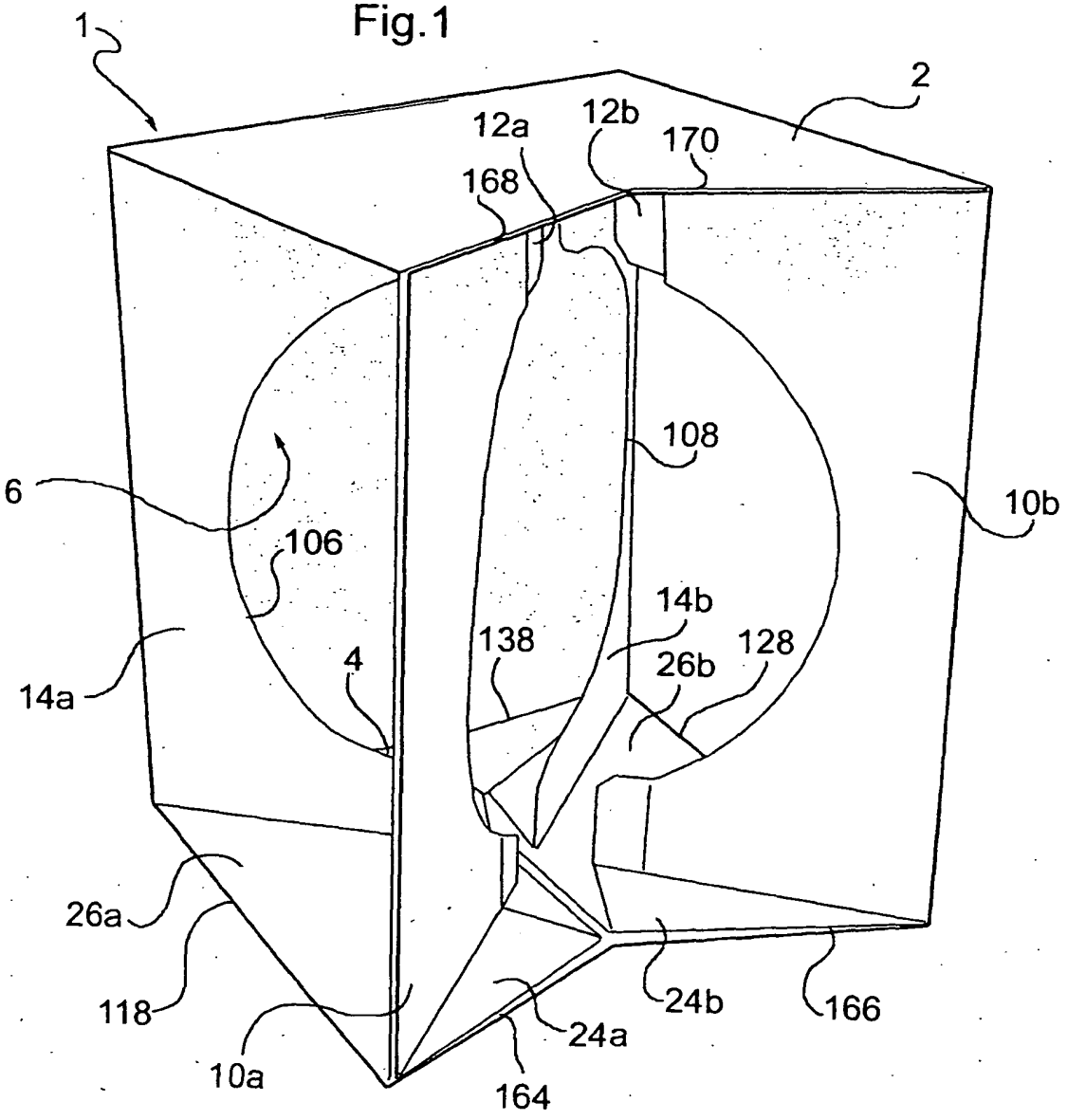
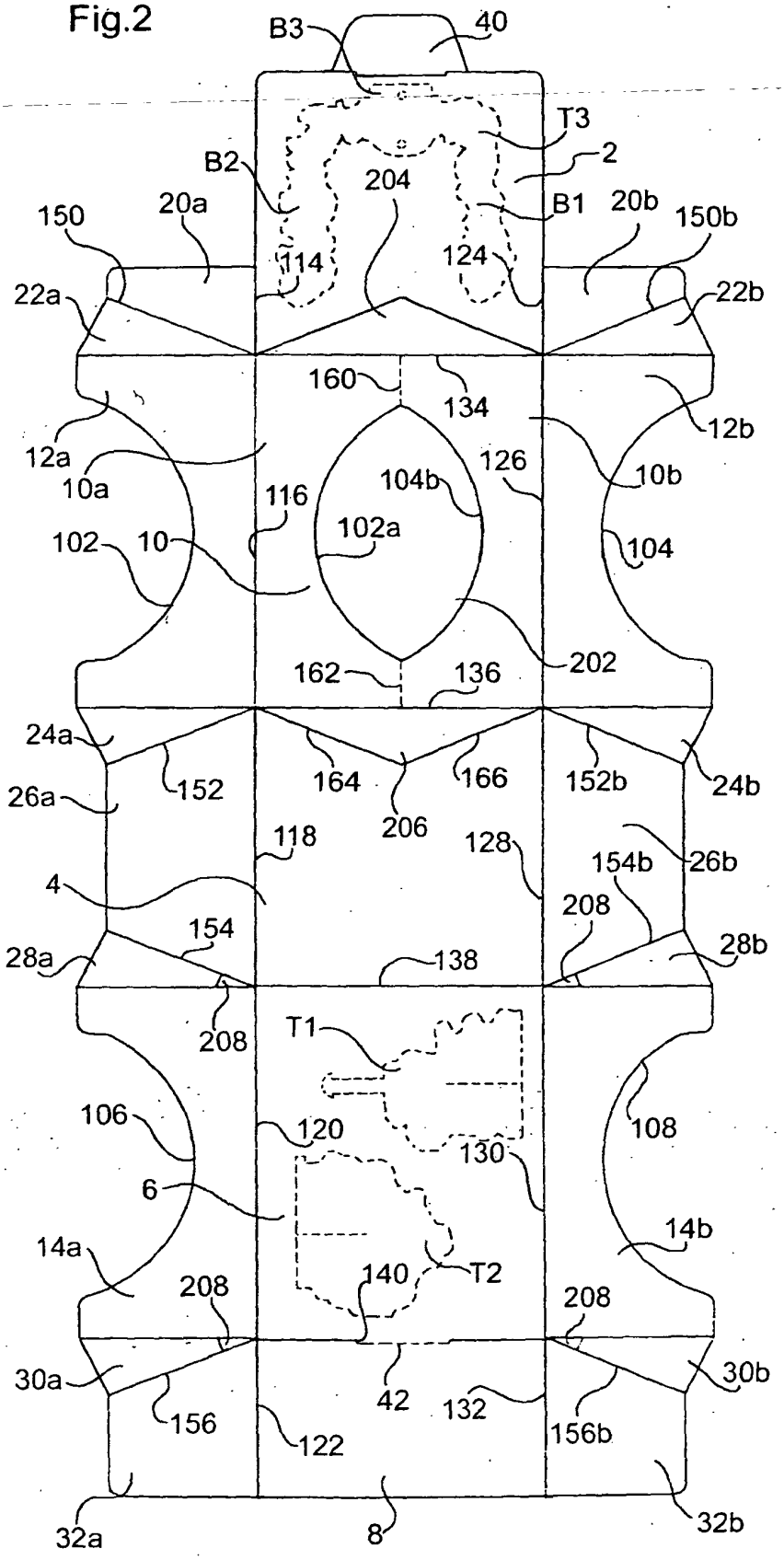

1
2
12a
12b
170
168
108
6
10b
106
14b
138
128
4
26b
14a
26a
118
24b
166
24a
10a
164

Fig.2


B3
40
T3
2
B2
204
B1
20b
150b
150
20a
114
124
22a
22b
160
134
12b
12a
126
10a
104b
10b
116
102a
102
10
104
162
136
202
24a
24b
152
164
166
152b
26a
206
118
128
154b
26b
4
208
154
28a
28b
138
208
T1
106
120
130
108
6
14a
14b
140
T2
208
208
30a
30b
42
132
156
122
156b
32a
8
32b