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(54) **PACKING CASE**

VERPACKUNGSSCHACHTEL

ÉTUI D'EMBALLAGE

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(56) References cited:
JP-A- 2002 284 153 JP-A- 2005 230 576
JP-A- 2007 145 346 JP-A- 2007 145 346
JP-A- 2008 056 328 JP-A- 2008 056 328
JP-A- 2008 114 873 JP-A- 2008 114 873
JP-U- 59 003 820 JP-U- 60 163 214
JP-U- 60 163 214 JP-U- 62 052 157
US-A- 1 772 625 US-A- 1 864 968
US-A- 5 460 322

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Description**TECHNICAL FIELD**

5 [0001] The present invention relates to a packaging case that stores a product, and particularly relates to a packaging case that stores a cleaning tool such as a handy mop.

BACKGROUND ART AND SUMMARY OF INVENTION

10 [0002] Conventionally, a cleaning tool having a dust suction portion and a hand grip is known as a cleaning tool for removing dust, etc. from inside a room, a car or the like.

[0003] The cleaning tool is normally sold with packaged in a packaging case in which a synthetic resin sheet is assembled in a hollow rectangular solid shape.

15 [0004] After purchasing the cleaning tool, the consumer takes out the cleaning tool from the packaging case and uses it to remove dust, etc. from inside a room, a car or the like. Generally, the consumer disposes of the packaging case as is after taking out the cleaning tool Japanese Patent Application Publication No. 2005-230576.

[0005] Because the consumer can use the cleaning tool not just once but several times, the cleaning tool that has been used once needs to be placed, for example, on top of household furniture to be stored.

20 [0006] There is, however, a problem that the cleaning tool that has been used once becomes dirty due to the adherence of dust, etc., in the dust suction portion, and therefore, if the cleaning tool is placed on top of furniture, for example, the furniture becomes dirty, and besides, the appearance of the room is spoiled.

[0007] Furthermore, as described above, because the packaging case is disposed of as is after the cleaning tool has been taken out, the problem of exertion of a high load on the environment occurs.

25 [0008] Thus, the present invention has been achieved in view of the aforementioned problem, and an object thereof is to provide a packaging case that can be used not only at the time of displaying or selling a product but also be used as a case for storing the product.

30 [0009] A first feature of the present invention is summarized as a cylindrical packaging case extending in a vertical direction, comprising: an upper portion; a lower portion in which a front side surface and a rear side surface are provided in a circumferential direction; and a pair of convex folding-back portions extending out in an upper direction from the front side surface and the rear side surface of the lower portion, wherein a first weakened line is provided along a first boundary line between the upper portion and the convex folding-back portions, a second weakened line is provided along a second boundary line in the circumferential direction between the upper portion and the lower portion, a first folding ruled line is provided in the circumferential direction between the convex folding-back portions and the lower portion, and second folding ruled lines extending continuously in a vertical direction from between the front side surface and the rear side surface of the lower portion are provided inside the convex folding-back portions.

35 [0010] As described above, according to the present invention it is possible to provide a packaging case that can be used not only at the time of displaying or selling a product but also be used as a case for storing the product. The present invention provides a packaging case as defined in the appended claims.

40 [0011] JP 2008 114873 A and US 1864968 A disclose packaging cartons with tear-off tops. JP 60163214 U describes a storage box having closure flaps provided with stiffening elements superimposed with the closure flaps.

BRIEF DESCRIPTION OF DRAWINGS**[0012]**

45 [Fig. 1] Fig. 1 is a perspective view of a packaging case according to a first embodiment of the present invention. [Fig. 2] Fig. 2 (a) through Fig. 2 (c) are a front view, a bottom view, and a side view of the packaging case, respectively, according to the first embodiment of the present invention.

[Fig. 3] Fig. 3 is an exploded view of the packaging case according to the first embodiment of the present invention.

50 [Fig. 4] Fig. 4 is a perspective view when an upper portion of the packaging case according to the first embodiment of the present invention is separated.

[Fig. 5] Fig. 5 is a perspective view when a cleaning tool is stored after separating the upper portion of the packaging case according to the first embodiment of the present invention.

[Fig. 6] Fig. 6 is an exploded view of a packaging case according to a second embodiment of the present invention.

55 [Fig. 7] Fig. 7 is an exploded view of a packaging case according to a third embodiment of the present invention.

DESCRIPTION OF EMBODIMENTS

(First embodiment of the present invention)

[0013] With reference to Fig. 1 through Fig. 5, a packaging case 1 according to a first embodiment of the present invention will be described.

[0014] As illustrated in Fig. 1, the packaging case 1 according to the present embodiment is a cylindrical packaging case extending in a vertical direction D1, and has an upper portion 2 having a side surface 21, and a lower portion 3 in which a front side surface 31B and a rear side surface 31A are provided in a circumferential direction D2.

[0015] For example, the upper portion 2 is formed in the shape of a bottomed cylinder having a top surface that closes an upper end portion of the side surface 21, and the side surface 21 provided in a near perpendicular direction with respect to the top surface.

[0016] Furthermore, as illustrated in Fig. 2 (a) through Fig. 2 (c), the lower portion 3 is formed in the shape of a bottomed cylinder having a bottom surface that closes a lower end portion of the side surfaces including the front side surface 31B (that is, a side surface 312), and the rear side surface 31A (that is, side surfaces 311, 313, and 314), and a side surface including the front side surface 31B and the rear side surface 31A (that is, the side surfaces 311 through 314) set up in a near perpendicular direction with respect to the bottom surface.

[0017] As illustrated in Fig. 2 (c), the bottom surface of the lower portion 3 is formed in a near hexagonal shape in a plan view, for example. The bottom surface of the lower portion 3 is not limited to a near hexagonal shape in a plan view, but may be formed in a near polygonal shape in a plan view, such as a near quadrilateral shape in a plan view, or a near circular shape in a plan view, or a near elliptical shape in a plan view.

[0018] As illustrated in Fig. 2 (c) and Fig. 3, the bottom surface is formed by combining together flaps 32 for forming the bottom surface, which extend from the front side surface 31B and the rear side surface 31A (that is, the side surfaces 311 through 314).

[0019] Furthermore, in the lower portion 3, a pair of convex folding-back portions 4 extending out in the upper direction side from the front side surface 31B and the rear side surface 31A (that is, the side surfaces 311 through 314) are provided.

[0020] A first weakened line W1 is provided along a first boundary line B1 between the upper portion 2 and the convex folding-back portions 4, and a second weakened line W2 is provided along a second boundary line B2 in the circumferential direction D2 between the upper portion 2 and the lower portion 3.

[0021] For example, in the present embodiment, the "weakened lines" are lines that enable the separation of the upper portion 2 in the packaging case 1, and may be perforated lines, or micro perforated lines (perforated lines with the length of a perforation and the length of a non-perforated portion being in the range of approximately 0.3 mm to 0.8 mm, respectively), or even fragile lines formed by weakening the sheet material through the laser processing, and the like.

[0022] In accordance with the invention as defined in claim 1, the upper portion 2 and the convex folding-back portions 4 are not connected in at least a part of the first weakened line W1.

[0023] Specifically, the first weakened line W1 includes straight weakened lines W11 and curved weakened lines W12, and the upper portion 2 and the convex folding-back portions 4 are not connected in at least a part of the curved weakened lines W12 via a cutting line that completely passes through the sheet material in the thickness direction in at least a part of the curved weakened lines W12 at a position corresponding to an angular portion of the convex folding-back portions 4.

[0024] Furthermore, in the lower portion 3, a plurality of convex rising portions 6 extending out in a lower direction from the front side surface 31B and the rear side surface 31A (that is, the side surfaces 311 through 314) are provided. The plurality of convex rising portions 6 are provided at equal intervals. According to the configuration, the effect of stable rise of the packaging case 1 is achieved.

[0025] Furthermore, in the upper portion 2, a finger grip portion 5 is provided along a part of the first weakened line W1 and the second weakened line W2. Furthermore, a hole 10 is provided in the upper end portion of the side surface 21 of the upper portion 2 in order to suspend the packaging case 1 from the product display shelves.

[0026] Furthermore, the packaging case 1 is covered with a paper sleeve. The sleeve covers at least a part on the outer side of the packaging case 1, and a locking mechanism is provided in at least one or more places in the sleeve such that the packaging case 1 does not move from its position during product transport or during display over the counter.

[0027] A claw shape is provided in the sleeve, and a cut for inserting the sleeve is provided in the packaging case 1. By pushing in the claw shape in to the cut, the packaging case 1 and the sleeve are configured to be locked.

[0028] Fig. 3 is an exploded view of the sheet material used to form the packaging case 1. The sheet material is particularly not limited, and a conventional well-known material can be used. Polyolefins such as polypropylene and polyethylene, synthetic resin sheets such as polyethylene terephthalate, thick paper, synthetic paper, and laminated sheets thereof can be used as the sheet material. The thickness of the sheet is not particularly limited, and preferably is in the range of approximately 0.2 mm to 1.0 mm.

[0029] As illustrated in Fig. 3, a first folding ruled line Y1 is provided in the circumferential direction D2 between the convex folding-back portions 4 and the lower portion 3, and second folding ruled lines Y2 extending continuously in the

vertical direction D1 from between the front side surface 31B and the rear side surface 31A of the lower portion 3 are provided inside the convex folding-back portions 4.

[0030] The second folding ruled lines Y2 are provided across the upper portion 2, the convex folding-back portions 4, and the lower portion 3.

[0031] In the present embodiment, the "folding ruled line" implies a line formed to enable shaping of the sheet material to facilitate its folding. The folding ruled line may be, for example, a pressed line formed by pressing the sheet material in the thickness direction, or a half-cut line formed by cutting the sheet material in an almost V shape in the thickness direction.

[0032] In the sheet material illustrated in Fig. 3, after pasting a tab for sticking 33, which extends towards a side of the side surface 311, to a side of the side surface 314, while folding the side surfaces 21, and 311 through 314 along the second folding ruled lines Y2, the flaps 32 for forming the bottom surface are combined together to form the packaging case 1.

[0033] As illustrated in Fig. 1, at the time of displaying or selling the product, the product is configured to be stored inside the upper portion 2 and the lower portion 3. In the example illustrated in Fig. 1, a cleaning tool X having a hand grip X1 and a dust suction portion X2 is configured to be stored inside the upper portion 2 and the lower portion 3.

[0034] As illustrated in Fig. 1, the cleaning tool X is fixed inside the packaging case 1 with a fixing mount 11. The fixing mount 11 is configured by a coat paper or a synthetic resin sheet, and the dust suction portion X2 and the hand grip X1 are configured to be set on the fixing mount 11.

[0035] The front side surface 31B of the lower portion 3 includes a single curved surface (side surface 312), and a pressing ruled line is not provided inside the front side surface 31B of the lower portion 3. According to the configuration, the product packaged in the packaging case 1 can be easily seen from outside.

[0036] Furthermore, as illustrated in Fig. 4, after separating the upper portion 2 of the packaging case 1, the consumer folds back the convex folding-back portions 4 towards the inside or the outside of the lower portion 3, along the first folding ruled line Y1 or the second folding ruled lines Y2, and as a result, as illustrated in Fig. 5, the cleaning tool X that has been used once can be stored inside the lower portion 3.

[0037] According to the packaging case 1 of the present embodiment, separating the upper portion 2 along the first weakened line W1 and the second weakened line W2, and then folding back the convex folding-back portions 4 towards the inside or the outside of the lower portion 3, along the first folding ruled line Y1 or the second folding ruled lines Y2 enables the formation of a storage case for the cleaning tool X.

[0038] Furthermore, according to the packaging case 1 of the present embodiment, by pulling up the finger grip portion 5 provided in the upper portion 2, the consumer can separate the upper portion 2 easily.

[0039] Furthermore, according to the packaging case 1 of the present embodiment, by processing the curved weakened line W12 that is at the position corresponding to the shoulder portion of the convex folding-back portions 4 as the cutting line, the consumer can easily separate the upper portion 2.

[0040] According to the packaging case 1 of the present embodiment, by separating the upper portion 2 and then folding back the convex folding-back portions 4 towards the outside of the lower portion 3, along the first folding ruled line Y1 or the second folding ruled lines Y2, the aperture portion of the lower portion 3 can be maintained in a stable state.

(Second embodiment)

[0041] With reference to Fig. 6, the packaging case 1 according to a second embodiment of the present invention will be described. The packaging case 1 according to the present embodiment will be described while focusing on the differences from the packaging case 1 according to the aforementioned first embodiment.

[0042] As illustrated in Fig. 6, in the packaging case 1 according to the present embodiment, a plurality of folding ruled lines Y20 are provided, along the vertical direction D1, on both sides of the second folding ruled lines Y2, in the circumferential direction D2, extending continuously in the vertical direction D1 from between the front side surface 31B and the rear side surface 31A of the lower portion 3 are provided inside the convex folding-back portions 4. As illustrated in Fig. 6, a part of the folding ruled lines Y20 may not necessarily be in a straight shape

(Third embodiment)

[0043] With reference to Fig. 7, the packaging case 1 according to a third embodiment of the present invention will be described. The packaging case 1 according to the present embodiment will be described while focusing on the differences from the packaging case 1 according to the aforementioned first embodiment.

[0044] As illustrated in Fig. 7, in the packaging case 1 according to the present embodiment, a plurality of folding ruled lines Y21 are provided along the vertical direction D1 in all the side surfaces 311 through 314 of the lower portion 3.

[0045] That is, in the packaging case 1 according to the present embodiment, the folding ruled lines Y21 are provided even in the front side surface 31B (side surface 312) of the lower portion 3.

[0046] In the present embodiment, an example in which the packaging case 1 is used when the front side surface 31B and the rear side surface 31A are in a risen state along the vertical direction is explained, however, the packaging case 1 according to the present embodiment may also be used in a state where the front side surface 31B and the rear side surface 31A are arranged along the horizontal direction.

[0047] Thus, the present invention has been explained in detail by using the above-described embodiments; however, it is obvious that for persons skilled in the art, the present invention is not limited to the embodiments explained herein. The present invention can be implemented as corrected and modified modes without departing from the scope of the present invention defined by the claims. Therefore, the description of the specification is intended for explaining the example only and does not impose any limited meaning to the present invention.

INDUSTRIAL APPLICABILITY

[0048] As described above, according to the present invention it is possible to provide a packaging case that can be used not only at the time of displaying or selling a product but also be used as a case for storing the product.

REFERENCE SIGNS LIST

[0049]

1	Packaging case
2	Upper portion
3	Lower portion
4A, 4B	Convex folding-back portion
5	Finger grip portion
6	Convex rising portion
12	Side surface of the upper portion
31A	Rear side surface of the lower portion
31B	Front side surface of the lower portion
311, 312, 313, 314	Side surface of the lower portion
32	Flap for forming the bottom surface
33	Tab for sticking
B1, B2	Boundary line
W1, W11, W12, W2, W3	Weakened line
Y1, Y2	Folding ruled line

Claims

1. A cylindrical packaging case (1) extending in a vertical direction, comprising:

an upper portion (2); and
 a lower portion (3) in which a front side surface (31B) and a rear side surface (31A) are provided in a circumferential direction; **characterised by**
 a pair of convex folding-back portions (4) extending out in an upper direction from the front side surface (31B) and the rear side surface (31A) of the lower portion (3), wherein
 a first weakened line (W1) is provided along a first boundary line (B1) between the upper portion (2) and the convex folding-back portions (4),
 a second weakened line (W2) is provided along a second boundary line (B2) in the circumferential direction between the upper portion (2) and the lower portion (3),
 a first folding ruled line (Y1) is provided in the circumferential direction between the convex folding-back portions (4) and the lower portion (3), and
 second folding ruled lines (Y2) extending continuously in a vertical direction from between the front side surface (31B) and the rear side surface (31A) of the lower portion (3) are provided inside the convex folding-back portions (4);
 wherein the upper portion (2) and the convex folding-back portions (4) are not connected in at least a part of the first weakened line (W1) comprising straight weakened lines (W11) and curved weakened lines (W12), wherein
 the upper portion (2) and the convex folding-back portions (4) are not connected in at least a part of the said

curved weakened lines (W12) at a position corresponding to an angular portion of the convex folding back portions (4) by means of cutting lines completely passing through the sheet material of the case (1) in the thickness direction.

2. The packaging case (1) according to claim 1, wherein in the upper portion (2), a finger grip portion (5) is provided along a part of the first weakened line (W1) and the second weakened line (W2).
3. The packaging case according to claim 1 or claim 2, wherein the front side surface (31B) of the lower portion (3) comprises a single curved surface (312).
4. The packaging case (1) according to any preceding claim, wherein in the lower portion (3), a plurality of convex rising portions (6) extending out in a lower direction from the front side surface (31A) and the rear side surface (31B) of the lower portion (3) are provided, and the plurality of convex rising portions (6) are provided at equal intervals.
5. The packaging case (1) according to any preceding claim, wherein when the upper portion (2) is separated, and the convex folding-back portions (4) are folded back towards the inside or the outside of the lower portion (3) along the first folding ruled line (Y1) and the second folding ruled lines (Y2), a cleaning tool (X) having a hand grip (X1) and a dust suction portion (X2) is configured to be stored inside the lower portion (3).

Patentansprüche

1. Eine zylinderförmige Verpackungsschachtel (1), die sich in eine vertikale Richtung erstreckt, die Folgendes beinhaltet:

einen oberen Teil (2); und

einen unteren Teil (3), in dem eine vorderseitige Oberfläche (31 B) und eine rückseitige Oberfläche (31A) in einer Umfangsrichtung bereitgestellt werden; **dadurch gekennzeichnet, dass**

sich ein Paar konvexer zurückfaltbarer Teile (4) von der vorderseitigen Oberfläche (31 B) und der rückseitigen Oberfläche (31A) des unteren Teils (3) in einer oberen Richtung heraus erstreckt, wobei

eine erste verdünnte Linie (W1) entlang einer ersten Grenzlinie (B1) zwischen dem oberen Teil (2) und den konvexen zurückfaltbaren Teilen (4) bereitgestellt ist,

eine zweite verdünnte Linie (W2) entlang einer zweiten Grenzlinie (B2) in der Umfangsrichtung zwischen dem oberen Teil (2) und dem unteren Teil (3) bereitgestellt ist,

eine erste faltende Netzlinie (Y1) in der Umfangsrichtung zwischen den konvexen zurückfaltbaren Teilen (4) und dem unteren Teil (3) bereitgestellt ist, und

zweite faltende Netzlinien (Y2), die sich zwischen der vorderseitigen Oberfläche (31 B) und der rückseitigen Oberfläche (31A) des unteren Teils (3) kontinuierlich in eine vertikale Richtung erstrecken, in den konvexen zurückfaltbaren Teilen (4) bereitgestellt sind;

wobei der obere Teil (2) und die konvexen zurückfaltbaren Teile (4) in mindestens einem Teil der ersten verdünnten Linie (W1) nicht verbunden sind; beinhaltend gerade verdünnte Linien (W11) und gebogene verdünnte Linien (W12),

wobei der obere Teil (2) und die konvexen zurückfaltbaren Teile (4) in mindestens einem Teil der gebogenen verdünnten Linien (W12) in einer Position, die einem winkelförmigen Teil der konvexen zurückfaltbaren Teile (4) entspricht, durch Schnittlinien, die in der Dickerichtung komplett durch das Schichtmaterial der Schachtel (1) laufen, nicht verbunden sind.
2. Verpackungsschachtel (1) gemäß Anspruch 1, wobei in dem oberen Teil (2) entlang einem Teil der ersten verdünnten Linie (W1) und der zweiten verdünnten Linie (W2) ein Fingereingriffsteil (5) bereitgestellt ist.
3. Verpackungsschachtel gemäß Anspruch 1 oder Anspruch 2, wobei die vorderseitige Oberfläche (31 B) des unteren Teils (3) eine einzelne gebogene Oberfläche (312) beinhaltet.
4. Verpackungsschachtel (1) gemäß einem der vorhergehenden Ansprüche, wobei in dem unteren Teil (3) eine Vielzahl von konvexen sich erhebenden Teilen (6), die sich in einer unteren Richtung von der vorderseitigen Oberfläche (31A) und der rückseitigen Oberfläche (31 B) des unteren Teils (3) heraus erstreckt, bereitgestellt sind, und die Vielzahl von konvexen sich erhebenden Teilen (6) in gleichen Abständen bereitgestellt sind.

5. Verpackungsschachtel (1) gemäß einem der vorhergehenden Ansprüche, wobei, wenn der obere Teil (2) abgetrennt ist und die konvexen zurückfaltbaren Teile (4) zur Innenseite oder Außenseite des unteren Teils (30) entlang der ersten faltenden Netzlinie (Y1) und der zweiten faltenden Netzlinie (Y2) zurückgefaltet sind, ein Reinigungswerkzeug (X) mit einem Handeingriff (X1) und einem Staubsaugteil (X2) konfiguriert ist, um innerhalb des unteren Teils (3) gelagert zu werden.

Revendications

1. Un étui d'emballage cylindrique (1) s'étendant dans une direction verticale, comprenant :

une portion supérieure (2) ; et
 une portion inférieure (3) dans laquelle une surface côté avant (31 B) et une surface côté arrière (31A) sont fournies dans une direction circonférentielle ; **caractérisé par** une paire de portions convexes qui se replient (4) s'étendant vers l'extérieur dans une direction supérieure depuis la surface côté avant (31 B) et la surface côté arrière (31A) de la portion inférieure (3), dans lequel
 une première ligne affaiblie (W1) est fournie le long d'une première ligne de limite (B1) entre la portion supérieure (2) et les portions convexes qui se replient (4),
 une deuxième ligne affaiblie (W2) est fournie le long d'une deuxième ligne de limite (B2) dans la direction circonférentielle entre la portion supérieure (2) et la portion inférieure (3),
 une première ligne réglée qui se plie (Y1) est fournie dans la direction circonférentielle entre les portions convexes qui se replient (4) et la portion inférieure (3), et
 des deuxièmes lignes réglées qui se plient (Y2) s'étendant en continu dans une direction verticale depuis entre la surface côté avant (31 B) et la surface côté arrière (31A) de la portion inférieure (3) sont fournies à l'intérieur des portions convexes qui se replient (4) ;
 dans lequel la portion supérieure (2) et les portions convexes qui se replient (4) ne sont pas raccordées dans au moins une partie de la première ligne affaiblie (W1) comprenant des lignes affaiblies droites (W11) et des lignes affaiblies incurvées (W12),
 dans lequel
 la portion supérieure (2) et les portions convexes qui se replient (4) ne sont pas raccordées dans au moins une partie desdites lignes affaiblies incurvées (W12) au niveau d'une position correspondant à une portion angulaire des portions convexes qui se replient (4) au moyen de lignes de coupe traversant complètement le matériau en feuille de l'étui (1) dans la direction d'épaisseur.

2. L'étui d'emballage (1) selon la revendication 1, dans lequel, dans la portion supérieure (2), une portion de saisie par le doigt (5) est fournie le long d'une partie de la première ligne affaiblie (W1) et de la deuxième ligne affaiblie (W2).

3. L'étui d'emballage selon la revendication 1 ou la revendication 2, dans lequel la surface côté avant (31 B) de la portion inférieure (3) comprend une surface incurvée unique (312).

4. L'étui d'emballage (1) selon n'importe quelle revendication précédente, dans lequel, dans la portion inférieure (3), une pluralité de portions convexes qui s'élèvent (6) s'étendant vers l'extérieur dans une direction inférieure depuis la surface côté avant (31A) et la surface côté arrière (31 B) de la portion inférieure (3) sont fournies, et la pluralité de portions convexes qui s'élèvent (6) sont fournies à des intervalles égaux.

5. L'étui d'emballage (1) selon n'importe quelle revendication précédente, dans lequel, lorsque la portion supérieure (2) est séparée, et que les portions convexes qui se replient (4) sont repliées vers l'intérieur ou l'extérieur de la portion inférieure (30) le long de la première ligne réglée qui se plie (Y1) et les deuxièmes lignes réglées qui se plient (Y2), un outil de nettoyage (X) ayant une poignée (X1) et une portion d'aspiration de poussière (X2) est configuré pour être stocké à l'intérieur de la portion inférieure (3).

FIG. 1

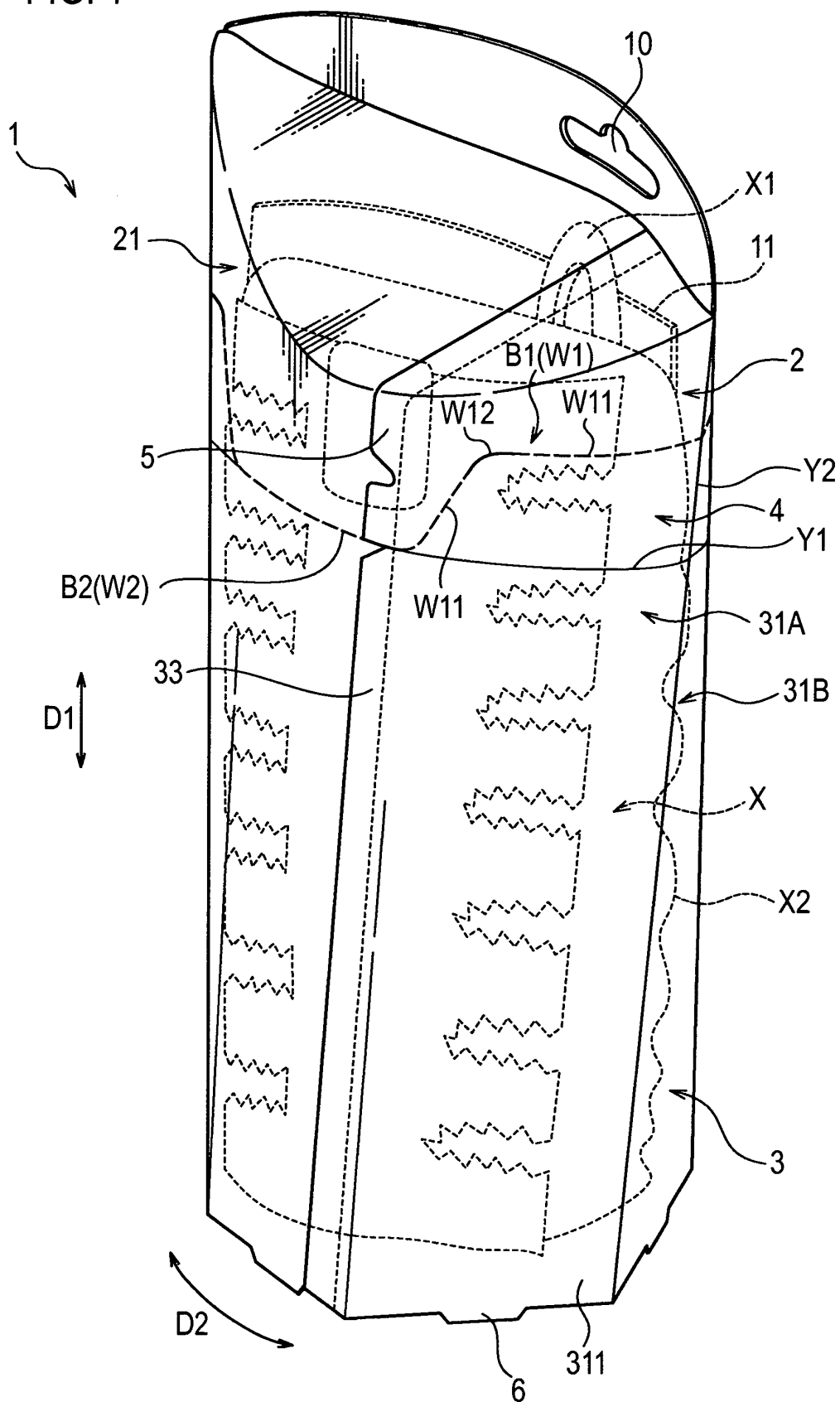


FIG. 2

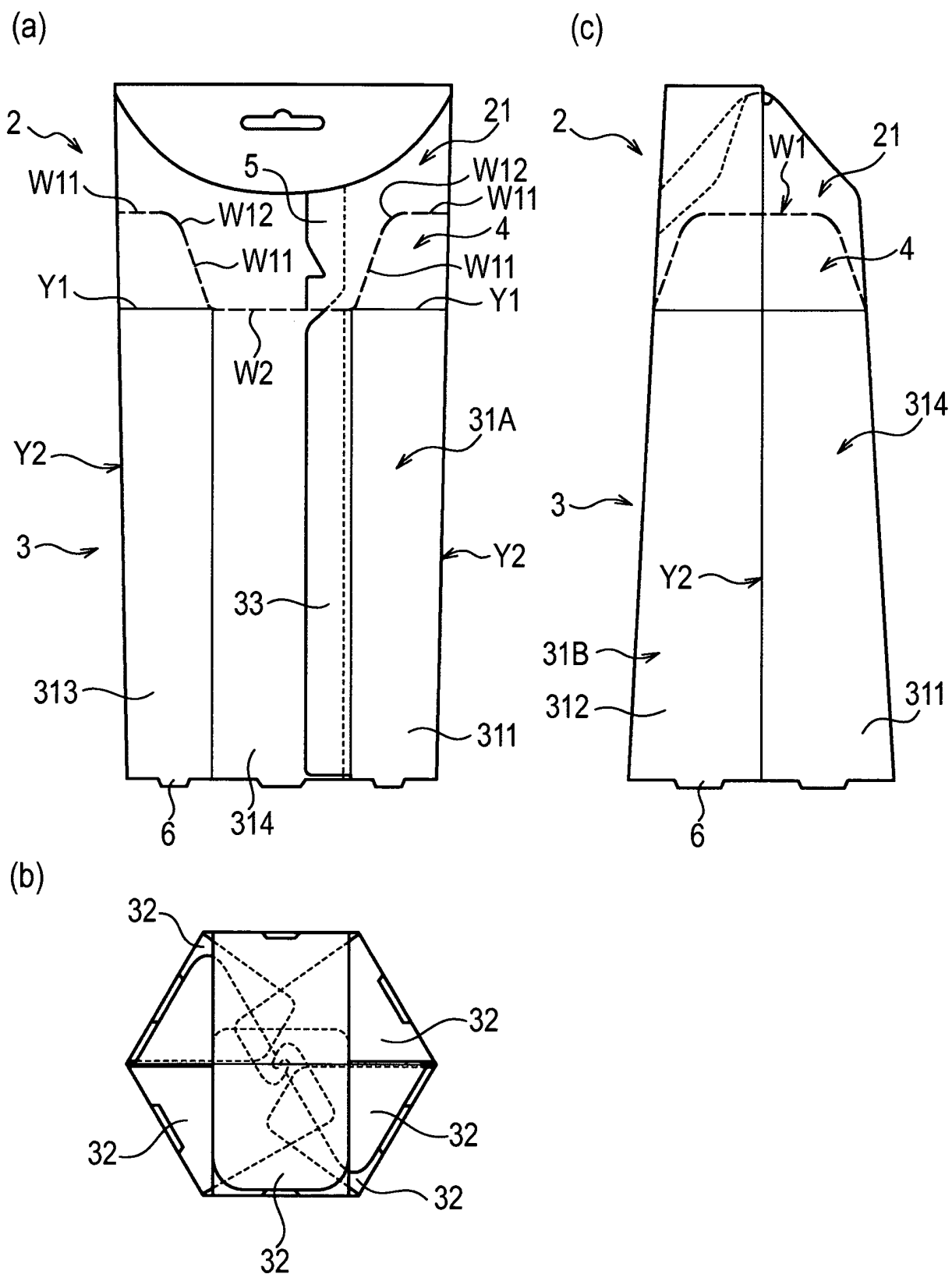


FIG. 3

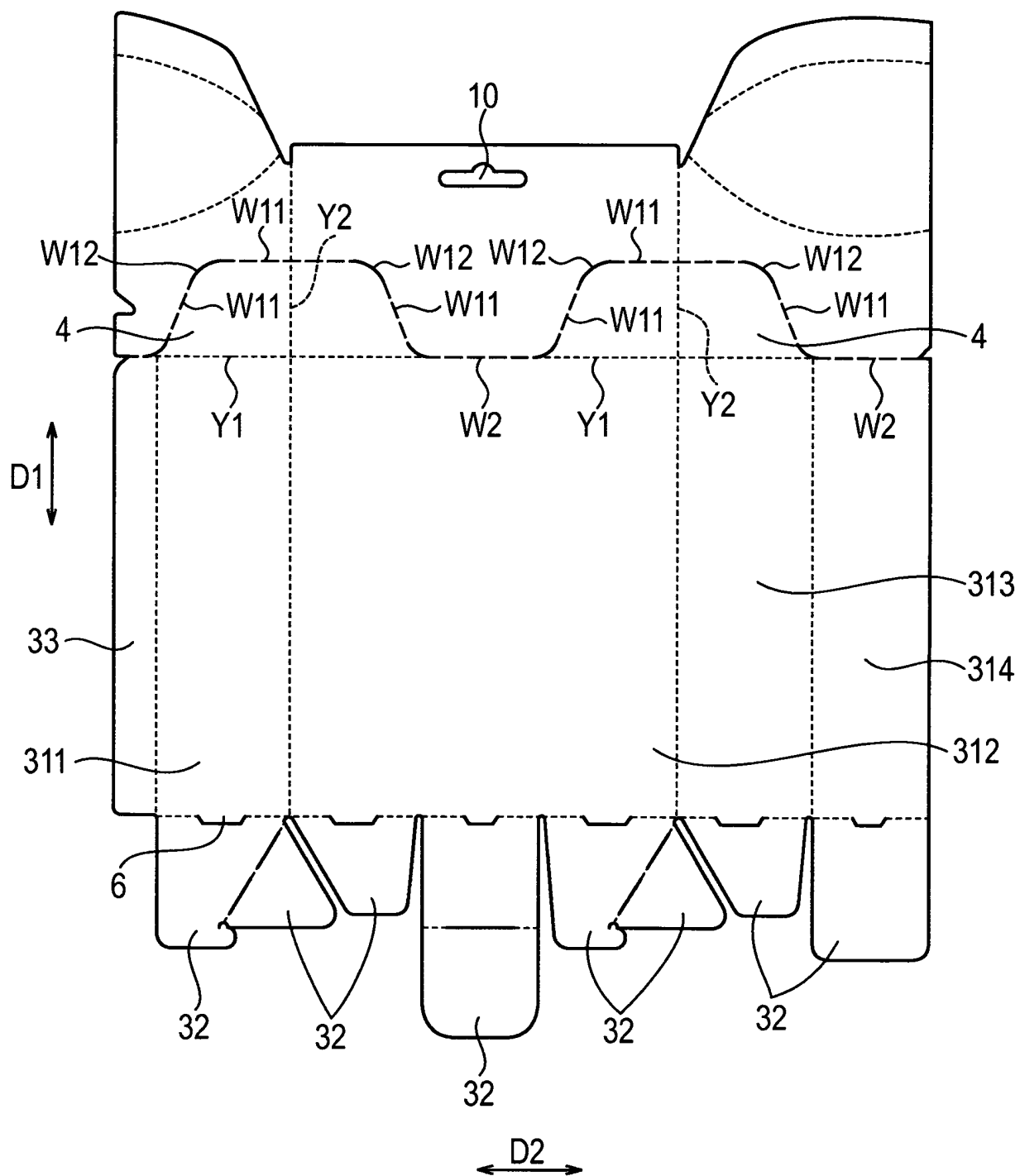


FIG. 4

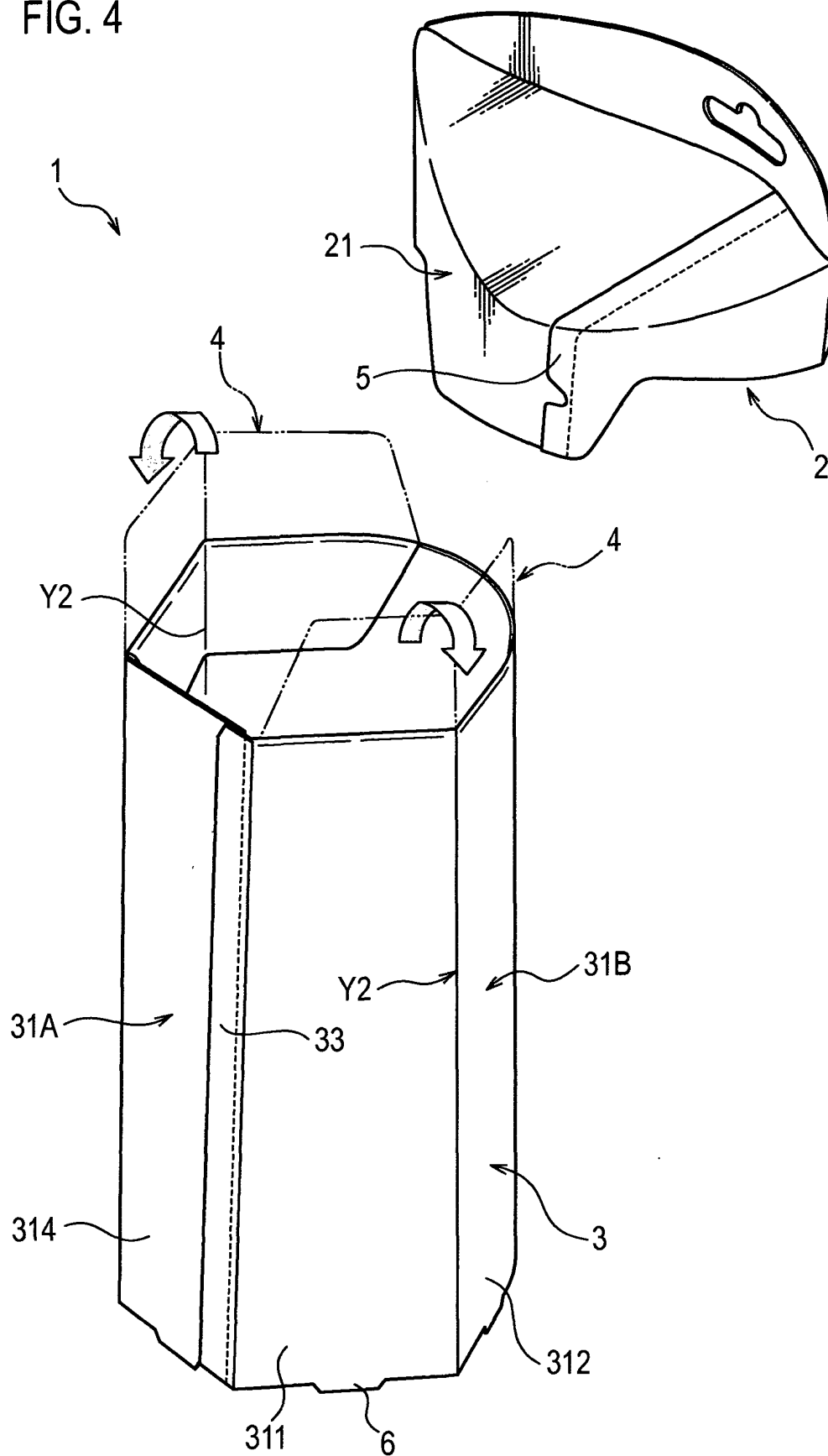


FIG. 5

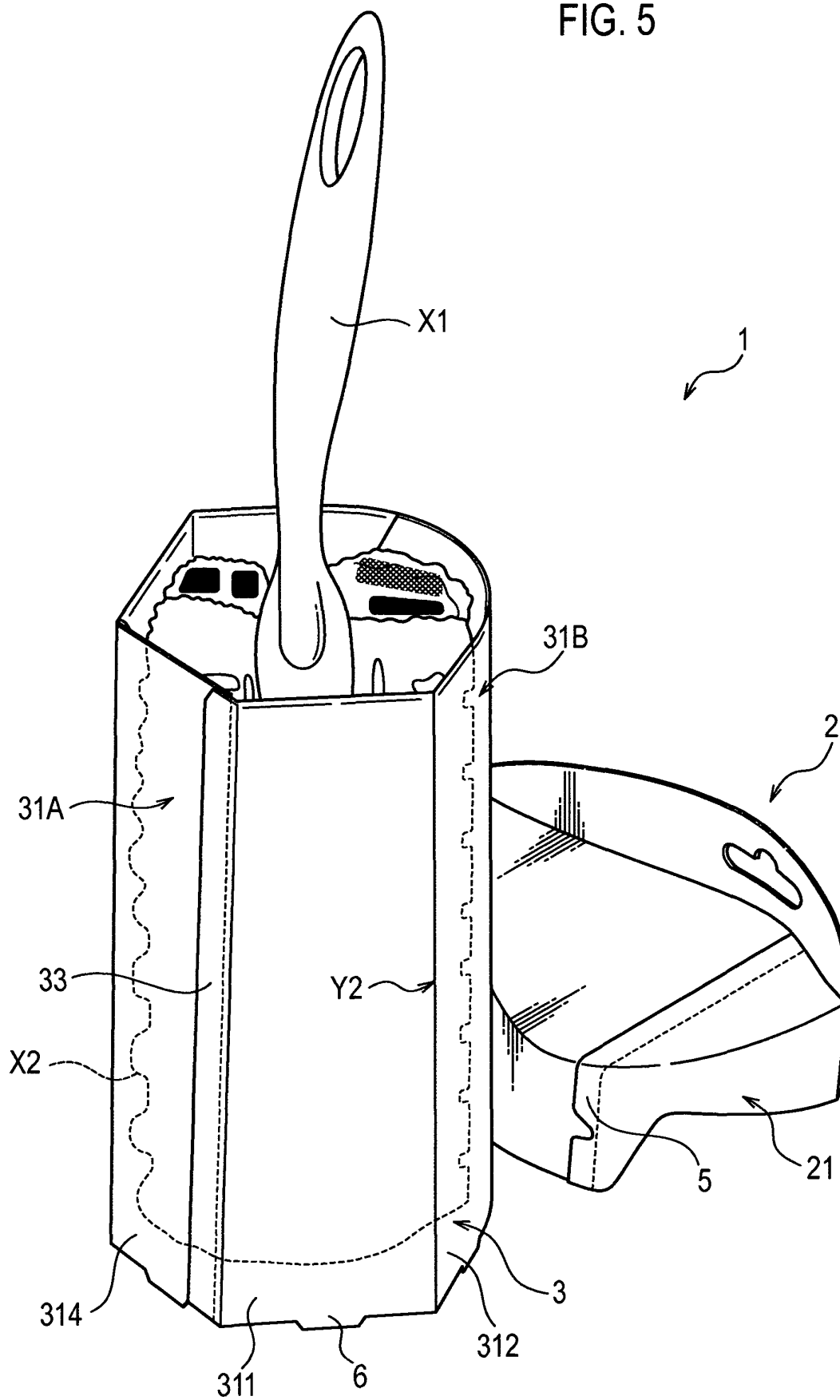


FIG. 6

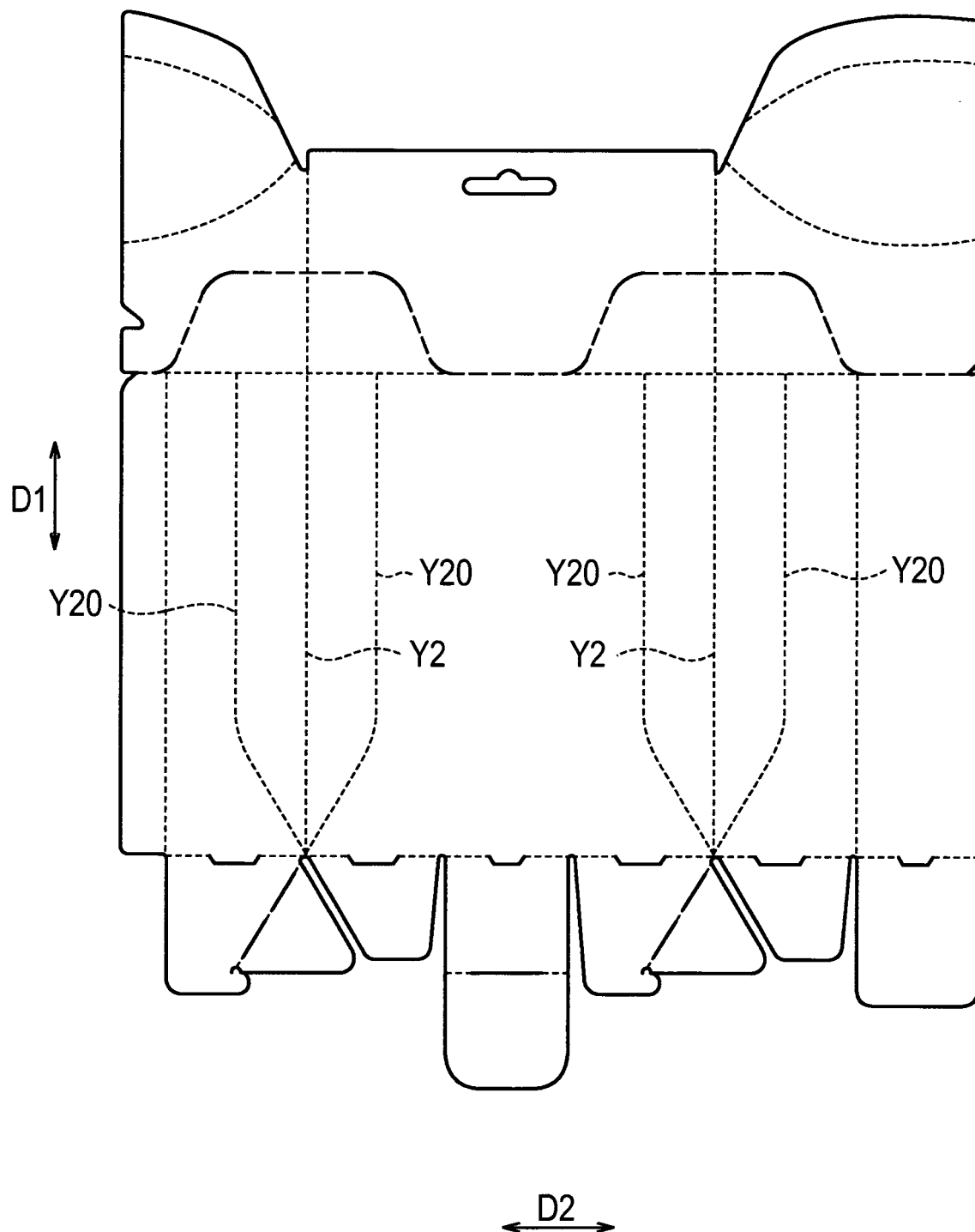
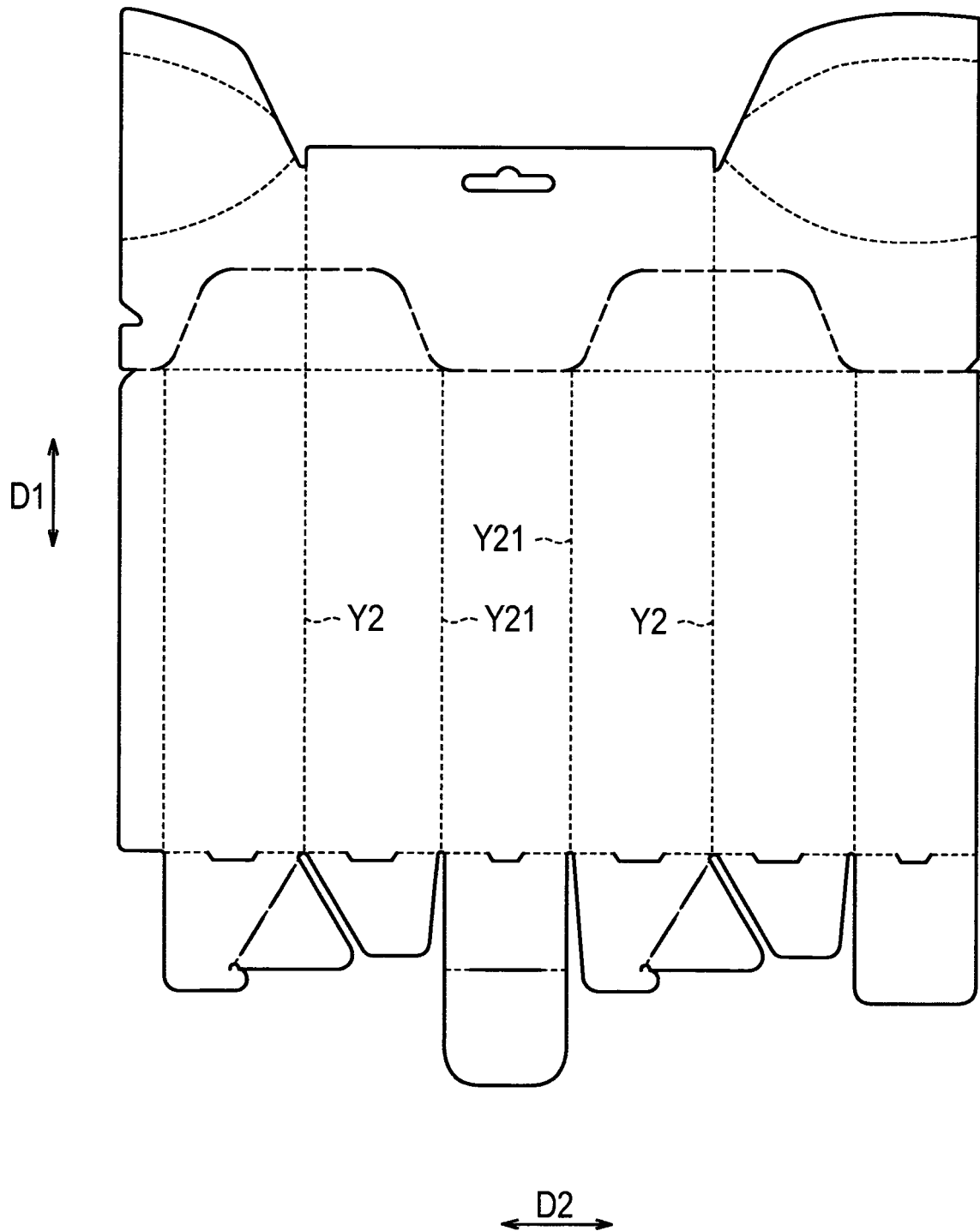


FIG. 7



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2005230576 A [0004]
- JP 2008114873 A [0011]
- US 1864968 A [0011]
- JP 60163214 U [0011]