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(54) BEVERAGE CONTAINER LID, METHOD FOR FORMING MOUTHPIECE OF BEVERAGE CONTAINER LID, AND BEVERAGE CONTAINER

(57) [Problem]

There is provided a beverage container lid that eliminates a straw and allows forming a mouthpiece that facilitates drinking a beverage without removing the beverage container lid.

[Solution]

A beverage container lid 1 includes: a cover plate portion 4 that covers an opening portion 3 of a beverage container 2; a side peripheral portion 5 engageable with an edge portion 3a of the opening portion 3; a mouthpiece-forming line portion 11 having a shape of a peripheral edge side of a mouthpiece 110 on a peripheral edge side of the cover plate portion 4; a folding low strength portion 12 having a strength lower than a general portion of the cover plate portion 4 and facilitating folding by mountain fold between a mouthpiece forming outer part 11A and a mouthpiece forming inner part 11B when the mouthpiece forming parts 11A and 11B enclosed by the mouthpiece-forming line portion 11 are pushed into from above; and an engaging portion engageable with a lock portion 11c at a peripheral edge of the mouthpiece forming outer part 11A in a state where the mouthpiece forming inner part 11B is valley-folded and lifted up and further the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B are folded.

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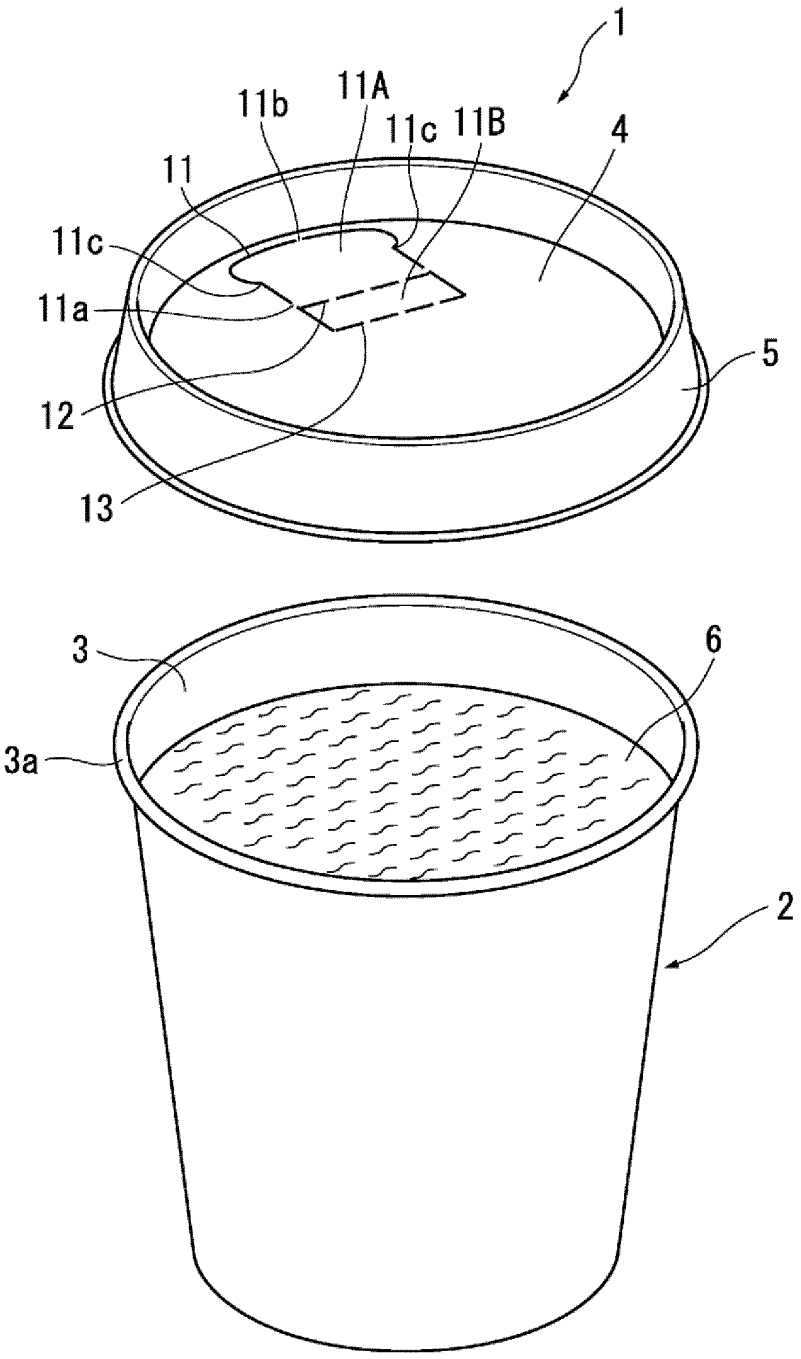
FIG. 1



Description

TECHNICAL FIELD

[0001] The present invention relates to a beverage container lid that covers an opening portion of a beverage container, a method for forming a mouthpiece of the beverage container lid, and a beverage container including the beverage container lid.

BACKGROUND ART

[0002] Conventionally, in many beverage stores, such as fast-food restaurants and convenience stores, an opening portion of a beverage container, such as a cup made of plastic (synthetic resin) or made of paper, is covered with a beverage container lid for sale such that a beverage, such as juice and coffee, housed inside the beverage container is less likely to spill out from the opening portion when the beverage container is carried around.

[0003] To drink the beverage housed inside the beverage container, the beverage container lid may be simply removed and the beverage is drunk from the opening portion. However, when the beverage container lid is removed, the beverage attached to the inside splashes, possibly resulting in smirching clothing of a person who drinks or the like.

[0004] Therefore, in many cases, an insertion portion for a straw is provided in a beverage container lid, and by inserting an accessory straw into the insertion portion, a beverage inside a beverage container is easily drunk (for example, see Patent Document 1).

[0005] However, nowadays, beginning with a marine contamination problem due to plastic dust or the like, a worldwide trend of plastic reduction has been increasing, and a trend of eliminating plastic straws has also been increasing as part of the plastic reduction.

[0006] Under such a situation, the market demands a beverage container lid that eliminates a straw and allows forming a mouthpiece that facilitates drinking a beverage without removing the beverage container lid.

[0007] Patent Document 1: JP-A-2021-14286

DISCLOSURE OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

[0008] Therefore, the present invention has been invented in view of the above-described background, and an object of the present invention is to provide a beverage container lid that eliminates a straw and allows forming a mouthpiece that facilitates drinking a beverage without removing the beverage container lid, a method for forming the mouthpiece of the beverage container lid, and a beverage container including the beverage container lid.

SOLUTIONS TO THE PROBLEMS

[0009] To solve the above-described problems, the present inventors have invented the following beverage container lid. The beverage container lid includes a cover plate portion, a side peripheral portion, a mouthpiece-forming line portion, a folding low strength portion, and an engaging portion. The cover plate portion covers an opening portion of a beverage container. The side peripheral portion is provided on an outer peripheral edge of the cover plate portion. The side peripheral portion is engageable with an edge portion of the opening portion of the beverage container when the opening portion of the beverage container is covered with the cover plate portion. The mouthpiece-forming line portion is provided on a peripheral edge side of the cover plate portion and has a shape of the peripheral edge side of a mouthpiece to form the mouthpiece. The mouthpiece-forming line portion is formed of a cut line portion or a low strength portion having a strength lower than a general portion of the cover plate portion. The folding low strength portion has a strength lower than the general portion of the cover plate portion. The folding low strength portion facilities folding by mountain fold between a mouthpiece forming outer part on an outer peripheral edge side of the cover plate portion and a mouthpiece forming inner part inside the cover plate portion in mouthpiece forming parts when the mouthpiece forming parts enclosed by the mouthpiece-forming line portion are pushed into from above. The engaging portion is engageable with a lock portion at a peripheral edge of the mouthpiece forming outer part in a state where the mouthpiece forming inner part is valley-folded and lifted up and further the mouthpiece forming outer part and the mouthpiece forming inner part are folded.

[0010] A beverage container lid according to a first invention includes a cover plate portion, a side peripheral portion, a mouthpiece-forming line portion, a folding low strength portion, and an engaging portion. The cover plate portion covers an opening portion of a beverage container. The side peripheral portion is provided on an outer peripheral edge of the cover plate portion. The side peripheral portion is engageable with an edge portion of the opening portion of the beverage container when the opening portion of the beverage container is covered with the cover plate portion. The mouthpiece-forming line portion is provided on a peripheral edge side of the cover plate portion and has a shape of the peripheral edge side of a mouthpiece to form the mouthpiece. The mouthpiece-forming line portion is formed of a cut line portion or a low strength portion having a strength lower than a general portion of the cover plate portion. The folding low strength portion has a strength lower than the general portion of the cover plate portion. The folding low strength portion facilities folding by mountain fold between a mouthpiece forming outer part on an outer peripheral edge side of the cover plate portion and a mouthpiece forming inner part inside the cover plate portion in mouth-

piece forming parts when the mouthpiece forming parts enclosed by the mouthpiece-forming line portion are pushed into from above. The engaging portion is engageable with a lock portion at a peripheral edge of the mouthpiece forming outer part in a state where the mouthpiece forming inner part is valley-folded and lifted up and further the mouthpiece forming outer part and the mouthpiece forming inner part are folded.

[0011] A beverage container lid according to a second invention, which is in the first invention, includes a valley fold low strength portion. The valley fold low strength portion has a strength lower than the general portion of the cover plate portion. The valley fold low strength portion is provided between inner end portions of the mouthpiece-forming line portion in the mouthpiece forming part of the cover plate portion to facilitate a valley fold of the mouthpiece forming inner part that is lifted up.

[0012] In a beverage container lid according to a third invention, which is in the second invention, the valley fold low strength portion is formed by providing a perforation.

[0013] In a beverage container lid according to a fourth invention, which is in any of the first invention to the third invention, the folding low strength portion is formed by providing a perforation.

[0014] In a beverage container lid according to a fifth invention, which is in any of the first invention to the fourth invention, the lock portion is formed at a narrowed width portion of an enlarged width portion where an end portion on the outer peripheral edge side of the cover plate portion widens in a side portion of the mouthpiece forming outer part. The lock portion is engageable with an edge portion of the mouthpiece as the engaging portion.

[0015] In a beverage container lid according to a sixth invention, which is in any of the first invention to the fourth invention, the lock portion is formed as a cutout at an end portion on the outer peripheral edge side of the cover plate portion in a side portion of the mouthpiece forming outer part. The lock portion is engageable with an edge portion of the mouthpiece as the engaging portion.

[0016] In a beverage container lid according to a seventh invention, which is in any of the first invention to the sixth invention, a plurality of the lock portions are provided.

[0017] In a beverage container lid according to an eighth invention, which is in any of the first invention to the seventh invention, the mouthpiece-forming line portion is formed of a cut line portion. One to a plurality of coupling portions couple between a side portion of the mouthpiece forming outer part and the cover plate portion around the side portion of the mouthpiece forming outer part.

[0018] In a beverage container lid according to a ninth invention, which is in any of the first invention to the eighth invention, the beverage container lid is made of paper.

[0019] A method for forming a mouthpiece of a beverage container lid according to a tenth invention according to any of the first invention to the ninth invention includes: a step of pushing the mouthpiece forming part from above with a finger; a step of folding the mouthpiece forming outer part and the mouthpiece forming inner part in the mouthpiece forming parts by mountain fold with a finger and valley-folding and lifting up the mouthpiece forming inner part; and a step of engaging the lock portion at the peripheral edge of the mouthpiece forming outer part with the engaging portion with a finger.

[0020] A beverage container according to an eleventh invention includes the beverage container lid according to any of the first invention to the ninth invention.

[0021] In a beverage container according to a twelfth invention, which is in the eleventh invention, the beverage container is made of paper.

EFFECTS OF THE INVENTION

[0022] The present invention having the above-described configuration eliminates a straw and allows forming a mouthpiece that facilitates drinking a beverage without removing the beverage container lid.

BRIEF DESCRIPTION OF THE DRAWINGS

[0023]

Fig. 1 is an exploded perspective view of a beverage container according to an embodiment of the present invention.

Fig. 2(a) and Fig. 2(b) are explanatory views illustrating a method for forming a mouthpiece of a beverage container lid according to the embodiment of the present invention in phases.

Fig. 3(a) and Fig. 3(b) are explanatory views illustrating the method for forming the mouthpiece of the beverage container lid according to the embodiment of the present invention in phases.

Fig. 4(a) and Fig. 4(b) are explanatory views illustrating the method for forming the mouthpiece of the beverage container lid according to the embodiment of the present invention in phases.

Fig. 5 is an explanatory view exemplifying a design condition of the beverage container lid according to the embodiment of the present invention.

Fig. 6(a) and Fig. 6(b) are explanatory views exemplifying the design condition of the beverage container lid according to the embodiment of the present invention.

Fig. 7(a) to Fig. 7(f) are explanatory views each illustrating a main part of a beverage container lid according to Embodiment 1 of the present invention.

Fig. 8(a) to Fig. 8(f) are explanatory views each illustrating a main part of a beverage container lid according to Embodiment 2 of the present invention.

DESCRIPTION OF PREFERRED EMBODIMENTS

[0024] The following will describe embodiments exemplified by applying the present invention with reference

to the drawings.

[Embodiments]

[0025] First, using Fig. 1, a beverage container 2 according to the embodiment of the present invention will be described. Fig. 1 is an exploded perspective view of the beverage container 2 according to the embodiment of the present invention.

[0026] As illustrated in Fig. 1, the beverage container 2 according to the embodiment of the present invention is made of paper, includes an opening portion 3 having an edge portion 3a on its upper portion, and is a paper cup having a cylindrical shape with a bottom often used to be sold by internally housing a beverage 6, such as juice and coffee.

[0027] Note that the beverage container 2 is not limited to the one made of paper and may be manufactured using another material, such as plastic. As the beverage container 2 made of plastic, environmentally friendly biodegradable plastic or the like may be used.

[0028] The beverage container 2 is used to sell the beverage 6 by covering the opening portion 3 with a beverage container lid 1.

[0029] The beverage container lid 1 is made of paper and includes a disk-shaped cover plate portion 4 that covers the opening portion 3 of the beverage container 2 and a side peripheral portion 5 provided on the outer peripheral edge of the cover plate portion 4 and engageable with the edge portion 3a of the opening portion 3 of the beverage container 2 when the opening portion 3 of the beverage container 2 is covered with the cover plate portion 4.

[0030] Note that the beverage container lid 1 is also not limited to the one made of paper and may be manufactured using another material, such as plastic. As the beverage container lid 1 made of plastic, environmentally friendly biodegradable plastic or the like may be used.

[0031] The cover plate portion 4 includes a mouthpiece-forming line portion 11 on its peripheral edge side. The mouthpiece-forming line portion 11 has a shape of a peripheral edge side of a mouthpiece 110 for forming the mouthpiece 110 and is formed of a cut line portion having an approximately U-shape (see also Fig. 4). Note that the mouthpiece-forming line portion 11 may be embodied by providing a low strength portion having a strength lower than a general portion of the cover plate portion 4 by, for example, providing a perforation or decreasing the thickness, instead of the cut line portion.

[0032] Additionally, a folding low strength portion 12 having a strength lower than the general portion of the cover plate portion 4 is provided. The folding low strength portion 12 facilities folding by mountain fold between a mouthpiece forming outer part 11A on the outer peripheral edge side of the cover plate portion 4 and a mouthpiece forming inner part 11B inside the cover plate portion 4 in the mouthpiece forming parts 11A and 11B when the mouthpiece forming parts 11A and 11B enclosed by the mouthpiece-forming line portion 11 of the cover plate portion 4 are pushed into from the above.

[0033] Specifically, the folding low strength portion 12 is formed by providing a perforation. Note that the folding low strength portion 12 can be embodied by providing a low strength portion having a strength lower than the general portion of the cover plate portion 4 by, for example, decreasing the thickness.

[0034] A valley fold low strength portion 13 having a strength lower than the general portion of the cover plate portion 4 is provided between the inner end portions of the mouthpiece-forming line portion 11 in the mouthpiece forming inner part 11B of the cover plate portion 4 to facilitate a valley fold of the mouthpiece forming inner part 11B that is lifted up.

[0035] Specifically, the valley fold low strength portion 13 is formed by providing a perforation. Note that the valley fold low strength portion 13 may be provided by, for example, providing a ruled line or decreasing the thickness or can be embodied without providing it.

[0036] Furthermore, lock portions 11c at the peripheral edge of the mouthpiece forming outer part 11A in a state where the mouthpiece forming inner part 11B is valley-folded and lifted up and further the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B are folded and an engaging portion that is engageable with the lock portions 11c are provided.

[0037] Specifically, the lock portions 11c are formed at narrowed width portions of an enlarged width portion where the end portion on the outer peripheral edge side of the cover plate portion 4 widens to be an approximately elliptical shape in the side portion of the mouthpiece forming outer part 11A, and the edge portion of the mouthpiece 110 is engageable as the engaging portion (see also Fig. 4).

[0038] Additionally, right and left coupling portions 11a and an upper coupling portion 11b couple between the side portion of the mouthpiece forming outer part 11A and the cover plate portion 4 around the side portion of the mouthpiece forming outer part 11A so as to avoid the side portion of the mouthpiece forming outer part 11A and the side portion of the mouthpiece forming inner part 11B to sink due to own weight or the like. Note that the numbers of and the positions of the coupling portions 11a and 11b are not limited to this, and the coupling portions 11a and 11b may be omitted.

[0039] Next, using Fig. 2 to Fig. 4, the method for forming the mouthpiece of the beverage container lid according to the embodiment of the present invention will be described. Fig. 2 to Fig. 4 are explanatory views illustrating the method for forming the mouthpiece of the beverage container lid according to the embodiment of the present invention in phases.

[0040] First, as illustrated in Fig. 2(a) and Fig. 2(b) to Fig. 3(a) and Fig. 3(b), when the mouthpiece forming outer part 11A is pushed into from the above with a finger, such as a thumb or a forefinger, a portion between the mouthpiece forming outer part 11A and the mouthpiece

forming inner part 11B is mountain-folded at the part of the folding low strength portion 12.

[0041] Further, when the mouthpiece forming outer part 11A is pushed into the inside of the cover plate portion 4 with a finger, such as a thumb or a forefinger, the mouthpiece forming inner part 11B is valley-folded at the part of the valley fold low strength portion 13 and is lifted up.

[0042] As illustrated in Fig. 4(a) and Fig. 4(b), when the mouthpiece forming outer part 11A is further pushed into the inside of the cover plate portion 4 with a finger, such as a thumb or a forefinger, the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B are folded by mountain fold, and the lock portions 11c of the mouthpiece forming outer part 11A engage with the edge portion of the mouthpiece 110 as the engaging portion to form the mouthpiece 110.

[0043] Next, using Fig. 5 and Fig. 6, a design condition of the beverage container lid 1 according to the embodiment of the present invention will be described. Fig. 5 and Fig. 6 are explanatory views exemplifying the design condition of the beverage container lid 1 according to the embodiment of the present invention.

[0044] Here, in the beverage container lid 1 exemplified in Fig. 5 and Fig. 6, A indicates a distance between the folding low strength portion 12 and the valley fold low strength portion 13, and B indicates a distance between the lock portion 11c and the folding low strength portion 12.

[0045] When the thickness of the cover plate portion 4 in the beverage container lid 1 or the like is considered, the following results are obtained.

[0046] In the case of $A < B$, for example, when B is too longer than A in excess of 2 mm, while the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B can be in a completely folded state, the lock portions 11c cannot be engaged with the edge portion of the mouthpiece 110 as the engaging portion.

[0047] Additionally, in the case of $A \geq B$, the lock portions 11c are trapped in the middle of the edge portion of the mouthpiece 110. Thus, the lock portions 11c cannot be well engaged with the edge portion of the mouthpiece 110 as the engaging portion while the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B are in the completely folded state.

[0048] Therefore, in the case of $A < B$, when, for example, B is made larger than A by 0.3 mm or more to 2 mm or less as the thickness of the cover plate portion 4, the lock portions 11c can be well engaged with the edge portion of the mouthpiece 110 as the engaging portion while the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B are in the completely folded state without the lock portions 11c being trapped in the middle of the edge portion of the mouthpiece 110.

[0049] As illustrated in Fig. 6(a), even in the case of $A < B$, the function can be satisfied. However, to well engage the lock portions 11c with the edge portion of the mouthpiece 110 as the engaging portion, it is important to meet the following conditions.

[0050] For example, as illustrated in Fig. 6(b), in the case of A being 15 mm, $B \approx 19$ mm with $B = 1.28A$, and therefore a surplus of around 4 mm is generated, and the lock portions 11c cannot be engaged with the edge portion of the mouthpiece 110 as the engaging portion.

[0051] Therefore, when the thickness of the cover plate portion 4 is denoted as X, as long as the formula $X \leq B - A \leq 2$ (unit is mm) is satisfied, the function is satisfied even with $A < B$.

[0052] Obviously, the design condition of the beverage container lid 1 is merely an example, and various designs can be embodied.

[0053] The embodiment of the present invention described above having the above-described configuration eliminates a straw and allows forming the mouthpiece 110 that facilitates drinking the beverage 6 without removing the beverage container lid 1.

[0054] Besides, since in the embodiment of the present invention, both of the beverage container lid 1 and the beverage container 2 are made of paper, except for an adhesive used or the like, plastic reduction can be approximately completely achieved.

[0055] Additionally, the method for forming the mouthpiece of the beverage container lid according to the embodiment of the present invention allows easily forming the mouthpiece 110 of the beverage container lid 1 in the above-described simple procedure.

[Embodiment 1]

[0056] Next, using Fig. 7(a) to Fig. 7(f), the beverage container lid 1 according to Embodiment 1 of the present invention will be described. Fig. 7(a) to Fig. 7(f) are explanatory views each illustrating a main part of the beverage container lid 1 according to Embodiment 1 of the present invention.

[0057] The beverage container lid 1 according to Embodiment 1 of the present invention mainly differs from the beverage container lid 1 according to the embodiment described above in the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A, and therefore the difference will be mainly described, the same reference numeral is given to the same configuration, and the description thereof will be omitted.

[0058] As illustrated in Fig. 7(a) to Fig. 7(f), the beverage container lid 1 differs from the beverage container lid 1 according to the embodiment in that the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A is not an ellipsoid shape.

[0059] The difference is specifically as follows.

[0060] In the beverage container lid 1 illustrated in Fig. 7(a), the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A is a rectangular shape.

[0061] In the beverage container lid 1 illustrated in Fig. 7(b), the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A is a rectangular shape with chamfered corner portions.

[0062] In the beverage container lid 1 illustrated in Fig. 7(c), the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A is an inverted taper shape expanding toward the distal end.

[0063] In the beverage container lid 1 illustrated in Fig. 7(d), the shape of the entire side portion of the mouthpiece forming outer part 11A is an inverted taper shape expanding toward the distal end including the end portion on the outer peripheral edge side of the cover plate portion 4. Furthermore, the lock portions 11c are formed as cutouts.

[0064] In the beverage container lid 1 illustrated in Fig. 7(e), the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A is an arrow shape pointing to the distal end.

[0065] In the beverage container lid 1 illustrated in Fig. 7(f), the shape of the end portion on the outer peripheral edge side of the cover plate portion 4 in the side portion of the mouthpiece forming outer part 11A is an arrow shape having a flat distal end.

[Embodiment 2]

[0066] Next, using Fig. 8(a) to Fig. 8(f), the beverage container lid 1 according to Embodiment 2 of the present invention will be described. Fig. 8(a) to Fig. 8(f) are explanatory views each illustrating a main part of the beverage container lid 1 according to Embodiment 2 of the present invention.

[0067] The beverage container lid 1 according to Embodiment 2 of the present invention mainly differs from the beverage container lid 1 according to Embodiment 1 described above in the number of the lock portions 11a, and therefore the difference will be mainly described, the same reference numeral is given to the same configuration, and the description thereof will be omitted.

[0068] The beverage container lid 1 according to Embodiment 2, as illustrated in Fig. 8(a) to Fig. 8(f), differs from the beverage container lid 1 according to Embodiment 1 in that the lock portion 11a on the right side is eliminated, and the shape of the mouthpiece forming outer part 11A is an approximately L-shape.

[0069] While the embodiments of the present invention have been described, the embodiments have been presented as examples, and are not intended to limit the scope of the invention. The novel embodiments described herein can be embodied in a variety of other configurations. Various omissions, substitutions, and changes can be made without departing from the gist of the invention. The embodiments and the modifications thereof are within the scope and the gist of the invention and within the scope of the inventions described in the claims and their equivalents.

DESCRIPTION OF REFERENCE SIGNS

[0070]

1:	Beverage container lid
11:	Mouthpiece-forming line portion
11A:	Mouthpiece forming outer part
11B:	Mouthpiece forming inner part
11a, 11b:	Coupling portion
11c:	Lock portion
12:	Folding low strength portion
13:	Valley fold low strength portion
2:	Beverage container
3:	Opening portion
3a:	Edge portion of opening portion
4:	Cover plate portion
5:	Side peripheral portion
6:	Beverage

Claims

1. A beverage container lid comprising:

a cover plate portion that covers an opening portion of a beverage container;

a side peripheral portion provided on an outer peripheral edge of the cover plate portion, the side peripheral portion being engageable with an edge portion of the opening portion of the beverage container when the opening portion of the beverage container is covered with the cover plate portion;

a mouthpiece-forming line portion provided on a peripheral edge side of the cover plate portion and having a shape of the peripheral edge side of a mouthpiece to form the mouthpiece, the mouthpiece-forming line portion being formed of a cut line portion or a low strength portion having a strength lower than a general portion of the cover plate portion;

a folding low strength portion having a strength lower than the general portion of the cover plate portion, the folding low strength portion facilitating folding by mountain fold between a mouthpiece forming outer part on an outer peripheral edge side of the cover plate portion and a mouthpiece forming inner part inside the cover plate portion in mouthpiece forming parts when the mouthpiece forming parts enclosed by the mouthpiece-forming line portion are pushed into from above; and

an engaging portion engageable with a lock portion at a peripheral edge of the mouthpiece forming outer part in a state where the mouthpiece

forming inner part is valley-folded and lifted up and further the mouthpiece forming outer part and the mouthpiece forming inner part are folded.

2. The beverage container lid according to claim 1, comprising
a valley fold low strength portion having a strength lower than the general portion of the cover plate portion, the valley fold low strength portion being provided between inner end portions of the mouthpiece-forming line portion in the mouthpiece forming part of the cover plate portion to facilitate a valley fold of the mouthpiece forming inner part that is lifted up.

3. The beverage container lid according to claim 2, wherein
the valley fold low strength portion is formed by providing a perforation.

4. The beverage container lid according to any one of claims 1 to 3, wherein
the folding low strength portion is formed by providing a perforation.

5. The beverage container lid according to any one of claims 1 to 4, wherein
the lock portion is formed at a narrowed width portion of an enlarged width portion where an end portion on the outer peripheral edge side of the cover plate portion widens in a side portion of the mouthpiece forming outer part, and the lock portion is engageable with an edge portion of the mouthpiece as the engaging portion.

6. The beverage container lid according to any one of claims 1 to 4, wherein
the lock portion is formed as a cutout at an end portion on the outer peripheral edge side of the cover plate portion in a side portion of the mouthpiece forming outer part, and the lock portion is engageable with an edge portion of the mouthpiece as the engaging portion.

7. The beverage container lid according to any one of claims 1 to 6, wherein
a plurality of the lock portions are provided.

8. The beverage container lid according to any one of claims 1 to 7, wherein

the mouthpiece-forming line portion is formed of a cut line portion, and
one to a plurality of coupling portions couple between a side portion of the mouthpiece forming outer part and the cover plate portion around the side portion of the mouthpiece forming outer part.

9. The beverage container lid according to any one of claims 1 to 8, wherein
the beverage container lid is made of paper.

10. A method for forming the mouthpiece of the beverage container lid according to any one of claims 1 to 9, comprising:

a step of pushing the mouthpiece forming part from above with a finger;
a step of folding the mouthpiece forming outer part and the mouthpiece forming inner part in the mouthpiece forming parts by mountain fold with a finger and valley-folding and lifting up the mouthpiece forming inner part; and
a step of engaging the lock portion at the peripheral edge of the mouthpiece forming outer part with the engaging portion with a finger.

11. A beverage container that includes the beverage container lid according to any one of claims 1 to 9.

12. The beverage container according to claim 11, wherein
the beverage container is made of paper.

FIG. 1

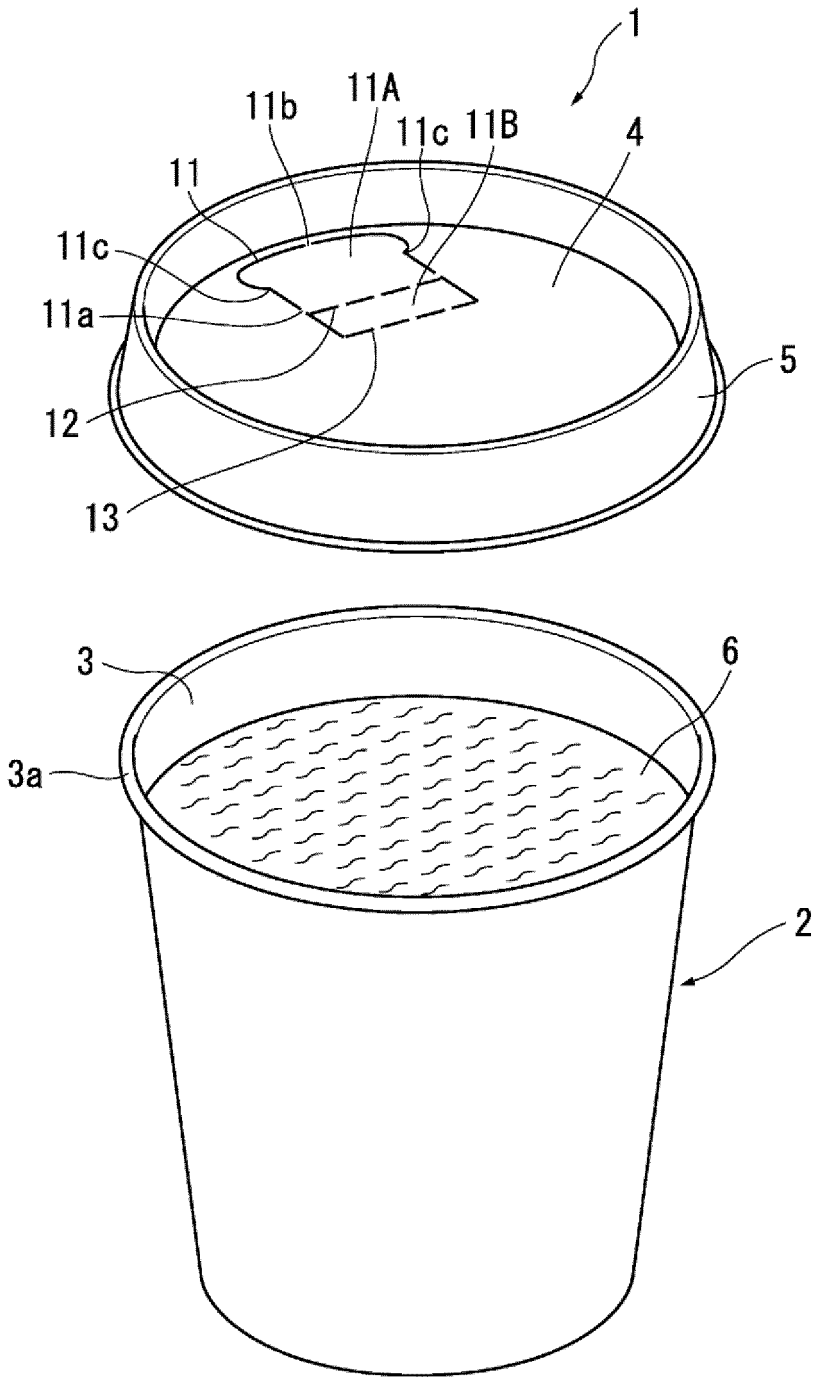
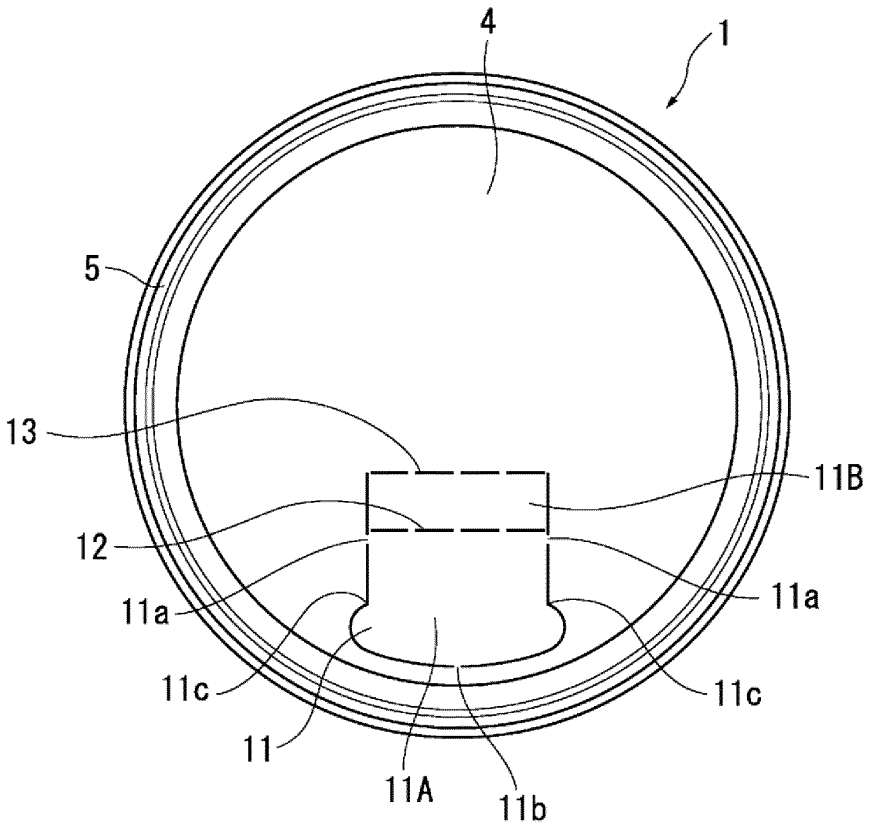


FIG. 2

(a)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1
5
13
11B
12
11a
11a
11c
11c
11
11A
11b

(b)

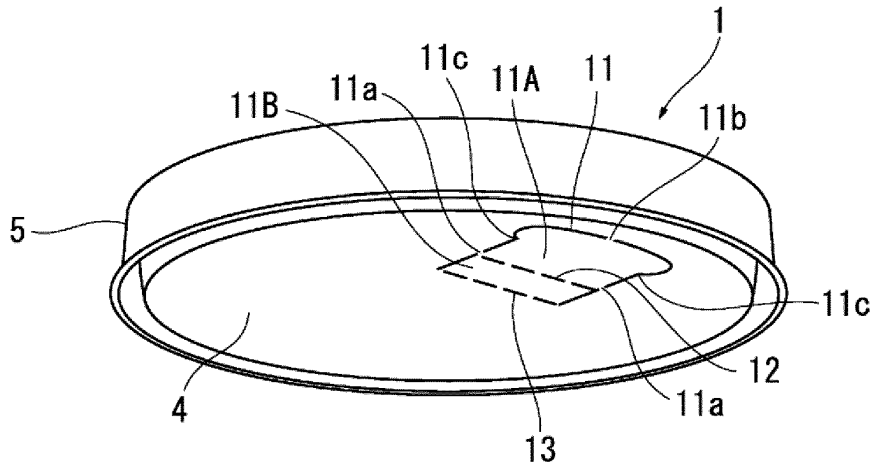
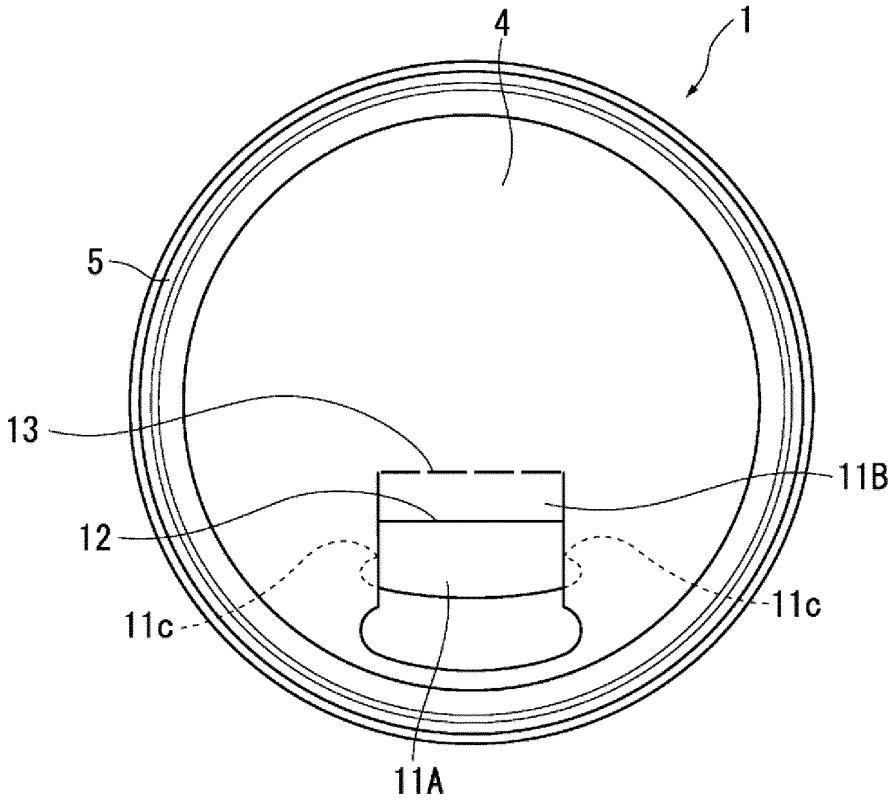

1
11c
11A
11
11a
11B
11b
5
11c
12
11a
4
13

FIG. 3

(a)



(b)

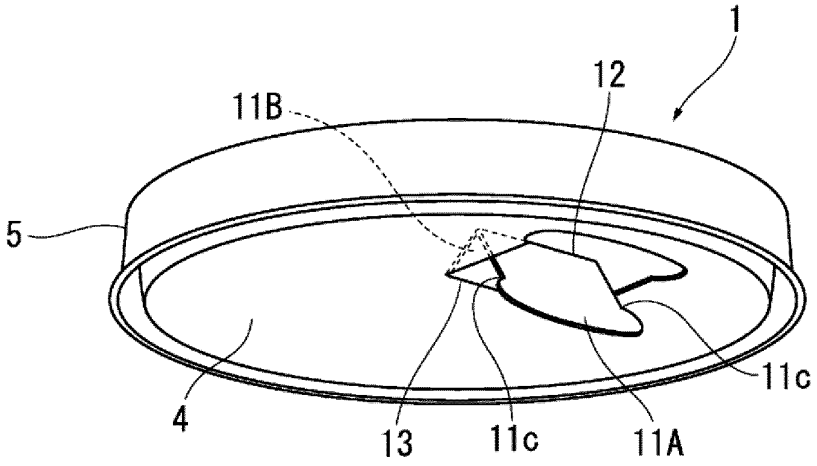
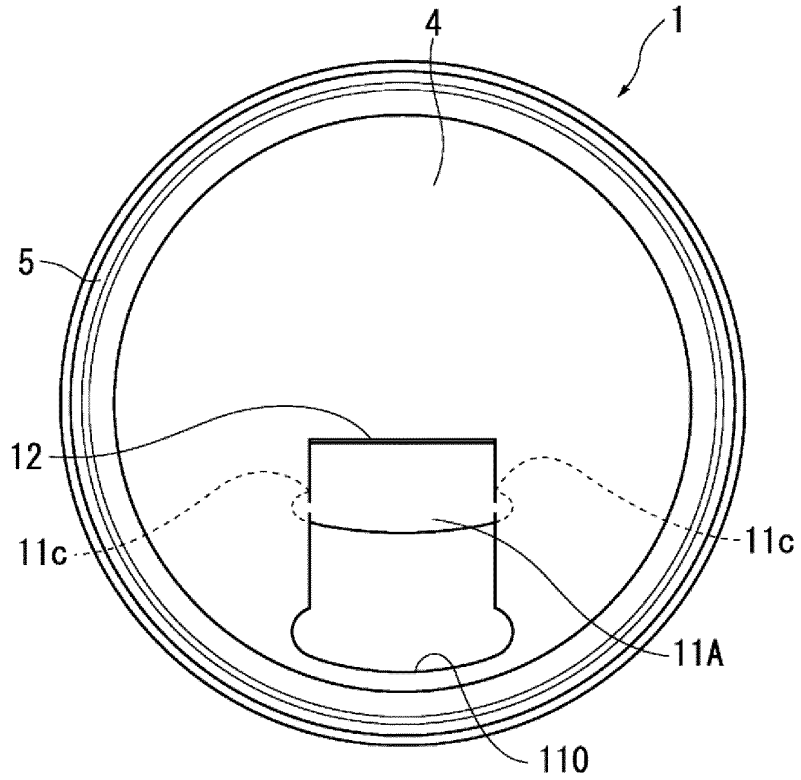


FIG. 4

(a)



(b)

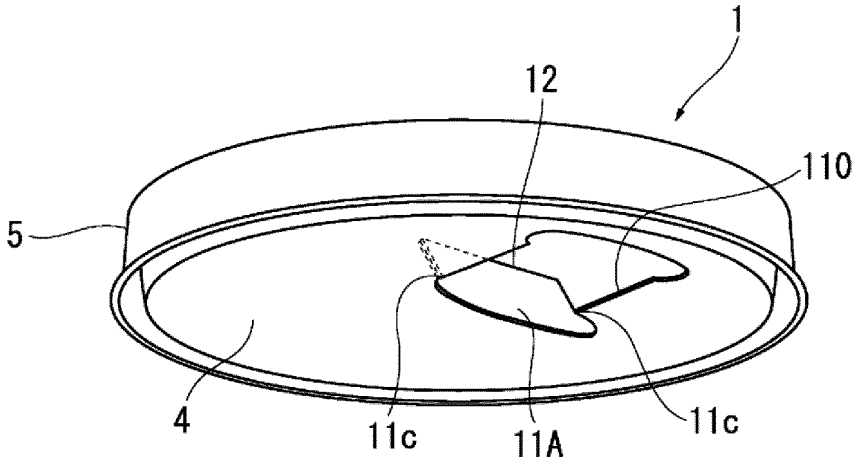


FIG. 5

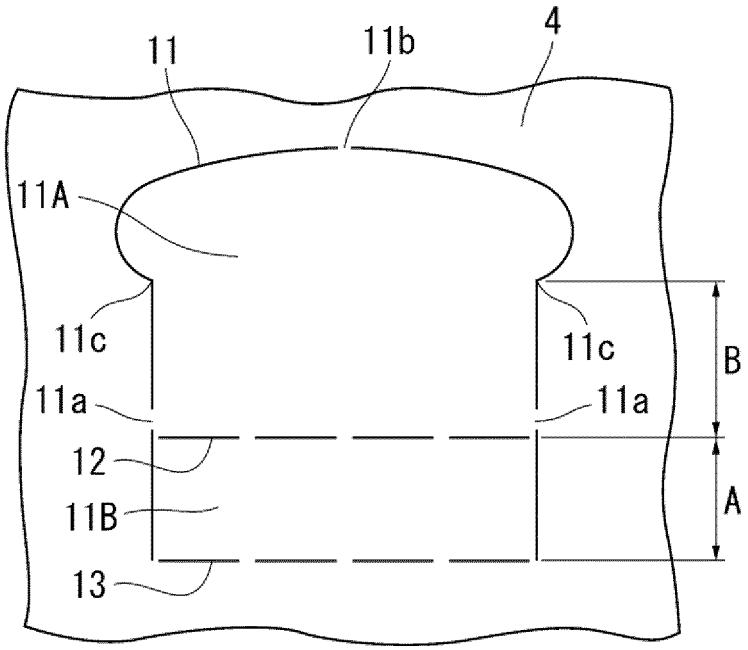


FIG. 6

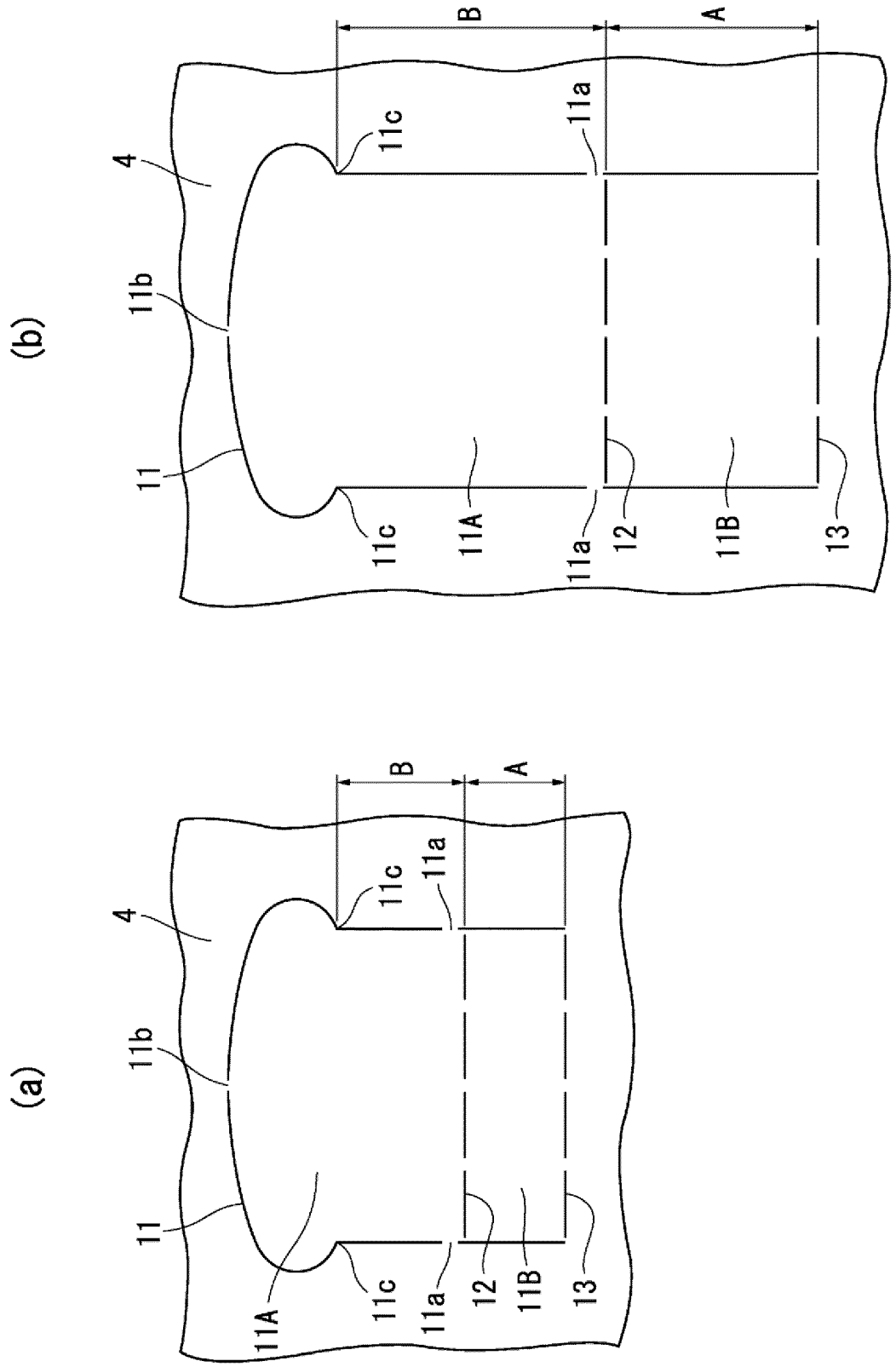

(b)
B
A
4
11b
11
11c
11a
11c
11A
11a
12
11B
13
(a)
B
A
4
11b
11
11c
11a
11A
11c
11a
12
11B
13

FIG. 7

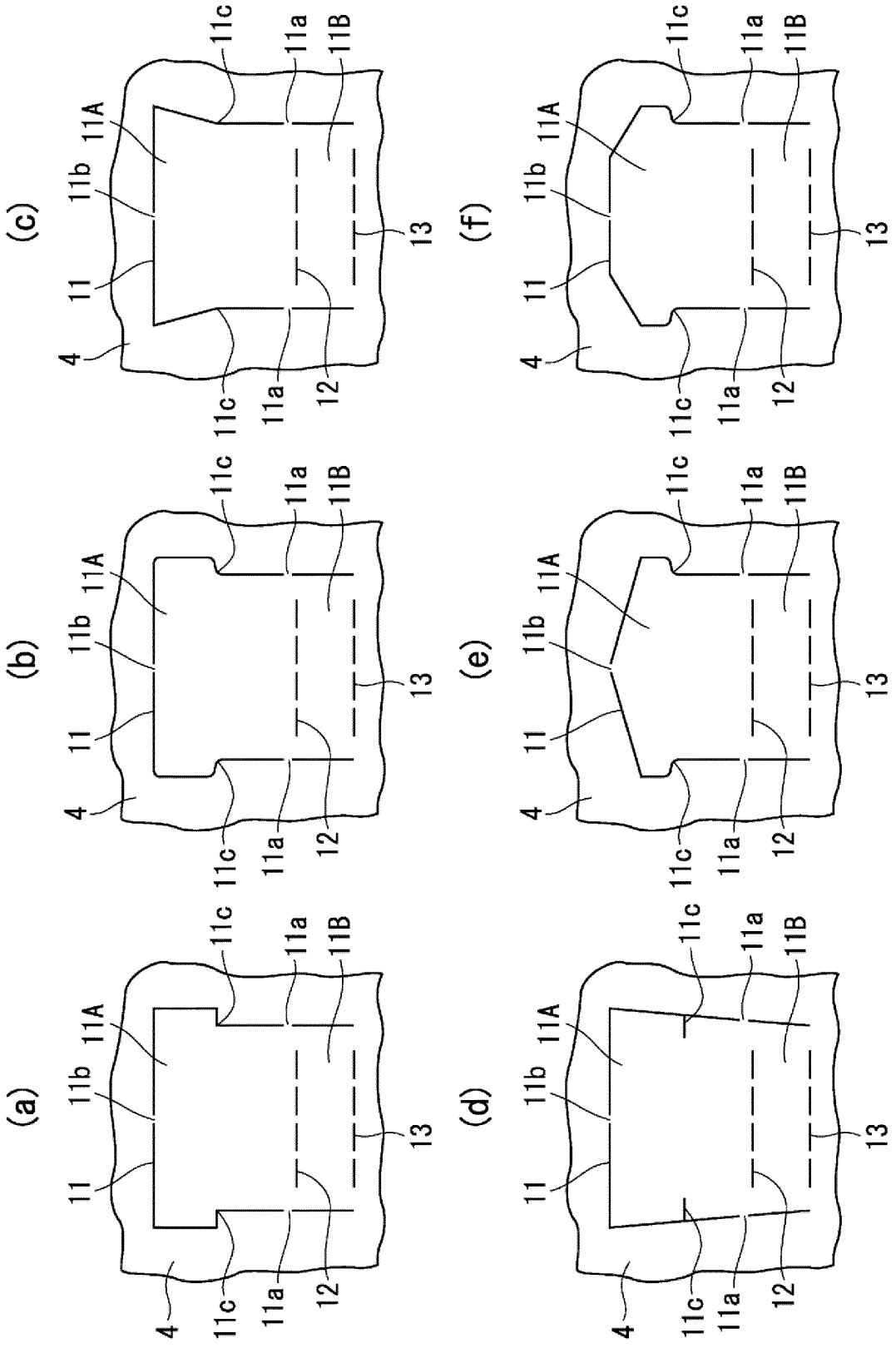
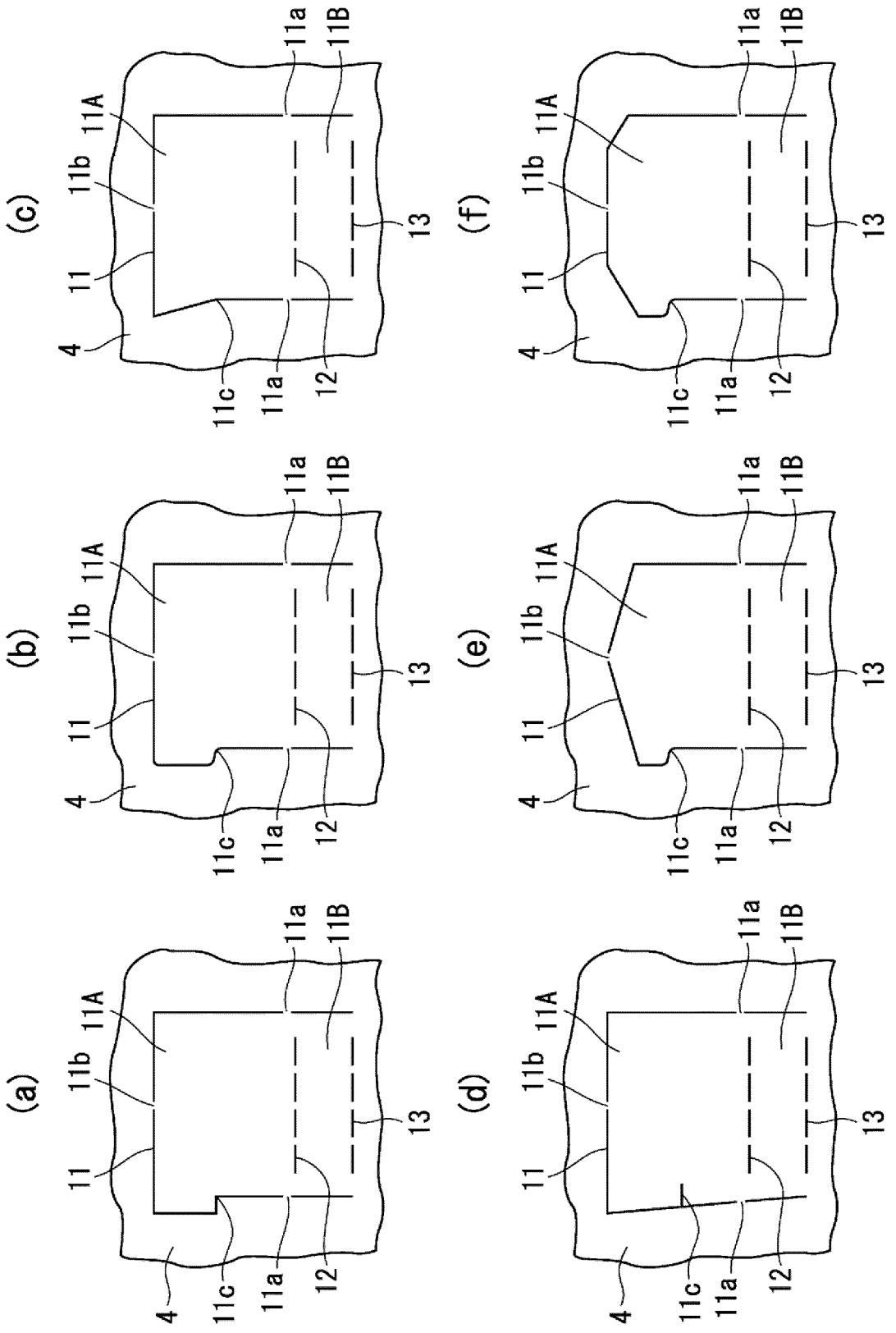


FIG. 8



INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2022/011946

A. CLASSIFICATION OF SUBJECT MATTER

A47G 19/22(2006.01)i; ***B65D 17/28***(2006.01)i; ***B65D 41/46***(2006.01)i; ***B65D 43/06***(2006.01)i; ***B65D 47/06***(2006.01)i
FI: A47G19/22 D; B65D43/06 200; B65D41/46; B65D47/06 110; B65D17/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A47G19/22; B65D17/28; B65D41/46; B65D43/06; B65D47/06

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2022
Registered utility model specifications of Japan 1996-2022
Published registered utility model applications of Japan 1994-2022

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4741450 A (BRAUDE, Elton) 03 May 1988 (1988-05-03) column 1, line 56 to column 6, line 33, fig. 1-15	1-12
Y	JP 11-500699 A (THE PROCTER & GAMBLE CO.) 19 January 1999 (1999-01-19) page 8, line 7 to page 9, line 1, fig. 1-3	1-12
A	WO 2021/020511 A1 (YAMADA, Kikuo) 04 February 2021 (2021-02-04) entire text, all drawings	1-12
A	US 2021/0198014 A1 (ZHU, Yueping) 01 July 2021 (2021-07-01) entire text, all drawings	1-12
A	US 4174554 A (BONAR AND BEMIS LTD.) 20 November 1979 (1979-11-20) fig. 1-2	5
A	JP 2004-51150 A (DAINIPPON PRINTING CO., LTD.) 19 February 2004 (2004-02-19) fig. 1-5	1-12
A	JP 2000-211635 A (DAINIPPON PRINTING CO., LTD.) 02 August 2000 (2000-08-02) fig. 4-6	1-12

☑ Further documents are listed in the continuation of Box C. ☑ See patent family annex.

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"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
15 April 2022	**10 May 2022**
Name and mailing address of the ISA/JP **Japan Patent Office (ISA/JP)** **3-4-3 Kasumigaseki, Chiyoda-ku, Tokyo 100-8915** **Japan**	Authorized officer Telephone No.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2022/011946

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 3183027 U (DYNAPAC CO., LTD.) 18 April 2013 (2013-04-18) fig. 2-4	1-12

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/JP2022/011946

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
US 4741450 A	03 May 1988	(Family: none)	
JP 11-500699 A	19 January 1999	WO 1997/022528 A1 page 5, line 13 to page 6, line 7, fig. 1-3	
WO 2021/020511 A1	04 February 2021	(Family: none)	
US 2021/0198014 A1	01 July 2021	EP 3842359 A1 entire text, all drawings	
US 4174554 A	20 November 1979	(Family: none)	
JP 2004-51150 A	19 February 2004	(Family: none)	
JP 2000-211635 A	02 August 2000	(Family: none)	
JP 3183027 U	18 April 2013	(Family: none)	

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2021014286 A **[0007]**