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(54) **BEVERAGE CONTAINER LID, DRINKING OPENING FORMATION METHOD FOR 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.

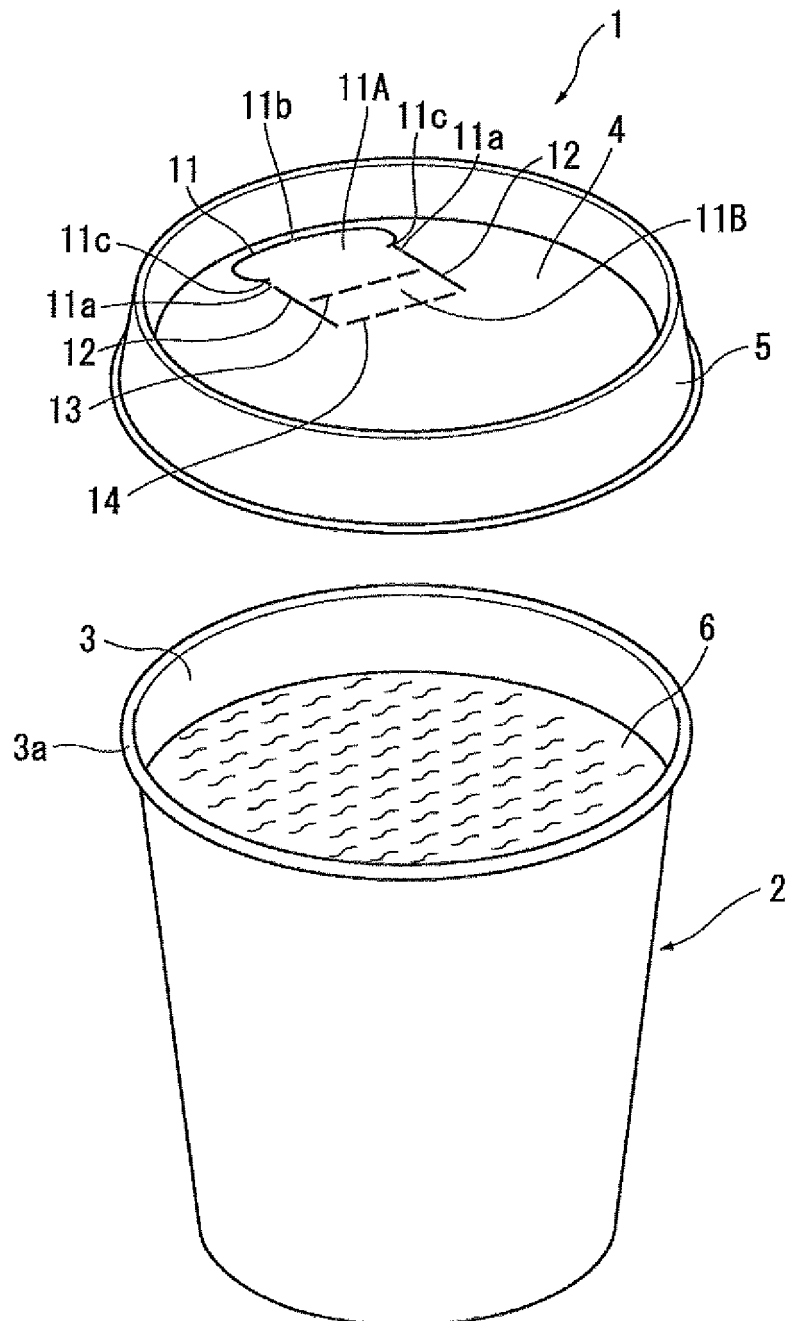
[Solution]

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 of the cover plate

portion 4; a folding low strength portion 13 facilitating folding by valley 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 a mouthpiece-forming line portion 111 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 mountain-folded, the mouthpiece forming outer part 11A 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 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 facilitates folding by valley 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 mountain-folded, the mouthpiece forming outer 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 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 facilitates folding by valley 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 mountain-folded, the mouthpiece forming outer 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 mountain fold low strength portion. The mountain fold low strength portion has a strength lower than the general portion of the cover plate portion. The mountain 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 mountain fold of the mouthpiece forming inner part.

[0012] In a beverage container lid according to a third invention, which is in the second invention, the mountain 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 valley fold with a finger and mountain-folding and lifting up the mouthpiece forming outer 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 12 having an approximately U-shape and coupling portions 11a and 11b (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 13 having a strength lower than the general portion of the cover plate portion 4 is provided. The folding low strength portion 13 facilitates folding by valley 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 13 is formed by providing a perforation. Note that the folding low strength portion 13 can be embodied by, for example, decreasing the thickness.

[0034] A mountain fold low strength portion 14 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 mountain fold of the mouthpiece forming inner part 11B.

[0035] Specifically, the mountain fold low strength portion 14 is formed by providing a perforation. Note that the mountain fold low strength portion 14 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 outer part 11A 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, the right and left coupling portions 11a and the 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.

[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 inner part 11B is pushed into from the above with a finger

F1, such as a thumb or a forefinger, a portion between the mouthpiece forming outer part 11A and the mouthpiece forming inner part 11B is valley-folded at the part of the folding low strength portion 13.

[0041] Further, when the mouthpiece forming outer part 11A is pushed into the inside of the cover plate portion 4 with the finger F1, such as a thumb or a forefinger, the mouthpiece forming inner part 11B is further mountain-folded and the mouthpiece forming outer part 11A is further valley-folded at the part of the mountain fold low strength portion 14 and is further 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 the finger F1, 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 width of the coupling portion 11b, B indicates a width of the coupling portion 11a, C indicates an interval between perforations of the folding low strength portion 13 and the mountain fold low strength portion 14, D indicates an interval between an end portion of the perforation of the folding low strength portion 13 or the mountain fold low strength portion 14 and the cut line portion 12 of the mouthpiece-forming line portion, E indicates a distance between the folding low strength portion 13 and the mountain fold low strength portion 14, and F indicates a distance between the folding low strength portion 13 and the lock portion 11c.

[0045] In the beverage container lid 1 illustrated in Fig. 5 and Fig. 6(a), for example, the function is satisfied with A of 0.5 mm, B of 0.75 mm, C of 0.5 mm, D of 3 mm, E of 8 mm, and F of 8 mm.

[0046] In contrast to this, in the beverage container lid 1 illustrated in Fig. 6(b), $E < F$ is set. Thus, even in the case of $E < F$, the function can be satisfied. However, to 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.

[0047] For example, in Fig. 6(b), in the case of E being 15 mm, $F \approx 16.9$ mm with $F = 1.13E$, and therefore a surplus of around 2 mm is generated at folding. However, considering the thickness of the cover plate portion 4 or the like, the lock portions 11c can be engaged with the edge portion of the mouthpiece 110 as the engaging portion, and thus the function is satisfied.

[0048] Therefore, when the thickness of the cover plate portion 4 is denoted as X, as long as the formula $X \leq F -$

$E \leq 2$ (unit is mm) is satisfied, the function is satisfied even with $E < F$. In this case, the formula $0.5 \leq A < 1.0$ (unit is mm) (the range of A) and the formula $A \geq C$ (the setting of C) are more preferably satisfied.

[0049] Obviously, the design condition of the beverage container lid 1 is merely an example, and various designs can be embodied.

[0050] 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.

[0051] 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.

[0052] 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]

[0053] 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.

[0054] 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.

[0055] 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.

[0056] The difference is specifically as follows.

[0057] 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.

[0058] 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.

[0059] 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.

[0060] 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.

[0061] 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.

[0062] 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]

[0063] 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.

[0064] 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.

[0065] 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.

[0066] 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

[0067]

1:	Beverage container lid
11:	Mouthpiece-forming line portion
11A:	Mouthpiece forming outer part
11B:	Mouthpiece forming inner part
5 11a, 11b:	Coupling portion
11c:	Lock portion
12:	Cut line portion
13:	Folding low strength portion
14:	Mountain fold low strength portion
10 2:	Beverage container
3:	Opening portion
3a:	Edge portion of opening portion
4:	Cover plate portion
5:	Side peripheral portion
15 6:	Beverage
F1:	Finger

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 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 valley 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 mountain-folded, the mouthpiece forming outer 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 mountain fold low strength portion having a strength lower than the general portion of the cover plate portion, the mountain 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 mountain fold of the mouthpiece forming inner part. 5
3. The beverage container lid according to claim 2, wherein
the mountain fold low strength portion is formed by providing a perforation. 10
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. 15
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. 20 25
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. 30 35
7. The beverage container lid according to any one of claims 1 to 6, wherein
a plurality of the lock portions are provided. 40
8. The beverage container lid according to any one of claims 1 to 7, wherein 45
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. 50
9. The beverage container lid according to any one of claims 1 to 8, wherein
the beverage container lid is made of paper. 55
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 valley fold with a finger and mountain-folding and lifting up the mouthpiece forming outer 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

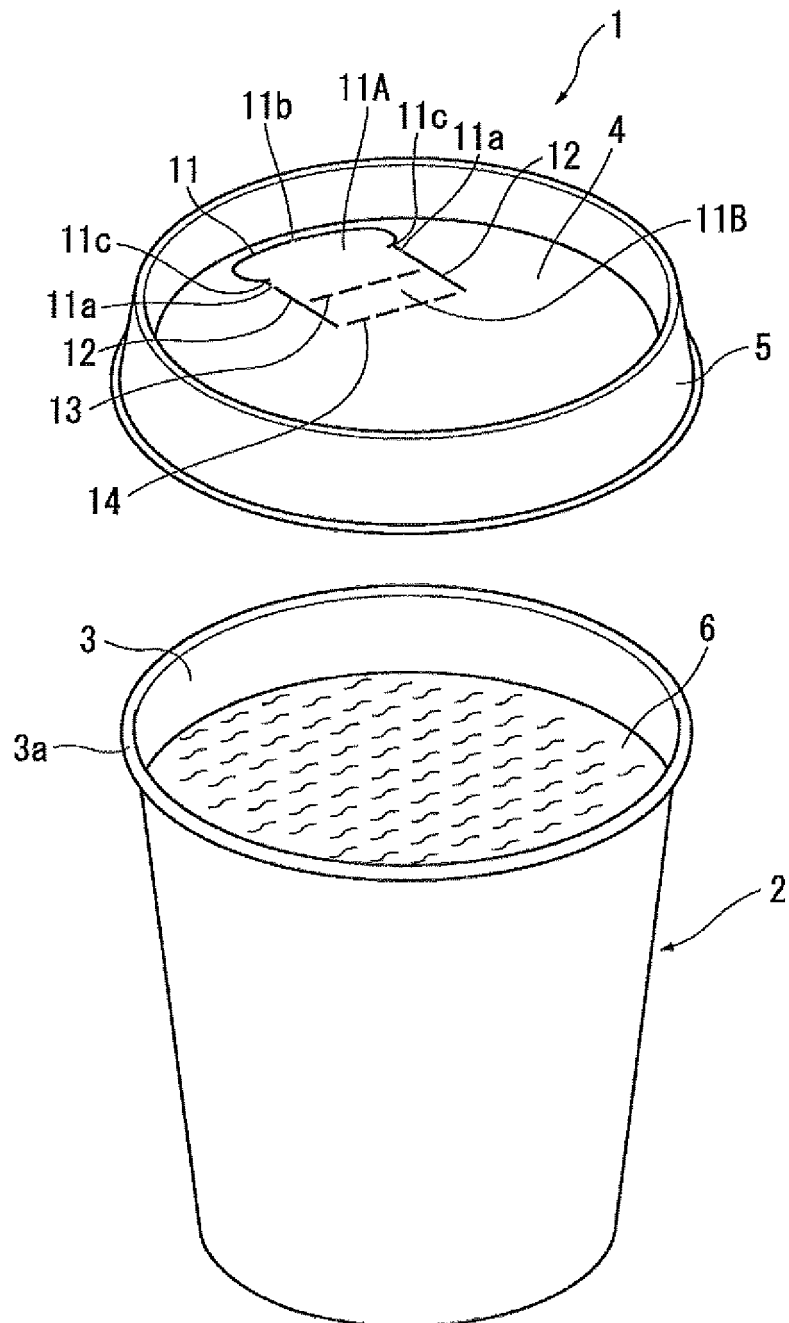
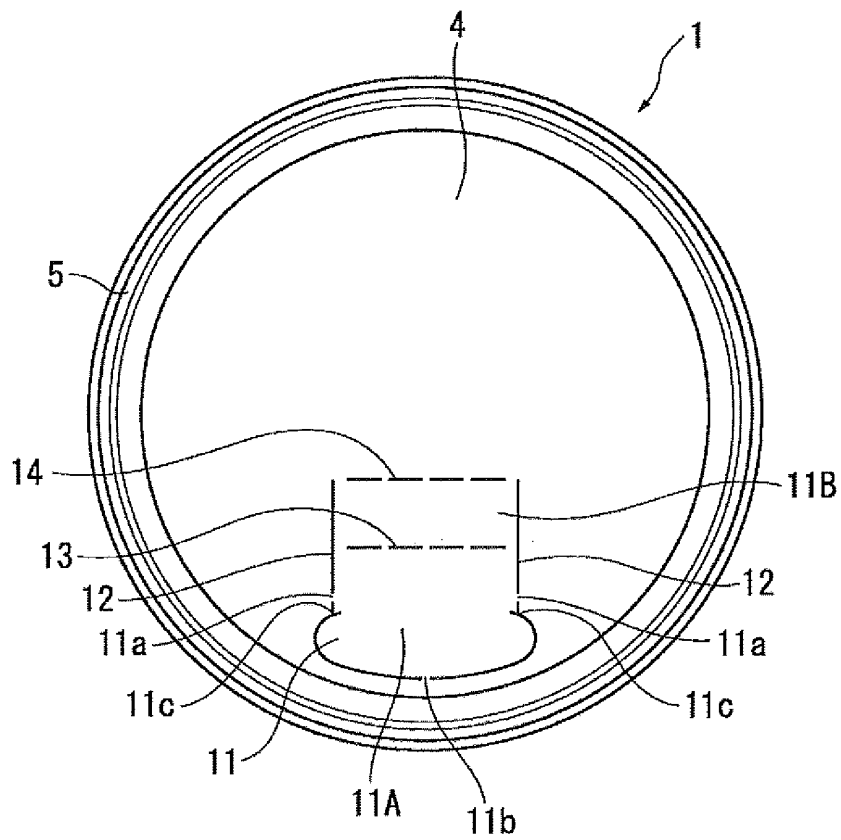


FIG. 2

(a)



(b)

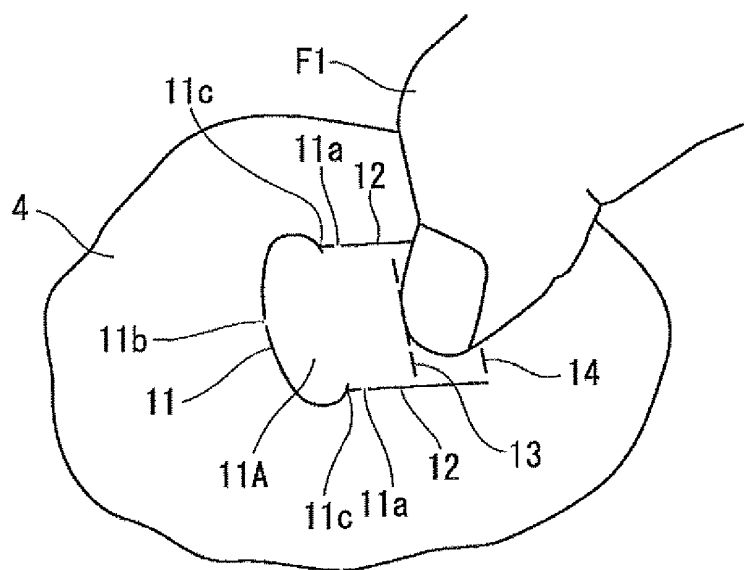
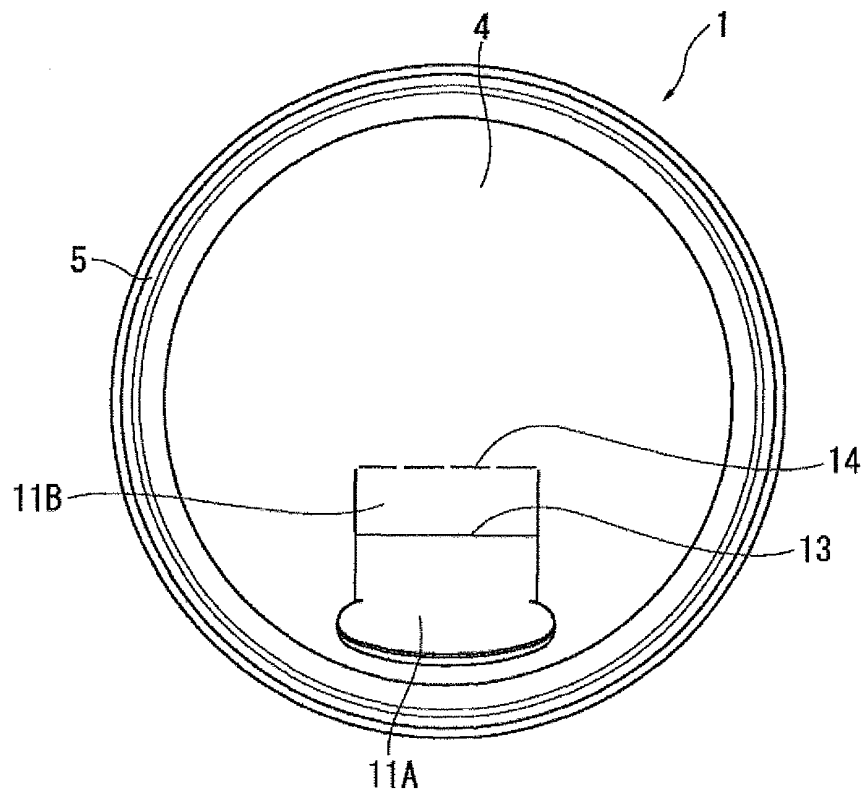


FIG. 3

(a)



(b)

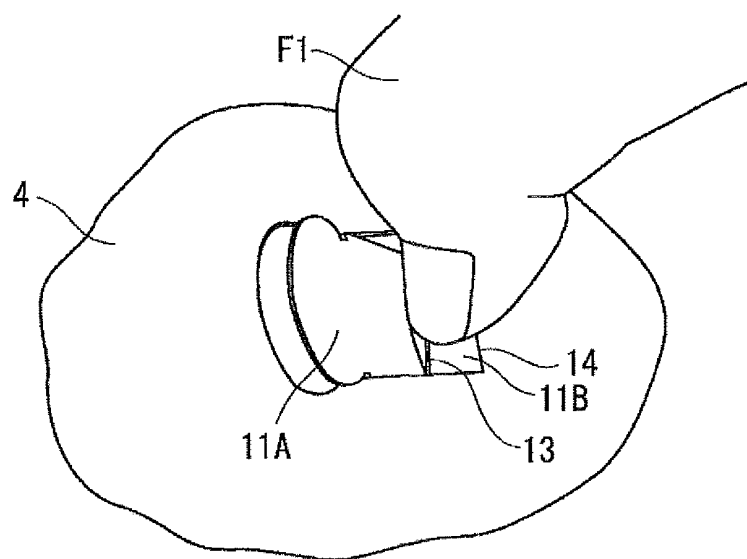
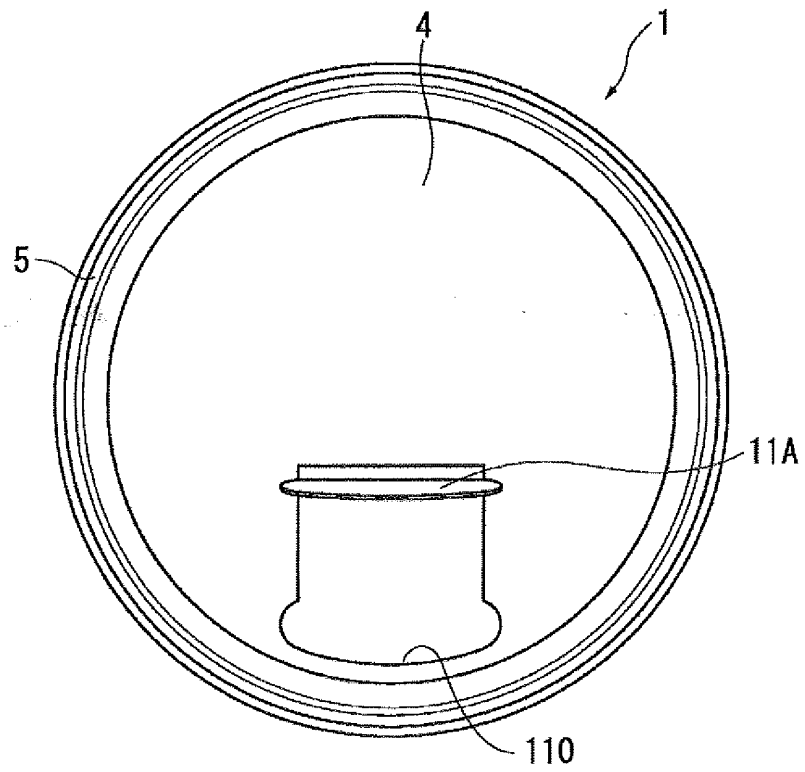


FIG. 4

(a)



(b)

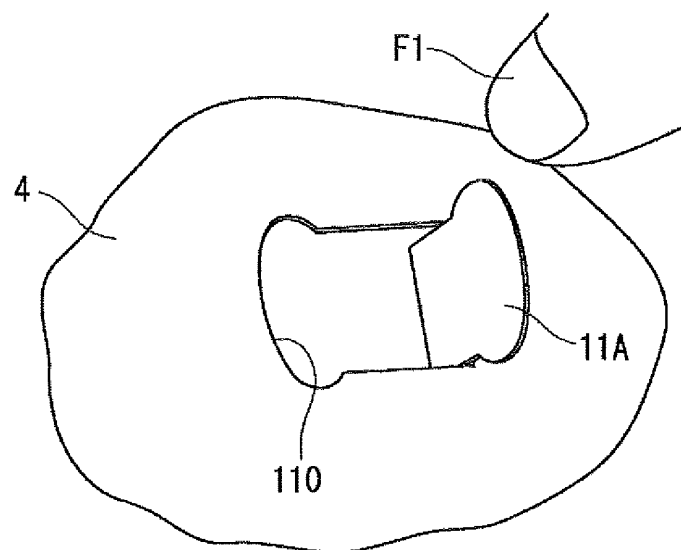


FIG. 5

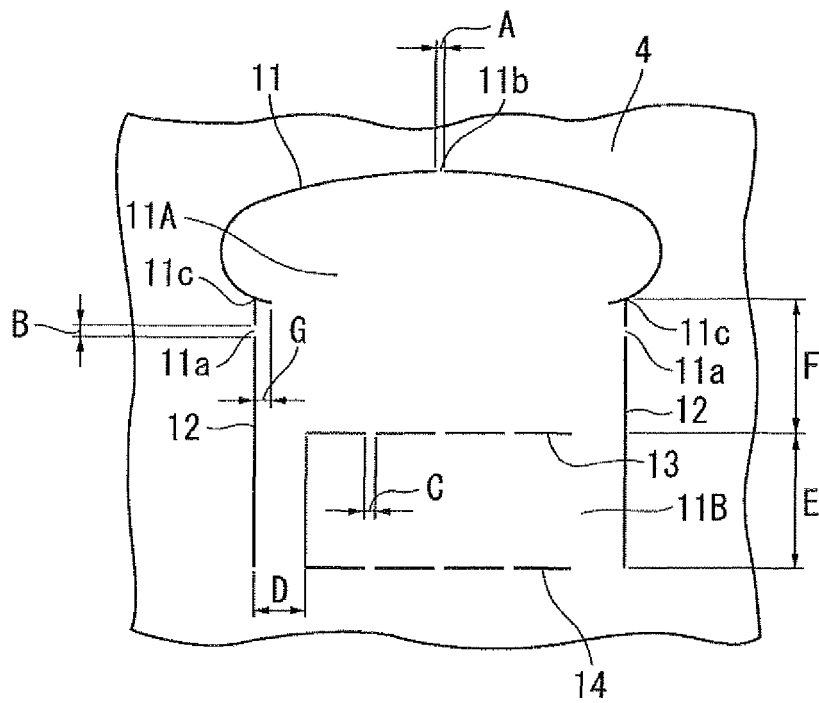


FIG. 6

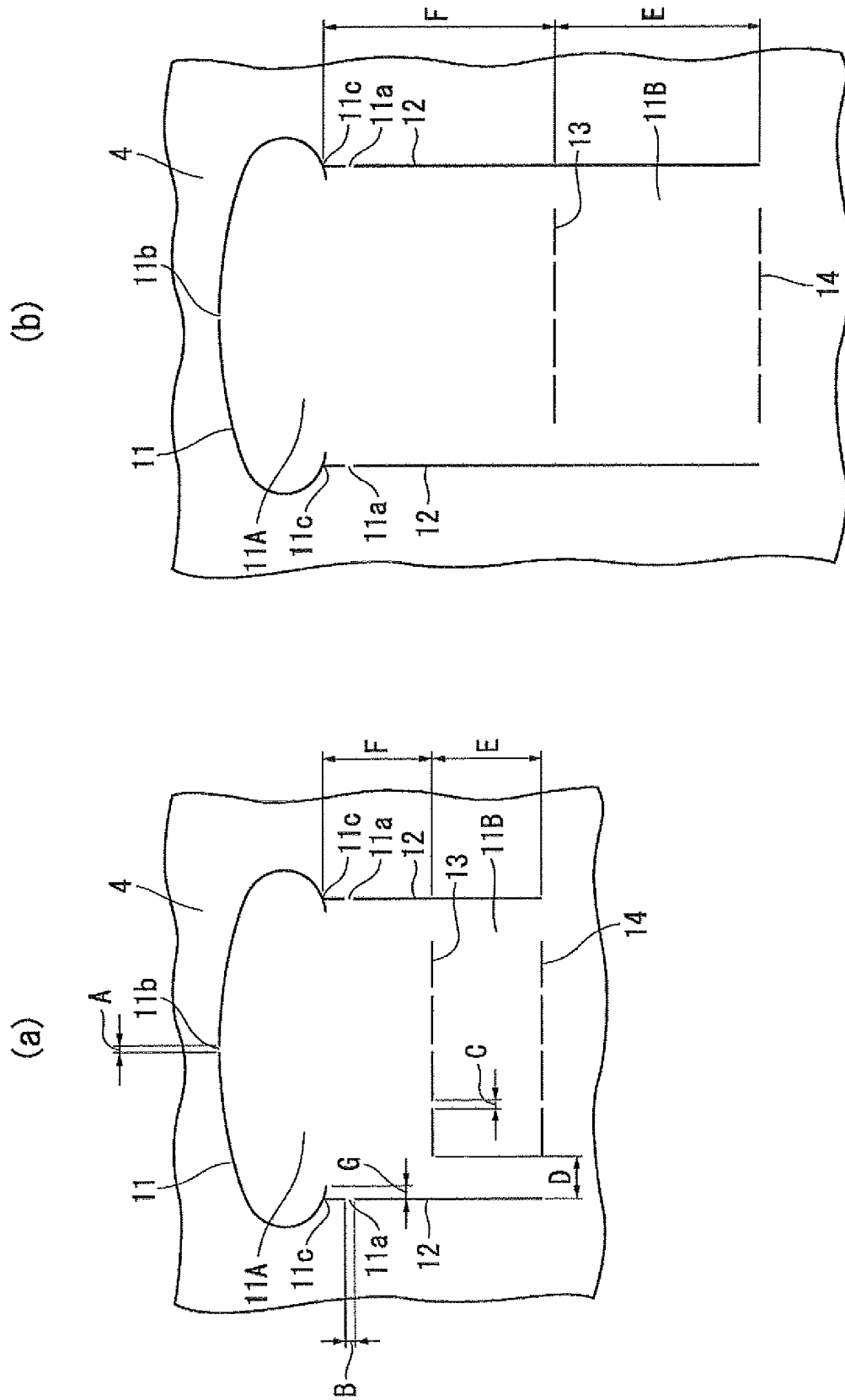


FIG. 7

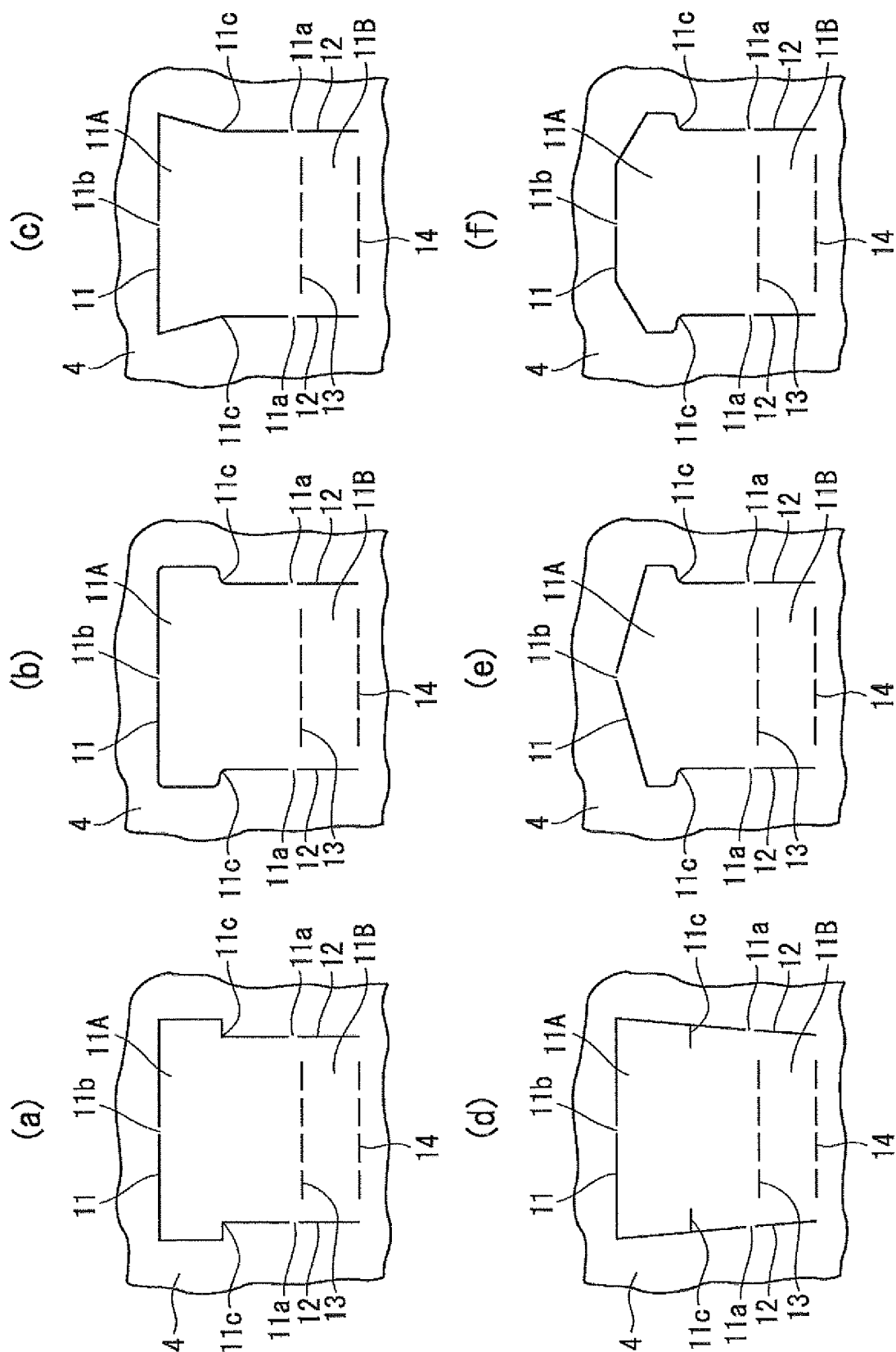
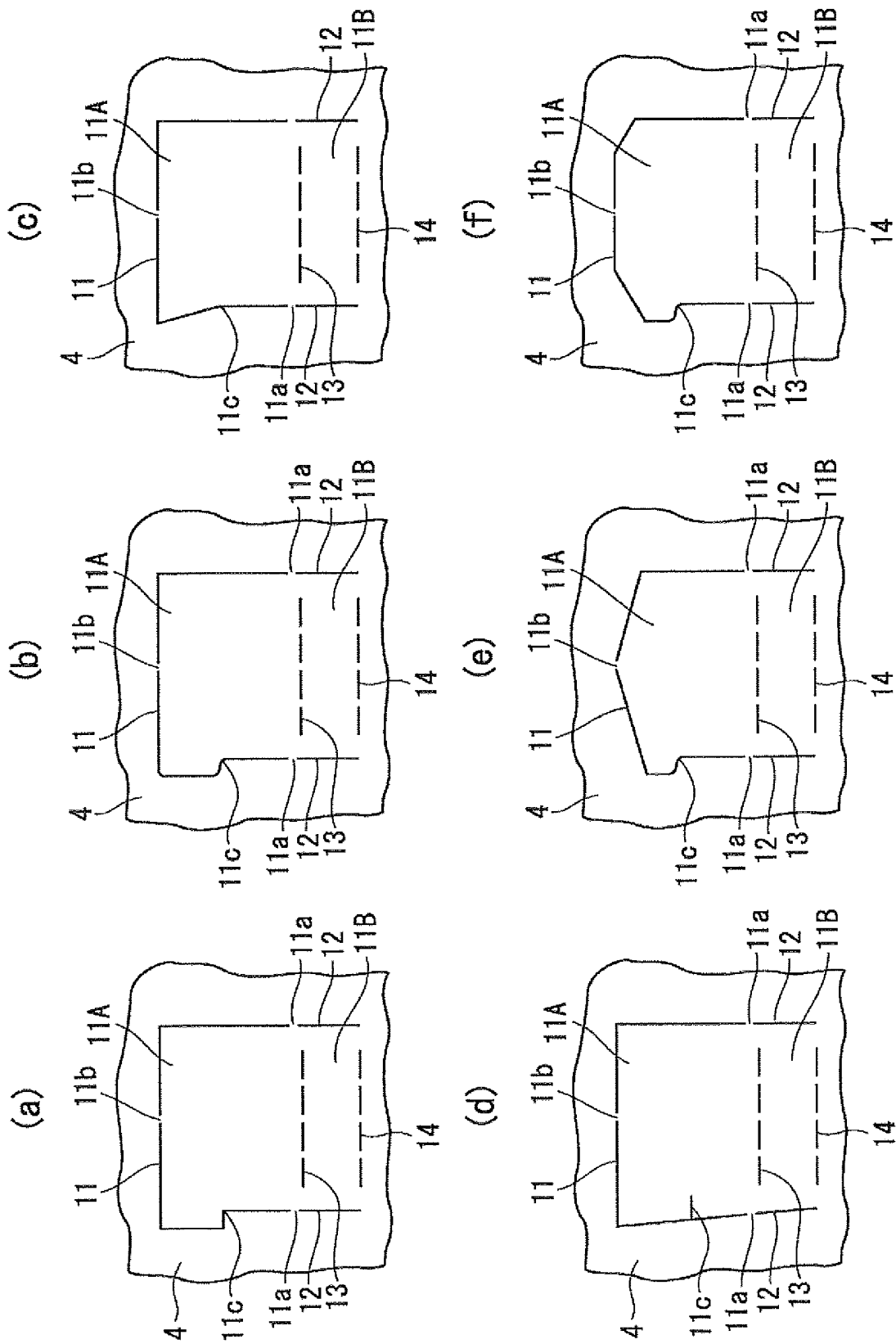


FIG. 8



INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2022/012563

A. CLASSIFICATION OF SUBJECT MATTER

B65D 47/06(2006.01)i; **A47G 19/22**(2006.01)i; **B65D 3/00**(2006.01)i
 FI: B65D47/06; A47G19/22 D; B65D3/00 B

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)

B65D47/06; A47G19/22; B65D3/00

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.
A	US 2016/0015199 A1 (GREEN, Marie) 21 January 2016 (2016-01-21) paragraph [0211], fig. 33	1-12
A	WO 2021/020511 A1 (YAMADA, Kikuo) 04 February 2021 (2021-02-04)	1-12
A	JP 2007-030984 A (IKOMA KAGAKU KOGYO KK) 08 February 2007 (2007-02-08)	1-12
A	JP 2002-002751 A (JOHNSON & JOHNSON CONSUMER COMPANIES, INC.) 09 January 2002 (2002-01-09)	1-12

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

* Special categories of cited documents:	"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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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

02 May 2022

Date of mailing of the international search report

24 May 2022

Name and mailing address of the ISA/JP

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Authorized officer

Telephone No.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/JP2022/012563

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
US	2016/0015199	A1	21 January 2016	US	2017/0020317	A1	
				US	2017/0197763	A1	
				US	2019/0150643	A1	
				WO	2016/011455	A1	
				EP	3169596	A1	
WO			2021/020511 A1	04 February 2021	(Family: none)		
JP			2007-030984 A	08 February 2007	(Family: none)		
JP			2002-002751 A	09 January 2002	US	2001/0020623	A1
				US	2004/0099674	A1	
				EP	1112710	A2	
				KR	2001-0062798	A	
				CN	1318336	A	

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2021014286 A [0007]