



(12) **EUROPEAN PATENT APPLICATION**  
published in accordance with Art. 153(4) EPC

(43) Date of publication:  
**14.01.2015 Bulletin 2015/03**

(51) Int Cl.:  
**B65D 83/08** <sup>(2006.01)</sup> **A47K 7/00** <sup>(2006.01)</sup>

(21) Application number: **13758311.8**

(86) International application number:  
**PCT/JP2013/001115**

(22) Date of filing: **26.02.2013**

(87) International publication number:  
**WO 2013/132782 (12.09.2013 Gazette 2013/37)**

(84) Designated Contracting States:  
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR**  
Designated Extension States:  
**BA ME**

(72) Inventor: **Yamada, Kikuo**  
**Shinagawa-ku**  
**Tokyo 141-0022 (JP)**

(30) Priority: **05.03.2012 JP 2012047807**

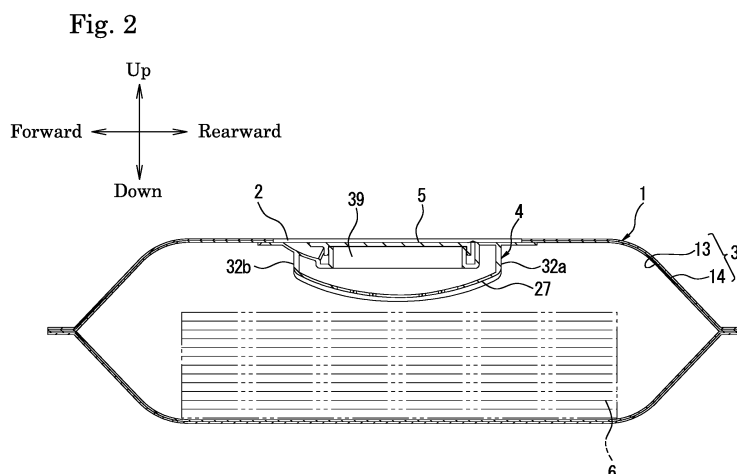
(74) Representative: **Wagner, Matthias**  
**Müller-Gerbes Wagner Albiger**  
**Patentanwälte**  
**Friedrich-Breuer-Straße 72-78**  
**D-53225 Bonn (DE)**

(71) Applicant: **Yamada, Kikuo**  
**Shinagawa-ku**  
**Tokyo 141-0022 (JP)**

(54) **WET TISSUE PACKAGING UNIT**

(57) This invention provides a wet tissue packaging unit capable of reliably sealing a storage container and maintaining a continuous body of wet tissues in a moist state. A wet tissue packaging unit provided with: a storage container, which is capable of storing a continuous body of wet tissues in which separating parts are formed at each of prescribed intervals, and in which is formed an opening for pulling out, towards the outside, a wet tissue that has separated from the continuous body of wet tissues at the separating part; a take-out port formation member having a take-out port formation part, which

is attached to the opening of the storage container and in which is formed a take-out port for imparting resistance when the continuous body of wet tissues passes there-through, and a storage space capable of storing the leading end of the continuous body of wet tissues that passed through the take-out port; and a cover section that freely opens and closes from the outside of the storage space, wherein there is provided a linking part for linking the storage space of the take-out port formation member and the space inside the storage container in an area other than the take-out port.



## Description

## Technical Field

**[0001]** The present invention relates to a wet tissue packaging unit that accommodates and packs a wet tissue continuing material body formed by a plurality of wet tissues, in an accommodation container.

## Background Art

**[0002]** Hitherto, a wet tissue used for wiping hands or buttocks of babies, patients, and elderly people is widely known. The wet tissue is formed by impregnating a chemical solution and the like into a ground fabric. The wet tissue is accommodated in a sealed accommodation container so that the ground fabric may be maintained in a wet state by the chemical solution and the like, and is formed to be extracted from the accommodation container as needed basis.

**[0003]** As the accommodation container, a cylindrical bottle type container has been widely used from the past. In many cases, the bottle type accommodation container accommodates a wet tissue continuing material body which is wound in a roll shape. The wet tissue continuing material body is provided with separating portions (i.e., dividing portions) by breaks of perforation lines or the like at predetermined intervals, and when the wet tissue continuing material body is divided at the dividing portion by cutting a part of the wet tissue continuing material body at the dividing portion or the like, a sheet-like wet tissue is obtained.

**[0004]** In recent years, instead of the bottle type wet tissue packaging unit, a bag type wet tissue packaging unit provided with a bag-like accommodation container has been used in many cases. The bag type wet tissue packaging unit accommodates an interfolded wet tissue continuing material body in a bag body and is formed so that wet tissues forming the wet tissue continuing material body are extracted to the outside from an opening which is opened to the bag body. The opening of the bag body is formed so that a wet tissue is separated from the wet tissue continuing material body at the dividing portion formed in the wet tissue continuing material body. Further, the bag body is generally provided with a lid for opening and closing the opening. As the lid, for example, a flap-like lid which is formed by a film material such as a material of the bag body has been widely used (e.g., Patent Literatures 1 and 2).

## Citation List

## Patent Literatures

**[0005]**

Patent Literature 1: JP 2004-196303 A  
Patent Literature 2: JP 2010-173649 A

## Summary of Invention

## Technical Problem

**[0006]** In the bag type wet tissue packaging unit formed as described above, the lid is attached to the vicinity of the surface of the bag body to close the opening when a user does not extract a wet tissue. In the wet tissue packaging unit, the inside of the bag body is kept in a sealed state by the lid such that the chemical solution and the like impregnated into the wet tissue accommodated in the bag body are prevented from volatilizing.

**[0007]** In addition, at a position inside the lid, an extraction hole which applies a friction resistance to the wet tissue continuing material body when the wet tissue packaging unit is drawn out while passing therethrough is formed. Then, when a predetermined or higher resistance is applied to the wet tissue continuing material body during the extraction, the wet tissue continuing material body is divided at the dividing portion, which is close to the drawing end, due to the resistance.

**[0008]** However, in the bag type wet tissue packaging unit, when the wet tissue is consumed, the volume of the wet tissue continuing material body inside the bag body decreases, the wet tissue continuing material body easily passes and hence the timing at which the wet tissue is divided at the dividing portion is delayed. Then, the front end of the wet tissue continuing material body that is divided and remains is excessively drawn out from the opening which has to be sealed by the lid, and the wet tissue packaging unit may not be reliably sealed. Accordingly, there is a problem in that the wet tissue may not be maintained in a wet state.

**[0009]** The present invention is made in view of such problems, and an object thereof is to provide a wet tissue packaging unit, i.e. a wet tissue package, capable of further sealing an accommodation container and maintaining a wet tissue accommodated in the accommodation container in a wet state.

## Solution to Problem

**[0010]** The present invention may be summarized as below.

(1) A wet tissue packaging unit including: an accommodation container that accommodates a wet tissue continuing material body having a dividing portion formed therein at a predetermined interval, and includes an opening formed to draw out a wet tissue divided from the wet tissue continuing material body at the dividing portion to the outside; an extraction hole forming member that is attached to the opening of the accommodation container and includes an extraction hole forming portion having an extraction hole formed to apply a resistance when the wet tissue continuing material body passes therethrough and an accommodation space which accommodates a

front end of the wet tissue continuing material body that passes through the extraction hole; a lid that is provided at the outside of the accommodation space so as to freely close and open the accommodation space; and a communicating portion that allows the accommodation space of the extraction hole forming member and a space in the accommodation container to communicate with each other in an area excluding the extraction hole.

(2) The wet tissue packaging unit according to (1), wherein the communicating portion is provided in a peripheral edge area of a bottom portion of the accommodation space.

(3) The wet tissue packaging unit according to (2), wherein the extraction hole forming portion is formed in a plate that is convexly curved toward the inner side of the accommodation container, and the communicating portion is formed by the convexly swollen area.

(4) The wet tissue packaging unit according to any of (1) to (3), wherein the attachment hole forming portion is supported by the attachment hole forming member in a cantilevered manner, and the communicating portion is formed or is widened as a free end of the attachment hole forming portion is turned toward the internal space of the accommodation container on the cantilevered portion as the center.

(5) The wet tissue packaging unit according to (1), wherein the extraction hole forming member is attached to the accommodation container by allowing an attachment surface of the extraction hole forming member to face an inner surface of the accommodation container.

#### Advantageous Effects of Invention

**[0011]** According to the wet tissue packaging unit of the present invention, even when the timing at which the wet tissue continuing material body is divided at the dividing portion is delayed and hence the extra front end portion of the wet tissue continuing material body is drawn out and is lengthened in the accommodation space, the front end portion of the wet tissue continuing material body may be pushed into the accommodation container through the communicating portion so as to be relieved. Since the lid is reliably closed and the accommodation container is sealed, it is possible to prevent the chemical solution and the like impregnated into the wet tissue continuing material body accommodated in the accommodation container from volatilizing. Further, according to the wet tissue packaging unit of the present invention, it is possible to provide the wet tissue in a state where the chemical solution and the like are always impregnated therein for a user.

#### Brief Description of Drawings

**[0012]**

Fig. 1 is an external perspective view illustrating the external configuration of a wet tissue packaging unit according to a first embodiment of the present invention.

Fig. 2 is a cross-sectional view taken along the line A-A of Fig. 1.

Figs. 3A and 3B are views illustrating the configuration of a wet tissue continuing material body, Fig. 3A is a partially enlarged view illustrating the configuration of a separating portion of the wet tissue continuing material body, and Fig. 3B is an explanatory view illustrating the position of the separating portion of the wet tissue continuing material body.

Figs. 4A and 4B are schematic views illustrating another embodiment of a wet tissue continuing material body, Fig. 4A is a view illustrating the wet tissue continuing material body which is folded in a so-called Z-shape, and Fig. 4B is a view illustrating the wet tissue continuing material body which is folded in a so-called WZ-shape.

Figs. 5A and 5B are external perspective views illustrating the external configuration of an extraction hole forming member provided with a lid, Fig. 5A is an external perspective view illustrating a state where the lid is closed, and Fig. 5B is an external perspective view illustrating a state where the lid is opened.

Figs. 6A and 6B are external perspective views illustrating the external configuration of an extraction hole forming member provided with a lid, Fig. 6A is an external perspective view illustrating a state where the lid is opened and a partitioning portion is removed, and Fig. 6B is an external perspective view illustrating the external configuration in a case where the extraction hole forming member is seen from the lower surface thereof.

Figs. 7A and 7B are cross-sectional views of the extraction hole forming member, Fig. 7A is a cross-sectional view taken along the line B-B of Fig. 5B, and Fig. 7B is a cross-sectional view taken along the line C-C of Fig. 6A.

Figs. 8A, 8B, and 8C are explanatory views illustrating a procedure of removing the partitioning portion, Fig. 8A is an explanatory view illustrating a state before the partitioning portion is removed, Fig. 8B is an explanatory view illustrating a state where the partitioning portion is being removed, and Fig. 8C is an explanatory view illustrating a state where the partitioning portion is removed.

Figs. 9A and 9B are explanatory views illustrating a procedure when a wet tissue is extracted and the operational effects of the wet tissue packaging unit according to the present invention, Fig. 9A is an explanatory view illustrating a state of the wet tissue packaging unit at the time of putting a finger into a pinching hole, and Fig. 9B is an explanatory view illustrating a state where the front end of the wet tissue continuing material body is being pinched.

Fig. 10 is an explanatory view illustrating a state where the wet tissue continuing material body is drawn out while passing through an extraction hole and the like.

Figs. 11A, 11B, and 11C are explanatory views illustrating a procedure when a wet tissue is extracted and disclosing the operation/working-effect of the wet tissue packaging unit according to the present invention, Fig. 11A is an explanatory view illustrating a state where a wet tissue is being extracted from the pinching hole, Fig. 11B is an explanatory view illustrating a state where the wet tissue is extracted, and Fig. 11C is an explanatory view illustrating a state where wet tissues are accommodated in an accommodation space.

Figs. 12A and 12B are views illustrating the external configuration of an extraction hole forming member of a wet tissue packaging unit according to a second embodiment of the present invention, Fig. 12A is an external perspective view illustrating a state where a lid is opened, and Fig. 12B is a top view illustrating a state where a closing portion is removed.

Figs. 13A and 13B are external perspective views illustrating an extraction hole forming member of a wet tissue packaging unit according to a third embodiment of the present invention, Fig. 13A is an external perspective view illustrating a state where a lid is closed, and Fig. 13B is an external perspective view illustrating a state where the lid is opened.

Figs. 14A and 14B are external perspective views illustrating the external configuration of an extraction hole forming member provided with a lid, Fig. 14A is an external perspective view illustrating a state where the lid is opened and a partitioning portion is removed, and Fig. 14B is an external perspective view illustrating the external configuration in a case where the extraction hole forming member is seen from the lower surface thereof.

Figs. 15A, 15B, and 15C are explanatory views illustrating a procedure of extracting a wet tissue and illustrating the operation of a wet tissue packaging unit according to a third embodiment, Fig. 15A is an explanatory view illustrating a state before the wet tissue is drawn out, Fig. 15B is an explanatory view illustrating a state where the wet tissue is being drawn out, and Fig. 15C is an explanatory view illustrating a state where wet tissues are accommodated in an accommodation space.

Figs. 16A and 16B are external perspective views illustrating an extraction hole forming member of a wet tissue packaging unit according to a fourth embodiment of the present invention, Fig. 16A is an external perspective view illustrating a state where a lid is opened and a partitioning portion is removed, and Fig. 16B is an external perspective view illustrating the external configuration in a case where the extraction hole forming member is seen from the lower surface thereof.

Figs. 17A, 17B, and 17C are explanatory views illustrating the operation of the wet tissue packaging unit according to the fourth embodiment, Fig. 17A is an explanatory view illustrating a state before a wet tissue is drawn out, Fig. 17B is an explanatory view illustrating a state where the wet tissue is being drawn out, and Fig. 17C is an explanatory view illustrating a state where wet tissues are accommodated in an accommodation space.

## Description of Embodiments

**[0013]** The configuration of a first embodiment of a wet tissue packaging unit, i.e. a wet tissue package, according to the present invention will be described with reference to Figs. 1 to 11C. Further, it is assumed that the up-down direction, the forward-rearward direction (or front-back direction), and the right-left direction in the present specification indicate the up-down direction, the forward-rearward direction, and the right-left direction illustrated in Fig. 1, respectively. Furthermore an example, in which a bag body is used as one kind of accommodation container, is described in the present specification. Any member other than the bag body may be arbitrarily selected to be used as the accommodation container. For example, as the accommodation container, a container that is formed of a resin material such as plastic may be used. In the present specification, the "unused item of the wet tissue packaging unit" indicates that a wet tissue continuing material body, or a continuous body of wet tissues, accommodated in the accommodation container in the manufacturing process has never been extracted from the accommodation container and a partitioning portion and a closing portion to be described later are not removed.

**[0014]** As illustrated in Fig. 1, a wet tissue packaging unit 1 according to this embodiment includes a bag body 3 (i.e., accommodation container) having an opening 2 that is opened to the upper portion thereof, an extraction hole forming member 4 which is attached to the inner surface of the bag body 3 by an arbitrary method such as hot-melt, and a lid 5 which is attached to the extraction hole forming member 4. Further, as illustrated in Fig. 2, the wet tissue packaging unit 1 accommodates a wet tissue continuing material body 6 inside the bag body 3.

**[0015]** First, the configuration of the wet tissue continuing material body 6 will be described. In the present specification, the "wet tissue continuing material body" indicates a wet tissue continuing material body that is piled in a folded shape by a method to be described later and is accommodated in the bag body 3, and a "wet tissue" indicates both a sheet-like tissue separated from the wet tissue continuing material body 6 and a sheet-like tissue forming the wet tissue continuing material body 6. This embodiment and second to fourth embodiments to be described later are described by using a wet tissue continuing material body that is piled in a folded shape as an example of the wet tissue continuing material body,

but the configuration of the wet tissue continuing material body is not limited thereto. For example, as the wet tissue continuing material body, a body that is wound in a roll shape or has the other configurations may be used.

**[0016]** The wet tissue continuing material body 6 is formed by impregnating a chemical solution and the like into a ground fabric formed by paper made from synthetic fabric or natural fabric, woven cloth, or non-woven cloth. As the chemical solution and the like, alcohol, water, or the mixture thereof may be exemplified. Further, the chemical solution may be arbitrarily selected from perfume, antibacterial agent, refresher, surfactant, antiseptic agent, pigment, antifoam agent, antioxidizing agent, clarifying agent, solubilizing agent, pH adjuster, and the like and mixed therewith. Furthermore, the above-described materials of the ground fabric and the chemical solution and the like forming the wet tissue continuing material body 6 are merely examples, and the materials other than the above-described materials may be arbitrarily selected to be used.

**[0017]** Structures of the wet tissue continuing material body 6 include both followed structures. In one kind of the structures, a wet tissue continuing material body is formed so that wet tissues are connected to each other by the perforation lines or the like, and in another kind of the structures, a wet tissue continuing material body that is formed so that each of separate wet tissues is bent and folded in a Z-shape or the like to be described later and the plurality of folded wet tissues contact one another. In addition, in the present specification, the separation of the wet tissue from the wet tissue continuing material body 6 indicates that, for example, in a case where the wet tissues are connected by the perforation lines or the like, the wet tissue continuing material body 6 is torn at the position of the perforation lines or the like and a portion that becomes the wet tissue is separated from the wet tissue continuing material body 6. Further, the separation indicates that, in a case where the wet tissue continuing material body 6 is formed to have a structure in which each of the separate wet tissues is appropriately folded in a Z-shape to be described later and the plurality of wet tissues contact one another, the front end of single wet tissue is took off from the contact portion of the plurality of wet tissues so as to be separated from the wet tissue continuing material body 6. Furthermore, a portion where the wet tissue is separated from the wet tissue continuing material body 6 is called a dividing portion.

**[0018]** A specific example of the wet tissue continuing material body 6 will be described. The wet tissue continuing material body 6 illustrated in Figs. 3A and 3B includes first turnback portions 8 and second turnback portions 9 as a plurality of turnback portions and is piled in a continuously folded shape. The wet tissue continuing material body 6 is provided with separating portions 10 (i.e., dividing portions) at predetermined intervals. The separating portion 10 is formed to be separated (i.e., divided) by a tensile force that is applied when the front end of the wet tissue continuing material body 6 is drawn

out. Fig. 3A illustrates an example of the separating portion 10 of the wet tissue continuing material body 6 according to this embodiment. The separating portion 10 is formed to be separated by a tensile force applied to the wet tissue continuing material body 6 when the front end of the wet tissue continuing material body 6 is drawn out. As illustrated in Fig. 3A, the separating portion 10 is provided with a plurality of spaces 11 at predetermined intervals in the right-left direction of the wet tissue continuing material body 6, and connecting portions 12 which connect the wet tissues 7 forming the wet tissue continuing material body 6 are formed between the spaces 11. In this embodiment, the connecting portions 12 are formed at three positions with respect to the right-left direction of the wet tissue continuing material body 6, but the shape of the connecting portion 12 is not limited thereto. Further, the separating portion 10 may be formed to be separated when a tensile force is applied thereto. For example, the separating portion 10 may be formed in a perforation line shape by reducing the interval between the space 11 and the connecting portion 12 or in the other shapes.

**[0019]** Fig. 3B is an explanatory view illustrating where the separating portion 10 is located in the wet tissue continuing material body 6. In this drawing, the points indicated by black circles represent the positions of the separating portions 10. As illustrated in Fig. 3B, the wet tissue continuing material body 6 is formed so that the separating portion 10 is located at the center portion between the first turnback portion 8 and the second turnback portion 9, and as the vertical relation, a portion with the separating portion 10 and a portion without the separating portion 10 are alternated.

**[0020]** In the above-described example, the case where the separating portion 10 is formed as the dividing portion in the wet tissue continuing material body 6. However, the shape of the wet tissue continuing material body 6 is not limited thereto and may be formed in the other shapes. Specifically, as exemplified below, the wet tissue continuing material body 6 may be formed so that a predetermined portion where two folded separate wet tissues overlap each other becomes the separating portion (i.e., the dividing portion). An example of the configuration of another shape of the wet tissue continuing material body 6 is illustrated in Figs. 4A and 4B. Fig. 4A illustrates a wet tissue continuing material body which is folded in a so-called Z-shape, and Fig. 4B illustrates the configuration of a wet tissue continuing material body which is folded in a so-called WZ-shape. Further, the structure of folding the wet tissue continuing material body 6 may be a structure in which when a wet tissue 7 is raised, the next wet tissues 7 are sequentially and continuously raised, and after the wet tissue 7 is divided from the next wet tissue 7, the next wet tissue 7 is in the state in which its end pops up from an extraction hole 26 to be described later (hereinafter, this state is referred to as "pop-up"). The configuration may also have a W-shape or the other shapes other than the above-described Z-shape and the

WZ-shape.

[0021] As illustrated in Fig. 4A, the wet tissue continuing material body 6 having a Z-shaped folded structure is formed by a plurality of layered wet tissues which are respectively folded in a Z-shape. In addition, the wet tissue continuing material body 6 having the Z-shaped folded structure is piled so that an upper surface 7c of a termination end of a wet tissue 7a overlaps a lower surface 7d of a start end of the next wet tissue 7b. When the wet tissue 7a is drawn out, the termination end of the wet tissue 7a acts to raise the start end of the next wet tissue 7b. Then, when the start end of the next wet tissue 7b is drawn out from the extraction hole 26 to be described later to the upper portion of the extraction hole 26, the termination end of the wet tissue 7a and the start end of the next wet tissue 7b are divided from each other. That is, a portion where the termination end of the wet tissue 7a and the start end of the next wet tissue 7b overlap forms the separating portion (i.e., the dividing portion), and the wet tissue 7a is separated from the wet tissue continuing material body 6 having the next wet tissue 7b at the dividing portion.

[0022] As illustrated in Fig. 4B, the wet tissue continuing material body 6 having a WZ-shaped folded structure is formed by alternately piling a wet tissue 7e folded in a Z-shape and a wet tissue 7f folded in a W-shape. In the case of Fig. 4B, the wet tissue continuing material body 6 is piled so that an upper surface 7g of a termination end of a wet tissue 7e folded in a Z-shape overlaps a lower surface 7h of a start end of the next wet tissue 7f folded in a W-shape. When the wet tissue 7e folded in a Z-shape is drawn out, the termination end of the wet tissue 7e acts to raise the start end of the next wet tissue 7f folded in a W-shape. Then, when the start end of the wet tissue 7f folded in a W-shape is drawn out from the extraction hole 26 to be described later to the upper portion of the extraction hole 26, the termination end of the wet tissue 7e folded in a Z-shape and the start end of the wet tissue 7f folded in a W-shape are divided from each other. Furthermore, the wet tissue is raised by the same operation even when the start end of a wet tissue 7i folded in a Z-shape is drawn out after the wet tissue 7f folded in a W-shape is drawn out. That is, a portion where the termination end of the wet tissue 7e overlaps the start end of the next wet tissue 7f and a portion where the termination end of the wet tissue 7f overlaps the start end of the next wet tissue 7i form the separating portions (i.e., the dividing portions), and the wet tissues 7e and 7f are separated from the wet tissue continuing material body 6 having the next wet tissues 7f and 7i at the dividing portions.

[0023] Furthermore, the configuration of the wet tissue continuing material body 6 is not limited to the above-described configuration. The configuration of the wet tissue continuing material body 6 may be formed in any shape as long as the wet tissue continuing material body may be accommodated in the bag body 3. For example, in this embodiment, the position of the separating portion

10 is located at the center portion between the first turnback portion 8 and the second turnback portion 9. However, the separating portion 10 may be disposed at a position other than the center portion. Further, the separating portion 10 may be disposed at a position where the first turnback portion 8 or the second turnback portion 9 is formed. Further, in this embodiment, as for the vertical relation of the wet tissue continuing material body 6, a portion with the separating portion 10 and a portion without the separating portion 10 are alternated. However, the portions with the separating portion 10 may overlap each other in the up-down direction. Further, the separating portion 10 may be located at both positions where the first turnback portion 8 and the second turnback portion 9 are formed. Furthermore, the separating portion may have a configuration other than the above-described configuration.

[0024] Next, the configuration of the bag body 3 will be described. The bag body 3 is an accommodation container that accommodates the wet tissue continuing material body 6 therein. The bag body 3 is formed in, for example, a pillow-like bag shape by a plastic film having airtightness and flexibility or the like. As illustrated in Fig. 1, the bag body 3 is formed so that both ends in the forward-rearward direction are air-tightly sealed by heat-seal or the like.

[0025] As illustrated in Fig. 2, the bag body 3 is formed in a double-layer structure with an inner layer 13 and an outer layer 14. In the inner layer 13, for example, a film formed of plastic such as polyethylene, polypropylene, polyester, polyamide, vinyl chloride, vinylidene chloride, and cellophane, a laminate film formed of two or more of these materials, or a complex film formed by laminating an aluminum foil on these single or complex laminate films may be used. In the outer layer 14, for example, a polyethylene terephthalate (PET) film may be used. Furthermore, in this embodiment, the bag body 3 formed by two layers, that is, the inner layer 13 and the outer layer 14 is used, but the structure of the bag body 3 is not limited thereto. For example, the bag body 3 may be formed as a multi-layer structure having three or more layers or a single-layer structure. Further, the materials of the inner layer 13 and the outer layer 14 are not limited to the above-described materials.

[0026] As illustrated in Figs. 1 and 2, the bag body 3 is provided with an opening 2. Through the opening 2, the wet tissue 7 separated from the wet tissue continuing material body 6 that is accommodated in the bag body 3 as the accommodation container is drawable to the outside. In this embodiment, the opening 2 is formed as a square opening in the upper portion of the bag body 3, but the shape of the opening 2 is not limited thereto. Further, the opening 2 may be formed to allow the wet tissue 7 to be drawable therethrough to the outside, and the size of the opening 2 may be arbitrarily adjusted.

[0027] As illustrated in Fig. 2, the extraction hole forming member 4 is attached to the inside of the bag body 3. The extraction hole forming member 4 is disposed at

such a position that the positions of a pinching hole 22 to be described later and the extraction hole 26 coincide with the position of the opening 2 of the bag body 3 so as to align themselves. As a method of attaching the extraction hole forming member 4 to the bag body 3, for example, a method using hot-melt or the like may be exemplified, but the present invention is not limited thereto, and various methods may be arbitrarily selected. Further, in the present specification, the description is provided by using the example in which the extraction hole forming member is disposed at the position so that the positions of the pinching hole and the extraction hole coincide with the position of the opening of the bag body so as to align themselves. The positions of the pinching hole, the extraction hole, and the opening may not coincide with each other.

**[0028]** As illustrated in Fig. 5A, the extraction hole forming member 4 and the lid 5 according to this embodiment may be integrally molded with each other through a hinge portion 5a.

**[0029]** For example, the extraction hole forming member 4 is formed of a thermoplastic resin material such as polyethylene and polypropylene. In this embodiment, the description is provided by using the extraction hole forming member 4 which is integrally molded by an injection molding method or the like, but the extraction hole forming member 4 may also be formed by the combination of the separately molded members. Further, the extraction hole forming member 4 may be formed by a method other than the above-described method.

**[0030]** As illustrated in Figs. 5A, 5B, and 6A, the extraction hole forming member 4 includes a base plate 21 as a base portion for attaching the extraction hole forming member 4 to the bag body 3, an accommodation space 23 which accommodates a front end 6a, or a leading end 6a, of the wet tissue continuing material body 6 through the pinching hole 22 through which the wet tissue 7 is drawn out from the bag body 3, and an extraction hole forming portion 27 having the extraction hole 26 which is opened to separate the wet tissue 7 at the separating portion 10 of the wet tissue continuing material body 6. Further, the extraction hole forming member 4 provided in this example includes a partitioning portion 24 and a fragile portion 25. The partitioning portion 24 is provided or arranged to close the pinching hole 22 and partitions the accommodation space 23 into a plurality of sections. The fragile portion 25 is formed at the peripheral edge portion of the partitioning portion 24 and is broken when a predetermined shear force is applied thereto.

**[0031]** The base plate 21 is formed in a flat square plate shape, and is formed so that the upper surface thereof becomes an attachment surface when the base plate 21 is attached to the inner surface of the bag body 3. The reference numeral 28 of Fig. 5A indicates the attachment surface. In the state where the extraction hole forming member 4 is attached to the bag body 3, the attachment surface 28 provided in the base plate 21 faces the inner surface of the bag body 3. Further, the base

plate 21 is integrally molded with the lid 5 through the hinge portion 5a. The base plate 21 is provided with an extraction concave portion 29 at the substantially center portion thereof. The extraction concave portion 29 is formed in a concave shape so that the position thereof in the height direction is lower than the position of the base plate 21 at one step lower. Further, the extraction concave portion 29 is formed in a circular shape in the top view of the extraction hole forming member 4.

**[0032]** A vertical wall portion 30 is uprightly formed in the extraction concave portion 29. The vertical wall portion 30 is formed in a circular shape in the top view of the extraction hole forming member 4. Further, the vertical wall portion 30 is formed so that the outer diameter of the vertical wall portion 30 is smaller than the inner diameter of the extraction concave portion 29. Furthermore, the vertical wall portion 30 is formed at a position where the center position of an inner wall 29a of the extraction concave portion 29 coincides with the center position of the vertical wall portion 30. That is, the vertical wall portion 30 is formed so that a circle drawn by the inner wall 29a of the extraction concave portion 29 is concentric with a circle drawn by the vertical wall portion 30. Further, as illustrated in Figs. 7A and 7B, the vertical wall portion 30 is formed so that the position of the upper surface thereof in the height direction is lower than the position of the upper surface of the base plate 21 in the height direction and when the lid 5 is closed, the upper surface of the lid 5 and the upper surface of the base plate 21 are substantially flush with each other. In the present specification, the description is provided by using the example in which the center position of the vertical wall portion 30 coincides with the center position of the inner wall 29a, but the positions thereof may not coincide with each other.

**[0033]** As illustrated in Fig. 6A, the pinching hole 22 allows a user to pinch the front end 6a of the wet tissue continuing material body 6 forming the wet tissues 7 when the user extracts the wet tissue 7 so that the wet tissue 7 is drawn out from the bag body 3. The pinching hole 22 is opened to the inner peripheral side of the vertical wall portion 30. The pinching hole 22 is formed in a size in which the user may pinch the front end 6a of the wet tissue continuing material body 6 accommodated in the bag body 3 with a finger to extract the front end 6a. In this embodiment, the hole diameter of the pinching hole 22 is substantially the same as the inner diameter of the vertical wall portion 30. Further, the hole diameter of the pinching hole 22 may be determined so that the user may pinch the front end 6a of the wet tissue continuing material body 6 with a finger to extract the front end 6a, and is not limited to the size and shape of this embodiment. That is, sizes and shapes may be arbitrarily selected. For example, when the pinching hole 22 is formed to be large, the user easily inserts a finger into the pinching hole 22, and hence the front end 6a of the wet tissue continuing material body 6 is easily drawn out during the drawing, thereby enhancing handleability. In contrast, when the

pinching hole 22 is formed to be small, the extraction hole forming member 4 may be decreased in size, and the manufacturing cost of the extraction hole forming member 4 may be largely reduced. The shape of the pinching hole in the top view of the pinching hole may be a shape other than a circular shape.

**[0034]** As illustrated in Fig. 5B, in a case where the wet tissue packaging unit 1 is the unused item, the pinching hole 22 is closed by the partitioning portion 24 to be described later and is opened by removing the partitioning portion 24 as illustrated in Fig. 6A.

**[0035]** The accommodation space 23 accommodates the front end 6a of the wet tissue continuing material body 6 through the pinching hole 22 and is a space indicated by the dotted line in Fig. 7B. The accommodation space 23 is sealed together with the internal space of the bag body 3, with a gap, when the lid 5 is closed. Regarding the wet tissue packaging unit 1, in the case where the wet tissue packaging unit 1 is the unused item, the pinching hole 22 is closed by the partitioning portion 24. Therefore, the accommodation space 23 is partitioned into a space that communicates with the inside of the bag body 3 and a space that communicates with the outside of the bag body 3 by the partitioning portion 24. Further, when the partitioning portion 24 is removed and the pinching hole 22 is opened, the accommodation space 23 is formed as a space indicated by the dotted line in Fig. 7B.

**[0036]** The partitioning portion 24 partitions the bag body 3 into the inside and the outside by closing the pinching hole 22. Further, the partitioning portion 24 also separates the accommodation space 23 into the space that communicates with the inside of the bag body 3 and the space that communicates with the outside of the bag body 3. As illustrated in Figs. 5B and 7A, the partitioning portion 24 is formed on the inner peripheral side of the vertical wall portion 30. Further, a tab 31 is integrally formed with the upper portion of the partitioning portion 24. The tab 31 is formed in an annular shape and is formed so that a part of the inner portion thereof is connected to the partitioning portion 24.

**[0037]** The fragile portion 25 is provided in the peripheral edge portion of the partitioning portion 24. As illustrated in Fig. 7A, the fragile portion 25 is formed at the peripheral edge portion of the partitioning portion 24 in a groove shape that is thinner than a thickness of the partitioning portion 24, and is formed to be broken by a stress that occurs due to a predetermined shear force when the shear force is applied. Here, the "predetermined shear force" is a force having a conventionally well-known magnitude needed for the shear failure of the fragile portion 25 provided at the peripheral edge portion of the partitioning portion 24.

**[0038]** The extraction hole forming portion 27 separates the wet tissue 7 at the separating portion 10 provided in the wet tissue continuing material body 6 and allows the front end 6a of the wet tissue continuing material body 6 to pop up. As illustrated in Figs. 2 and 6B, the extraction hole forming portion 27 is formed in a plate

shape that is convexly curved toward the inner side of the bag body 3 and has a pair of leg portions 32a and 32b at both ends of the curved end. Further, the pair of leg portions 32a and 32b is integrally formed with the base plate 21 on the lower side of the base plate 21 and is hence integrally formed with the base plate 21. The extraction hole forming portion 27 is disposed on the lower side of the base plate 21 so that the extraction hole 26 is located below a point where the extraction concave portion 29 of the base plate 21 is formed. Furthermore, the extraction hole forming portion 27 is formed in a curved shape.

**[0039]** As illustrated in Fig. 6B, in the extraction hole forming portion 27, the extraction hole 26 is opened to the substantially center portion of the extraction hole forming portion 27 in the forward-rearward direction. The extraction hole 26 is formed in an elongated hole shape that extends in the right-left direction. The extraction hole 26 is formed in a size in which, when the front end 6a of the wet tissue continuing material body 6 or the like passes therethrough, a friction resistance can be applied to the wet tissue continuing material body 6 that passes therethrough. Further, in the extraction hole forming portion 27, a first slit 33 and a second slit 34 are respectively provided in both ends of the extraction hole 26 in the forward-rearward direction with respect to the extraction hole 26. The first and second slits 33 and 34 are formed in elongated hole shapes that extend in the right-left direction, and the widths thereof in the forward-rearward direction are smaller than the width of the extraction hole 26 in the forward-rearward direction. Furthermore, the first and second slits 33 and 34 are formed so that the widths of the first and second slits 33 and 34 are the same. The first and second slits 33 and 34 are also formed so that, when the front end 6a of the wet tissue continuing material body 6 passes therethrough, a resistance can be applied to the front end 6a of the wet tissue continuing material body 6 that passes therethrough.

**[0040]** Furthermore, in the extraction hole forming portion 27, a first protruding piece 35 is provided between the extraction hole 26 and the first slit 33, and a second protruding piece 36 is provided between the first slit 33 and the second slit 34. The first protruding piece 35 includes a left protruding piece 35a that extends from the left to the right and a right protruding piece 35b that extends from the right to the left, and a first void 37 is provided between the left protruding piece 35a and the right protruding piece 35b. Further, the second protruding piece 36 includes a left protruding piece 36a that extends from the left to the right and a right protruding piece 36b that extends from the right to the left, and a second void 38 is provided between the left protruding piece 36a and the right protruding piece 36b. The first and second voids 37 and 38 are formed to be located on the substantially same straight line in the right-left direction.

**[0041]** As illustrated in Figs. 2 and 6A, the extraction hole forming member 4 is provided with a relief portion 39 (i.e., communicating portion or linking part). The relief



portion 39 allows a portion of the front end 6a which is not accommodated in the accommodation space 23 to be pushed into the bag body 3 so as to be relieved when the front end 6a of the wet tissue continuing material body 6 is pushed into the accommodation space 23. The relief portion 39 is formed to be surrounded by the base plate 21, the extraction hole forming portion 27 that is convexly curved, and the leg portions 32a and 32b and is formed as a communicating portion that allows the accommodation space 23 and the internal space of the bag body 3 to communicate with each other in an area excluding the extraction hole 26 and the like. The relief portion 39 is formed in a convexly curved shape by both sides of a portion of a plate-like attachment hole forming portion that is swollen or expanded in a convex shape. Further, in this embodiment, each of the relief portions 39 is formed in the leftward direction and in the rightward direction, but the points where the relief portions 39 are formed may be, for example, points in the forward direction and in the rearward direction, or the other positions. Furthermore, the size of the relief portion 39 may be arbitrarily selected to be used as long as the front end 6a of the wet tissue continuing material body 6 may move between the accommodation space 23 and the internal space of the bag body 3. The number of relief portions 39 may also be arbitrarily selected.

**[0042]** Furthermore, the extraction hole forming portion 27 of this embodiment is integrally formed with the pair of leg portions 32a and 32b and the base plate 21, but may also be formed separately from the base plate or have the other structures.

**[0043]** The lid 5 is provided on the extraction hole forming member 4 in an openable and closable manner and is configured to close or open the accommodation space 23 provided in the extraction hole forming member 4. Further, the extraction hole forming member 4 and the lid 5 may be molded separately from each other, and may also be molded integrally with each other by a structure other than hinges in a case where they are formed integrally with each other. The lid 5 is formed of the same material as that of the extraction hole forming member 4, for example, a thermoplastic resin material such as polyethylene and polypropylene.

**[0044]** As illustrated in Fig. 6A, the lid 5 is formed integrally with the extraction hole forming member 4 through the hinge portion 5a. The shape of the lid 5 is formed as a circular shape in the top view of the lid 5. Further, a side wall 41 is provided in the peripheral edge portion of the lid 5. The side wall 41 is formed along the peripheral edge portion in the plan view of the lid 5. In this embodiment, the side wall 41 is formed in a circular shape. The side wall 41 is formed so that the center position thereof when the lid 5 is closed is at the same position as those of the pinching hole 22 and the extraction hole 26. Furthermore, the side wall 41 is formed so that the inner diameter thereof is substantially the same as the outer diameter of the vertical wall portion 30 or greater than the outer diameter of the vertical wall portion 30 so

that the inside of the bag body 3 may be sealed by fitting the outer peripheral surface of the vertical wall portion 30 with the inner peripheral surface of the side wall 41 when the lid 5 is closed.

**[0045]** Next, in the wet tissue packaging unit 1 according to this embodiment, a procedure of removing the partitioning portion 24 will be described. In a case where the wet tissue packaging unit 1 according to this embodiment is an unused item that the user does not use yet, as illustrated in Fig. 8A, the partitioning portion 24 of the extraction hole forming member 4 is present. In this case, the pinching hole 22 is closed by the partitioning portion 24, and the accommodation space 23 is also partitioned by the partitioning portion 24. Further, the lid 5 is generally closed, but a state where the lid 5 is opened is illustrated in Fig. 8A.

**[0046]** When the user initially uses the wet tissue packaging unit 1, first, the partitioning portion 24 is removed. In the case of removing the partitioning portion 24, the user pinches the tab 31 with a finger and applies a force in the A direction in Fig. 8B. In this case, since the tab 31 is disposed above the partitioning portion 24, when the user applies the force in the A direction, a force in the B direction is applied to the partitioning portion 24. The force in the B direction is applied to the fragile portion 25 as shear force.

**[0047]** When the shear force in the B direction is applied to the fragile portion 25 by the force in the A direction applied by the user, since the fragile portion 25 is formed to be thinner than the partitioning portion 24, a stress applied to the fragile portion 25 becomes greater than a stress applied to positions other than the fragile portion 25. Therefore, the fragile portion 25 is likely to undergo shear failure, and undergoes shear failure when a predetermined stress is applied thereto such that the partitioning portion 24 is removed from the extraction hole forming member 4. The fragile portion 25 gradually undergoes shear failure from the position to which the predetermined shear force is applied and the entire fragile portion 25 finally undergoes shear failure. When the shear failure of the entire fragile portion 25 occurs, as illustrated in Fig. 8C, the partitioning portion 24 is removed such that the pinching hole 22 is opened.

**[0048]** As illustrated in Fig. 8C, when the partitioning portion 24 is removed as described above, the pinching hole 22 is opened and the accommodation space 23 which has been partitioned by the partitioning portion 24 is formed as a space. When the partitioning portion 24 is removed as described above, the front end 6a of the wet tissue continuing material body 6 that is accommodated in the bag body 3 may be extracted.

**[0049]** Next, a procedure of drawing out the wet tissue continuing material body 6 by the user will be described. When the pinching hole 22 is opened in the above-described procedure, the extraction hole forming portion 27 and the extraction hole 26 of the extraction hole forming member disposed inside the bag body 3 are visible through the pinching hole 22 from the outside of the bag

body 3. This is because the extraction hole forming member 4 is attached at the position which coincides with the position of the pinching hole 22 in the forward-rearward and right-left directions and the position of the opening 2 of the bag body 3 in the forward-rearward and right-left directions.

**[0050]** As illustrated in Fig. 9A, in the wet tissue packaging unit 1, there may be cases where the front end 6a of the wet tissue continuing material body 6 is not drawn above the extraction hole 26 of the extraction hole forming portion 27. For example, there is a case where the wet tissue packaging unit 1 is an unused item, and a case where the front end 6a of the wet tissue continuing material body 6 inside the bag body 3 does not pop up but falls below the extraction hole forming portion 27.

**[0051]** In these cases, the user draws out the front end 6a of the wet tissue continuing material body 6. When the front end 6a is drawn, the user puts a finger into the pinching hole 22 which is opened in the precedent procedure and pushed down the extraction hole forming portion 27 or the like to move the extraction hole forming member 4 (including the upper portion of the bag body 3) in the C direction in Fig. 9A so as to allow the lowest portion of the lower end surface of the extraction hole forming portion 27 to approach the upper surface of the wet tissue continuing material body 6. Further, in Fig. 9A, regarding the extraction hole forming member indicated by the two-dotted chain line, as an example in which the lowest portion is caused to approach the upper surface of the wet tissue continuing material body 6, a state where the lowest portion of the lower end surface of the extraction hole forming portion 27 is brought into contact with the upper surface of the wet tissue continuing material body 6 is illustrated.

**[0052]** Next, as illustrated in Fig. 9B, the user pinches the front end 6a of the wet tissue continuing material body 6 with the fingertip to raise it through the extraction hole 26. At this time, it is desirable that the end portion of the front end 6a of the wet tissue continuing material body 6 be located to extend in the forward-rearward direction and be located at substantially the center portions of the pinching hole 22 and the extraction hole 26 in the right-left direction. The wet tissue continuing material body 6 raised through the extraction hole 26 is drawn out while widening in the forward-rearward and right-left directions as illustrated in Fig. 10. Therefore, a portion of the wet tissue continuing material body 6 which widens in the forward-rearward direction passes through the first and second voids 37 and 38 and the first and second slits 33 and 34 other than the extraction hole 26, and is drawn above the extraction hole forming member 4. Further, in the following description, the extraction hole 26, the first void 37, the second void 38, the first slit 33, and the second slit 34 may be referred to as "the extraction hole 26 and the like". Furthermore, in the concept of the present invention, "the extraction hole 26 and the like" are referred to as "the extraction hole".

**[0053]** At this time, the wet tissue continuing material

body 6 is drawn out while applying a force in the D direction (Fig. 11A) to the first and second protruding pieces 35 and 36 by a resistance that occurs between the first and second protruding pieces 35 and 36. Therefore, while the wet tissue continuing material body 6 is drawn out, the force in the D direction is applied to the first and second protruding pieces 35 and 36 such that the first and second protruding pieces 35 and 36 are elastically deformed by the force in the D direction.

**[0054]** As illustrated in Fig. 11B, when the separating portion 10 in the wet tissue continuing material body 6 passes through the extraction hole 26 and the like, a force in the E direction in Fig. 11B is applied to the front end 6a of the wet tissue continuing material body 6 (the wet tissue 7) on the side lower than the separating portion 10 by the resistance applied when passing through the extraction hole 26 and the like and the restoring forces of the first and second protruding pieces 35 and 36. On the other hand, a force in the F direction in Fig. 11B which is applied as the user raises the wet tissue 7 is applied to the wet tissue 7 on the side upper than the separating portion 10. Therefore, the force in the E direction and the force in the F direction are applied to the separating portion 10 such that the wet tissue 7 on the side upper than the separating portion 10 is separated from the wet tissue 7 on the side lower than the separating portion 10 and the wet tissue 7 on the side upper than the separating portion 10 is extracted to the outside of the bag body 3 as a single sheet-like wet tissue 7. Further, the wet tissue 7 on the side lower than the separating portion 10 becomes a wet tissue 7 forming the front end 6a of the wet tissue continuing material body 6 after being separated.

**[0055]** The wet tissue 7 forming the front end 6a of the wet tissue continuing material body 6 after the separation does not receive the force in the F direction which has been applied by the user in Fig. 11B and thus, tries to move in the G direction in Fig. 11C. At this time, a resistance is applied to the front end 6a when passing through the extraction hole 26 and the like. The resistance at this time is applied in the opposite direction to the G direction in which the wet tissue 7 forming the front end 6a tries to move, and the magnitude of the resistance balances with the magnitude of the force applied when the wet tissue 7 tries to move in the G direction such that the front end 6a of the wet tissue 7 becomes a pop-up state in which the front end 6a is kept in a state of being positioned above the extraction hole forming portion 27. Further, in a case where the front end 6a of the wet tissue continuing material body 6 is not entirely accommodated in the accommodation space 23 at this time, a portion of the front end 6a moves to the internal space of the bag body 3 through the relief portion 39.

**[0056]** After extracting the wet tissue 7, the user closes the lid 5 to seal the bag body 3. When the wet tissue 7 is to be extracted thereafter, the user may open the lid 5 again, insert a finger into the pinching hole 22, pinch the front end 6a of the wet tissue continuing material body 6 which has already popped up and draw out the wet tissue

continuing material body 6. Then, the wet tissue 7 is separated at the separating portion 10 by the same operation as described above such that the sheet-like wet tissue 7 is drawn out.

**[0057]** When the wet tissue 7 is extracted again, even in a case where the front end 6a of the wet tissue continuing material body 6 has not popped up, the wet tissue 7 may be drawn out in the same order described above.

**[0058]** In the wet tissue packaging unit 1 according to this embodiment, as the wet tissues 7 are drawn out, the volume of the wet tissue continuing material body 6 decreases. However, in the wet tissue packaging unit 1 according to this embodiment, the lid 5 is formed in an openable and closable manner with respect to the extraction hole forming member 4. Therefore, even when the volume of the wet tissue continuing material body 6 accommodated in the bag body 3 decreases, the lid 5 may be closed to seal the bag body 3. Therefore, according to the wet tissue packaging unit 1 according to this embodiment, the bag body 3 is prevented from not being maintained in the sealed state and thus the chemical solution and the like impregnated into the wet tissue continuing material body 6 (the wet tissue 7) are prevented from volatilizing. Accordingly, it is possible to provide the wet tissue 7 in a state where the chemical solution and the like are always impregnated therein for the user.

**[0059]** Further, according to the wet tissue packaging unit 1 according to this embodiment, in the case where the wet tissue packaging unit 1 is the unused item, the pinching hole 22 is closed by the partitioning portion 24. To use the wet tissue packaging unit 1, the fragile portion 25 provided in the peripheral edge portion of the partitioning portion 24 is broken to remove the partitioning portion 24 and open the pinching hole 22, and thereafter the front end 6a of the wet tissue continuing material body 6 is pinched. Accordingly, it is possible to very easily determine whether or not the wet tissue packaging unit 1 is the unused item according to the presence or absence of the partitioning portion 24. Therefore, when using the wet tissue packaging unit 1 or purchasing the wet tissue packaging unit 1, it is possible for the user to use or purchase the wet tissue packaging unit 1 after determining whether or not the wet tissue packaging unit 1 is the unused item.

**[0060]** Furthermore, according to the wet tissue packaging unit 1 according to this embodiment, since the extraction hole forming member 4 provided with the lid 5 is attached to the inner surface of the bag body 3, during the manufacture, it is possible to manufacture the wet tissue packaging unit 1 without a process of attaching the lid 5 after attaching the extraction hole forming member 4 to the bag body 3. Therefore, according to the wet tissue packaging unit 1 according to this embodiment, the number of processes may be reduced during the manufacture and hence it is possible to largely reduce the manufacturing cost. Furthermore, the wet tissue packaging unit 1 according to this embodiment includes the relief portion which allows the accommodation space

23 and the internal space of the bag body 3 to communicate with each other. Accordingly, when the front end 6a of the wet tissue continuing material body 6 is to be accommodated in the accommodation space 23, in a case where the front end 6a is not entirely accommodated only in the accommodation space 23, a portion of the front end 6a may be relieved to the inside of the bag body 3 through the relief portion. Therefore, according to the wet tissue packaging unit 1 according to this embodiment, the bag body 3 may be always sealed by closing the lid 5 regardless of the pop-up amount of the front end 6a of the wet tissue continuing material body 6, and hence it is possible to prevent the chemical solution and the like impregnated into the wet tissue continuing material body 6 (the wet tissue 7) from volatilizing.

**[0061]** Next, a second embodiment of the wet tissue packaging unit according to the present invention will be described with reference to Figs. 12A and 12B. Further, the description of the same components as those of the first embodiment will not be repeated and the same reference numerals are used in the description of the second embodiment.

**[0062]** The wet tissue packaging unit according to this embodiment is different from that of the first embodiment described above in the structure of the extraction hole forming member, and hence the structure of the extraction hole forming member will now be described.

**[0063]** An extraction hole forming member 51 according to this embodiment is attached at a position where the positions of an extraction hole 54 and the opening 2 of the bag body 3 coincide with each other on the inner side of the bag body 3. As a method of attaching the extraction hole forming member 51 to the bag body 3, for example, a method using hot-melt or the like may be exemplified, but the present invention is not limited thereto. That is, various methods may be arbitrarily selected.

**[0064]** For example, the extraction hole forming member 51 may be formed of a thermoplastic resin material such as polyethylene and polypropylene. In this embodiment, the description is provided by using the extraction hole forming member 51 which is integrally molded by an injection molding method or the like, but the extraction hole forming member 51 may also be formed by the combination of the separately molded members. Further, the extraction hole forming member 51 may be formed by a method other than the above-described method.

**[0065]** As illustrated in Fig. 12A, the extraction hole forming member 51 includes a base plate 52 as a base portion for attaching the extraction hole forming member 51 to the bag body 3, an accommodation space 53 which can accommodate the front end of the wet tissue continuing material body, and an extraction hole 54 through which the wet tissue continuing material body is separated at the separating portion of the wet tissue continuing material body. Further, the extraction hole forming member 51 illustrated in this example includes a closing portion 55 which is provided to close the extraction hole 54 and a fragile portion 56 which is formed at the peripheral

edge portion of the closing portion 55 and is broken when a predetermined shear force is applied thereto.

[0066] The base plate 52 is formed in a flat square plate shape, and is formed so that the upper surface thereof becomes an attachment surface when the base plate 52 is attached to the inner surface of the bag body. The reference numeral 57 of Fig. 12A indicates the attachment surface. In the state where the extraction hole forming member 51 is attached to the bag body, the attachment surface 57 provided in the base plate 52 faces the inner surface of the bag body. Further, the upper surface of the base plate 52 is integrally molded with the lid 5 through the hinge portion 5a. The base plate 52 is provided with an extraction concave portion 58 at the substantially center portion thereof. The extraction concave portion 58 is formed in a concave shape so that the position thereof in the height direction is lower than the position of the base plate 52 at one step lower. Further, the extraction concave portion 58 is formed in a circular shape in the top view of the extraction hole forming member 51.

[0067] A vertical wall portion 59 is uprightly formed in the extraction concave portion 58. The vertical wall portion 59 is formed in a circular shape in the top view of the extraction hole forming member 51. Further, the vertical wall portion 59 is formed so that the outer diameter of the vertical wall portion 59 is smaller than the inner diameter of the extraction concave portion 58. Furthermore, the vertical wall portion 59 is formed at a position where the center position of an inner wall of the extraction concave portion 58 coincides with the center position of the vertical wall portion 59. That is, the vertical wall portion 59 is formed so that a circle drawn by the inner wall of the extraction concave portion 58 is concentric with a circle drawn by the vertical wall portion 59. Further, the vertical wall portion 59 is formed so that the position of the upper surface thereof in the height direction is lower than the position of the upper surface of the base plate 52 in the height direction and when the lid 5 is closed, the upper surface of the lid 5 and the upper surface of the base plate 52 substantially are flush with each other.

[0068] The accommodation space 53 is a space formed to accommodate the front end 6a of the wet tissue continuing material body 6. The accommodation space 53 is sealed when the lid 5 is closed. The accommodation space 53 is surrounded by the lid 5, the closing portion 55, and the vertical wall portion 59 when the wet tissue packaging unit 1 is the unused item and the lid 5 is closed. Further, when the lid 5 is closed in a case of a used item in which the closing portion 55 is formerly removed, the accommodation space 53 is formed to be surrounded by the lid 5 and the vertical wall portion 59 and to communicate with the internal space of the bag body 3 through the extraction hole 54.

[0069] The extraction hole 54 is formed such that the wet tissue 7 separates at the separating portion 10 provided in the wet tissue continuing material body 6 and the following front end 6a of the wet tissue continuing

material body 6 is allowed to pop up. As illustrated in Fig. 12B, the extraction hole 54 is opened to the base plate 52. The extraction hole 54 is formed so that the user pinches the front end 6a of the wet tissue continuing material body 6 to draw out the front end 6a and the front end 6a of the wet tissue continuing material body 6 is maintained in the pop-up state.

[0070] As illustrated in Fig. 12B, the extraction hole 54 is formed inside an area surrounded by the vertical wall portion 59 and is opened by breaking the fragile portion 56 and removing the closing portion 55. The extraction hole 54 is formed to allow the accommodation space 53 to communicate with the internal space of the bag body 3 so that the front end 6a of the wet tissue continuing material body 6 accommodated in the bag body 3 is pinched, the pinched front end 6a is drawn to the outside of the bag body 3, and furthermore the front end 6a is maintained in the pop-up state. As illustrated in Fig. 12B, the extraction hole 54 includes a pinching portion 61 which is opened at substantially the center portion thereof, is formed to be wide in the forward-rearward direction, and has an elongated hole shape that widens in the right-left direction, a first extraction slit 62 which extends to the left while drawing an arc line from the pinching hole 61, and a second extraction slit 63 which extends to the right while drawing an arc line from the pinching hole 61. The first and second extraction slits 62 and 63 are opened to extend from the pinching hole 61 to the left while drawing a curve with respect to the pinching hole 61 and thereafter extend to the right while drawing a curve. In this embodiment, the shape of the extraction hole is the above-described shape, but is not limited thereto and may be formed in the other shapes. Further, the shape of the extraction hole may not be symmetrical in the right-left direction or may not be symmetrical in the forward-rearward direction.

[0071] The closing portion 55 partitions the bag body 3 into the inside and the outside by closing the extraction hole 54. The closing portion 55 is formed inside the vertical wall portion 59. Further, a tab 60 is integrally formed with the upper portion of the closing portion 55. The tab 60 is formed in an annular shape and is formed so that a part of the inner portion thereof is connected to the closing portion 55.

[0072] The fragile portion 56 is provided in the peripheral edge portion of the closing portion 55. As illustrated in Fig. 12A, the fragile portion 56 is formed at the peripheral edge portion of the closing portion 55 in a groove shape so that a thickness thereof is thinner than a thickness of the closing portion 55. Further the fragile portion 56 is formed to be broken by a stress that occurs due to a predetermined shear force when the shear force is applied. Here, the "predetermined shear force" is a force having a conventionally well-known magnitude needed for the shear failure of the fragile portion 25 provided at the peripheral edge portion of the partitioning portion 24.

[0073] Next, the operation/working-effect of the wet tissue packaging unit according to this embodiment when

the front end 6a of the wet tissue continuing material body 6 is extracted therefrom will be described. Further, in this embodiment, the procedure of removing the closing portion 55 and the procedure of extracting the wet tissue 7 by drawing out the front end 6a of the wet tissue continuing material body 6 after removing the closing portion 55 are the same as those of the first embodiment, and hence the description thereof will not be repeated.

**[0074]** As illustrated in Fig. 12B, in the extraction hole forming member according to this embodiment, the extraction hole 54 includes the pinching hole 61 and the first and second extraction slits 62 and 63. When pinching the front end 6a of the wet tissue continuing material body 6, as needed basis, the user causes the lowest portion of the extraction hole forming member 51 to approach the upper surface of the wet tissue continuing material body 6 and pinches the front end 6a through the pinching hole 61 to be drawn out from the bag body 3. In this case, since the wet tissue continuing material body 6 is located at a position where the user easily pinches the front end 6a, the user may easily pinch the front end 6a of the wet tissue continuing material body 6 to draw out the front end 6a. Further, since the wet tissue continuing material body 6 (the wet tissue 7) which is being drawn out is drawn out while widening in the right-left direction, the wet tissue continuing material body 6 is drawn out while passing through the first and second extraction slits 62 and 63 as well as the pinching hole 61.

**[0075]** Here, since the first and second extraction slits 62 and 63 are formed while drawing the curves as described above, a resistance is applied to the wet tissue continuing material body 6 in the forward-rearward and right-left directions when the wet tissue continuing material body 6 passes through the first and second extraction slits 62 and 63. The resistance is applied in the opposite direction to the direction in which the user draws out the front end 6a of the wet tissue continuing material body 6. Therefore, when the separating portion 10 of the wet tissue continuing material body 6 passes through the extraction hole 54, the wet tissue continuing material body 6 is separated at the separating portion 10 and the sheet-like wet tissue 7 is extracted.

**[0076]** At this time, in the wet tissue continuing material body 6, the front end 6a pops up to the upper portion of the extraction hole 54 and thus tries to move downward. However, even in this case, a resistance is applied to the wet tissue continuing material body 6 by the pinching hole 61 and the first and second extraction slits 62 and 63. The resistance in this case is applied in the opposite direction to the direction in which the front end 6a of the wet tissue continuing material body 6 tries to move downward, and the magnitude of the force balances with the force applied when the front end 6a tries to move. Therefore, the front end 6a of the wet tissue continuing material body 6 does not move downward due to the extraction hole 54 and is maintained in the state of popping up to the upper portion of the extraction hole 54, that is, in the pop-up state. At this time, the front end 6a is accommo-

dated in the accommodation space 53. When the user closes the lid 5, the accommodation space 53 is sealed and hence the wet state of the wet tissue continuing material body 6 accommodated in the accommodation space 53 and the bag body 3 is maintained.

**[0077]** As described above, according to the wet tissue packaging unit according to this embodiment, since the extraction hole 54 is provided in the extraction hole forming member 51 and the pinching hole 61 and the first and second extraction slits 62 and 63 are provided in the extraction hole 51, it is possible to easily extract the wet tissue 7 without complicating the shape of the extraction hole forming member 51. Further, according to the wet tissue packaging unit according to this embodiment, since the lid 5 is provided in the extraction hole forming member 51, even when the volume of the wet tissue continuing material body 6 decreases, the bag body 3 may be sealed only by closing the lid 5. Therefore, it is possible to maintain the wet tissue continuing material body 6 accommodated in the bag body 3 in a wet state and thus it is possible to provide the wet tissue 7 in a state where the chemical solution and the like are always impregnated therein for the user.

**[0078]** Furthermore, according to the wet tissue packaging unit according to this embodiment, in the case where the wet tissue packaging unit is the unused item, the extraction hole 54 is closed by the closing portion 55. To use the wet tissue packaging unit, the fragile portion 56 provided in the peripheral edge portion of the closing portion 55 is broken to remove the closing portion 55 and to open the extraction hole 54, and thereafter the front end 6a of the wet tissue continuing material body 6 is pinched. Accordingly, it is possible to very easily determine whether or not the wet tissue packaging unit is the unused item according to the presence or absence of the extraction hole 54. Therefore, it is possible for the user to use the wet tissue packaging unit and to purchase the wet tissue packaging unit after determining whether or not the wet tissue packaging unit is the unused item.

**[0079]** Furthermore, according to the wet tissue packaging unit according to this embodiment, since the extraction hole forming member 51 provided with the lid 5 is attached to the inner surface of the bag body 3, during the manufacture, it is possible to manufacture the wet tissue packaging unit without a process of attaching the lid 5 after attaching the extraction hole forming member 51 to the bag body 3. Therefore, according to the wet tissue packaging unit according to this embodiment, the number of processes may be reduced during the manufacture and hence it is possible to largely reduce the manufacturing cost.

**[0080]** Next, a wet tissue packaging unit according to a third embodiment of the present invention will be described with reference to Figs. 13A to 15C. Further, the description of the same components as those of the first or second embodiment will not be repeated and the same reference numerals are used in the description of the third embodiment.

**[0081]** The wet tissue packaging unit according to this embodiment is different from those of the first and second embodiments described above in the structure of an extraction hole forming member 71, and hence the structure of the extraction hole forming member 71 will now be described.

**[0082]** The extraction hole forming member 71 according to this embodiment is attached at a position where the positions of an extraction hole 77 to be described later and the opening 2 of the bag body 3 coincide with each other on the inner side of the bag body 3. As a method of attaching the extraction hole forming member 71 to the bag body 3, for example, a method using hot-melt or the like may be exemplified, but the present invention is not limited thereto. That is, various methods may be arbitrarily selected.

**[0083]** As illustrated in Fig. 13A, the extraction hole forming member 71 includes a base plate 72 as a base portion for attaching the extraction hole forming member 71 to the bag body 3, an accommodation space 74 which accommodates the front end 6a of the wet tissue continuing material body 6 through a pinching hole 73 for extracting the wet tissue 7 to the outside of the bag body 3, and an extraction hole forming portion 78 having an extraction hole 77 which is opened to separate the wet tissue 7 at the separating portion 10 of the wet tissue continuing material body 6. Further, the extraction hole forming member 71 illustrated in this example includes a partitioning portion which is provided to close the pinching hole 73 and partitions the accommodation space 74 into a plurality of sections, and a fragile portion which is formed at the peripheral edge portion of the partitioning portion and is broken when a predetermined shear force is applied thereto. In addition, the configurations of the base plate 72, the pinching hole 73, the accommodation space 74, the partitioning portion, and the fragile portion in this embodiment are the same as those of the first embodiment described above, and hence the detailed description thereof will not be repeated.

**[0084]** As illustrated in Figs. 13A to 14B, in the wet tissue packaging unit according to this embodiment, the extraction hole forming portion 78 is supported by the base plate 72 as the base portion in a cantilevered manner. The extraction hole forming portion 78 separates the wet tissue 7 at the separating portion 10 provided in the wet tissue continuing material body 6 and allows the front end 6a of the wet tissue continuing material body 6 to pop up. The extraction hole forming portion 78 has a leg portion 79 at the front end, and the leg portion 79 is integrally formed with the base plate 72 on the lower side of the base plate 72 and is hence integrally formed with the base plate 72. That is, the extraction hole forming portion 78 is supported by the base plate 72 in a cantilevered manner through the leg portion 79. The extraction hole forming portion 78 is disposed on the lower side of the base plate 72 so that the extraction hole 77 is located below a point where the extraction concave portion of the base plate 72 is formed. Furthermore, the extraction

hole forming portion 78 is formed in a curved shape.

**[0085]** As illustrated in Fig. 14B, in the extraction hole forming portion 78, the extraction hole 77 is opened to the substantially center portion of the extraction hole forming portion 78 in the forward-rearward direction. The extraction hole 77 is formed in an elongated hole shape that extends in the right-left direction. The extraction hole 77 is formed in a size in which, when the front end 6a of the wet tissue continuing material body 6 or the like passes therethrough, a resistance is applied to the front end 6a of the wet tissue continuing material body 6 that passes therethrough. Further, in the extraction hole forming portion 78, a first slit 80 and a second slit 81 are respectively provided in both ends of the extraction hole 77 in the forward-rearward direction with respect to the extraction hole 77. The first and second slits 80 and 81 are formed in elongated hole shapes that extend in the right-left direction, and the widths thereof in the forward-rearward direction are smaller than that of the extraction hole 77 in the forward-rearward direction. Furthermore, the first and second slits 80 and 81 are formed so that the widths of the first and second slits 80 and 81 are the same. The first and second slits 80 and 81 are formed so that, when the front end 6a of the wet tissue continuing material body 6 passes therethrough, a resistance is applied to the front end 6a of the wet tissue continuing material body 6 that passes therethrough.

**[0086]** Furthermore, in the extraction hole forming portion 78, a first protruding piece 82 is provided between the extraction hole 77 and the first slit 80, and a second protruding piece 83 is provided between the first slit 80 and the second slit 81. The first protruding piece 82 includes a left protruding piece 82a that extends from the left to the right and a right protruding piece 82b that extends from the right to the left, and a first void 84 is provided between the left protruding piece 82a and the right protruding piece 82b. Further, the second protruding piece 83 includes a left protruding piece 83a that extends from the left to the right and a right protruding piece 83b that extends from the right to the left, and a second void 85 is provided between the left protruding piece 83a and the right protruding piece 83b. The first and second voids 84 and 85 are formed to be located on the substantially straight line in the right-left direction.

**[0087]** As illustrated in Figs. 13A to 14B, the extraction hole forming member 71 is provided with a relief portion 86. The relief portion 86 allows a portion of the front end 6a which is not accommodated in the accommodation space 74 to be relieved into the bag body 3 when the front end 6a of the wet tissue continuing material body 6 is pushed into the accommodation space 74. The relief portion 86 is formed to be surrounded by the base plate 72, the extraction hole forming portion 78, and the leg portion 79 to allow the accommodation space 74 and the internal space of the bag body 3 to communicate with each other. In addition, in this embodiment, the relief portion 86 is formed on the left, right, and rear sides of the extraction hole forming portion 78 where the leg portion

79 is not formed, but the position where the relief portion 86 is formed may be a position other than the above-described position. Furthermore, the size of the relief portion 86 may be arbitrarily selected as long as the front end 6a of the wet tissue continuing material body 6 may move between the accommodation space 74 and the internal space of the bag body 3. The number of relief portions may also be arbitrarily selected as long as the extraction hole forming portion 78 is supported by the base plate 72 in a cantilevered manner.

**[0088]** Next, the operation of the wet tissue packaging unit according to this embodiment will be described. As illustrated in Fig. 15A, the extraction hole forming member 71 according to this embodiment is formed so that the leg portion 79 provided on the front side of the extraction hole forming portion 78 is formed integrally with the lower side of the base plate 72 and the rear side of the extraction hole forming portion 78 becomes a free end. Here, in a case that the user pinches and raises the front end 6a of the wet tissue continuing material body 6 in the H direction illustrated in Fig. 15B, the extraction hole forming portion 78 is elastically deformed in the I direction about or on the leg portion 79 as the fulcrum at a side of the free end thereof by a force, which is applied in the H direction to the extraction hole 77 and the like when the wet tissue continuing material body 6 is raised. At this time, the relief portion 86 is narrowed. Subsequently, after extracting the wet tissue 7, when the user pushes down the front end in the J direction illustrated in Fig. 13C in order to cause the front end 6a of the wet tissue continuing material body 6 to be accommodated in the accommodation space 74, the free end is elastically deformed in the K direction about the leg portion 79 as the fulcrum by a force, which is applied to the extraction hole 77 and the like when the front end 6a is moved in the J direction. Hence the free end is turned toward the internal space of the bag body 2. Accordingly, the relief portion 86 is widened.

**[0089]** As described above, according to the wet tissue packaging unit according to this embodiment, in addition to the effects of the wet tissue packaging unit 1 according to the first embodiment described above, since the extraction hole forming portion 78 is elastically deformed about or on the leg portion 79 as the fulcrum, ease of extraction when the front end 6a of the wet tissue continuing material body 6 is extracted is largely improved. Further the extraction hole forming portion 78 is elastically deformed about or on the leg portion 79 as the fulcrum and is turned when the front end 6a of the wet tissue continuing material body 6 is accommodated in the accommodation space 74, thereby widening the accommodation space 74. Therefore, according to the wet tissue packaging unit according to this embodiment, it is possible to largely improve ease of extraction of the wet tissue and ease of accommodation. At this time, it is possible to widen the relief portion 86 as well as the accommodation space 74. Therefore, according to the wet tissue packaging unit according to this embodiment, it is possi-

ble to further improve ease of accommodation of the wet tissue.

**[0090]** Next, a fourth embodiment of the wet tissue packaging unit according to the present invention will be described with reference to Figs. 16A to 17C. Further, the description of the same components as those of the first to third embodiments will not be repeated and the same reference numerals are used in the description of the fourth embodiment.

**[0091]** The wet tissue packaging unit according to this embodiment is different from those of the first to third embodiments described above in the structure of an extraction hole forming member 91, and hence the structure of the extraction hole forming member 91 will now be described.

**[0092]** The extraction hole forming member 91 according to this embodiment is disposed or attached at a position where the positions of an extraction hole 111 and the opening 2 of the bag body 3 coincide with each other on the inner side of the bag body 3. As a method of attaching the extraction hole forming member 91 to the bag body 3, for example, a method using hot-melt or the like may be exemplified, but the present invention is not limited thereto. That is, various methods may be arbitrarily selected.

**[0093]** As illustrated in Fig. 16A, the extraction hole forming member 91 includes a base plate 92 as a base portion for attaching the extraction hole forming member 91 to the bag body 3, an accommodation space 94 which accommodates the front end 6a of the wet tissue continuing material body 6 through a pinching hole 93 for extracting the wet tissue 7 to the outside of the bag body 3, and an extraction hole forming portion 96 having an extraction hole 111 which is opened to separate the wet tissue 7 at the separating portion 10 of the wet tissue continuing material body 6. Further, the extraction hole forming member 91 illustrated in this example includes a partitioning portion which is provided to close the pinching hole 93 and partitions the accommodation space 94 into a plurality of sections, and a fragile portion which is formed at the peripheral edge portion of the partitioning portion and is broken when a predetermined shear force is applied thereto. In addition, the configurations of the base plate 92, the pinching hole 93, the accommodation space 94, the partitioning portion, and the fragile portion in this embodiment are the same as those of the first embodiment described above, and hence the detailed description thereof will not be repeated.

**[0094]** As illustrated in Fig. 16B, in the wet tissue packaging unit according to this embodiment, the extraction hole forming portion is divided into a plurality of portions (in the case of this embodiment, the extraction hole forming portion 96 is formed by a first extraction hole forming portion 97 and a second extraction hole forming portion 98) and is supported by a base plate as the base portion in a cantilevered manner so that the respective free ends of the extraction hole forming portions oppose each other. In this embodiment, a state where the extraction hole

forming portion 96 is formed by the two portions including the first extraction hole forming portion 97 and the second extraction hole forming portion 98 is used for the description, but the extraction hole forming portion 96 may include two or more portions.

**[0095]** The extraction hole forming portion 96 separates the wet tissue 7 at the separating portion 10 provided in the wet tissue continuing material body 6 and allows the front end 6a of the wet tissue continuing material body 6 to pop up. The first extraction hole forming portion 97 has a leg portion 101a at the front end, and the leg portion 101a is integrally formed with the base plate 92 on the lower side of the base plate 92 and is hence integrally formed with the base plate 92. That is, the first extraction hole forming portion 97 is supported by the base plate 92 in a cantilevered manner through the leg portion 101a. The second extraction hole forming portion 98 has a leg portion 101b at the rear end, and the leg portion 101b is integrally formed with the base plate 92 on the lower side of the base plate 92 and is hence integrally formed with the base plate 92. That is, the second extraction hole forming portion 98 is supported by the base plate 92 in a cantilevered manner through the leg portion 101b.

**[0096]** As illustrated in Fig. 16B, the first extraction hole forming portion 97 is provided with a first extraction hole forming portion concave portion 102 at the rear of the extraction hole forming portion 96. On the front side of the first extraction hole forming portion concave portion 102, a first slit 103 and a second slit 104 are formed. The first and second slits 103 and 104 are formed in elongated hole shapes that extend in the right-left direction, and the widths thereof in the forward-rearward direction are substantially the same as the width of the first extraction hole forming portion concave portion 102. Furthermore, the first and second slits 103 and 104 are formed so that the widths of the first and second slits 103 and 104 are the same. The first and second slits 103 and 104 are also formed so that, when the front end 6a of the wet tissue continuing material body 6 passes therethrough, a resistance is applied to the front end 6a of the wet tissue continuing material body 6 that passes therethrough.

**[0097]** Furthermore, in the first extraction hole forming portion 97, a first protruding piece 105 is provided between the first extraction hole forming portion concave portion 102 and the first slit 103, and a second protruding piece 106 is provided between the first slit 103 and the second slit 104. The first protruding piece 105 includes a left protruding piece 105a that extends from the left to the right and a right protruding piece 105b that extends from the right to the left, and a first void 107 is provided between the left protruding piece 105a and the right protruding piece 105b. Further, the second protruding piece 106 includes a left protruding piece 106a that extends from the left to the right and a right protruding piece 106b that extends from the right to the left, and a second void 108 is provided between the left protruding piece 106a and the right protruding piece 106b. The first and second

voids 107 and 108 are formed to be located on the substantially straight line in the right-left direction.

**[0098]** The second extraction hole forming member 91 is provided with a second extraction hole forming concave portion 109 on the front side of the extraction hole forming portion 96. In addition, the first and second slits 103 and 104 are formed on the rear side of the first extraction hole forming portion concave portion 102. The configurations of the first and second slits 103 and 104, the first and second protruding pieces 105 and 106, and the first and second voids 107 and 108 are the same as those of the first extraction hole forming portion 97, and hence the description thereof will not be repeated.

**[0099]** The first and second extraction hole forming portions 97 and 98 are formed at the lower surface of the base plate 92 so that the free ends thereof on the opposite sides to the leg portions 101a and 101b oppose each other. That is, a free end 101c of the first extraction hole forming portion 97 is formed to be positioned on the rear side in relation to the leg portion 101a, and a free end 101d of the second extraction hole forming portion 98 is formed to be positioned on the front side in relation to the leg portion 101b. A third void 110 is provided between the free end 101c of the first extraction hole forming portion 97 and the free end 101d of the second extraction hole forming portion 98 so that the free end 101c of the first extraction hole forming portion 97 and the free end 101d of the second extraction hole forming portion 98 do not come into contact with each other when the first and second extraction hole forming portions 97 and 98 are elastically deformed. Further, the first and second extraction hole forming portions 97 and 98 are disposed so that the first and second extraction hole forming portion concave portions 102 and 109 oppose each other. As described above, the space formed by the first and second extraction hole forming portion concave portions 102 and 109 becomes the extraction hole 111. That is, it can be said that the extraction hole 111 in this embodiment is a hole having an elongated hole shape that extends in the right-left direction, and the third void 110 is formed on each of both ends in the right-left direction. In this embodiment, the third void 110 is provided at substantially the center portion of the extraction hole forming member 91 in the forward-rearward direction, but the position where the third void 110 is provided is not limited thereto.

**[0100]** As illustrated in Figs. 16A to 17C, a relief portion 112 is provided in the extraction hole forming member 91. The relief portion 112 allows a portion of the front end 6a of the wet tissue continuing material body 6 which is not accommodated in the accommodation space 94 to be relieved into the bag body 3 when the front end 6a is pushed into the accommodation space 94. The relief portion 112 is formed to be surrounded by the base plate 92, the leg portion 101a, the first and second extraction hole forming portions 97 and 98, and the leg portion 101b to allow the accommodation space 94 and the internal space of the bag body 3 to communicate with each other. In addition, in this embodiment, the relief portion 112 is



formed on the left and right sides of the first and second extraction hole forming portions 97 and 98 where the leg portions 101a and 101b are not formed, but the position where the relief portion 112 is formed may be a position other than the above-described position. Furthermore, the size of the relief portion 112 may be arbitrarily selected as long as the front end 6a of the wet tissue continuing material body 6 may move between the accommodation space 94 and the internal space of the bag body 3. The number of relief portions 112 may also be arbitrarily selected as long as the extraction hole forming portion 96 is supported by the base plate 92 in a cantilevered manner.

**[0101]** Next, the operation of the wet tissue packaging unit according to this embodiment will be described. As illustrated in Fig. 17A, the extraction hole forming portion 96 according to this embodiment is formed by the first and second extraction hole forming portions 97 and 98. The first extraction hole forming portion 97 is formed so that the leg portion 101a provided on the front side of the first extraction hole forming portion 97 is formed integrally with the lower side of the base plate 92 and the rear side of the first extraction hole forming portion 97 becomes the free end 101c. In addition, the second extraction hole forming portion 98 is formed so that the leg portion 101b provided on the rear side of the second extraction hole forming portion 98 is formed integrally with the lower side of the base plate 92 and the front side of the second extraction hole forming portion 98 becomes the free end 101d. As described above, the third void 110 is provided between the free end 101c of the first extraction hole forming portion 97 and the free end 101d of the second extraction hole forming portion 98. Furthermore, the extraction hole 111 is formed by the first extraction hole forming portion concave portion 102 provided in the free end 101c of the first extraction hole forming portion 97 and the second extraction hole forming portion concave portion 109 provided in the free end 101d of the second extraction hole forming portion 98.

**[0102]** Here, in the case that the user pinches the front end 6a of the wet tissue continuing material body 6 and raises the front end 6a in the L direction illustrated in Fig. 17B, the first extraction hole forming portion 97 is elastically deformed in the M direction about or on the leg portion 101a as the fulcrum at the side of free end 101c by a force, which is applied in the L direction to the first extraction hole forming portion concave portion 102 when the wet tissue continuing material body is raised. In addition, in the second extraction hole forming portion 98, when the wet tissue is raised, the free end 101d is elastically deformed in the M direction about the leg portion 101b as the fulcrum by a force, which is applied in the L direction to the second extraction hole forming portion concave portion 109.

**[0103]** Furthermore, after extracting the wet tissue 7, when the user pushed down the front end 6a in the N direction illustrated in Fig. 17C in order to cause the front end 6a of the wet tissue continuing material body 6 to be

accommodated in the accommodation space 94, the first extraction hole forming portion 97 is elastically deformed in the O direction about or on the leg portion 101a as the fulcrum at the side of the free end 101c by the force, which is applied to the first extraction hole forming portion concave portion 102 and the like when the front end is moved in the O direction. Similarly, in the second extraction hole forming portion 98, when the front end 6a is moved in the O direction, the free end 101d is elastically deformed in the O direction about the leg portion 101b as the fulcrum by the force, which is applied to the second extraction hole forming portion concave portion 109 and the like.

**[0104]** As described above, according to the wet tissue packaging unit according to this embodiment, in addition to the effects of the wet tissue packaging unit 1 according to the first embodiment described above, since the first extraction hole forming portion 97 is elastically deformed about the leg portion 101a as the fulcrum and the second extraction hole forming portion 98 is elastically deformed about the leg portion 101b as the fulcrum, ease of extraction when the front end 6a of the wet tissue continuing material body 6 is extracted is largely improved.

**[0105]** In addition, when the front end 6a of the wet tissue continuing material body 6 is accommodated in the accommodation space 94, the first extraction hole forming portion 97 is elastically deformed about the leg portion 101a as the fulcrum and the second extraction hole forming portion 98 is elastically deformed about the leg portion 101b as the fulcrum, thereby widening the accommodation space 94.

**[0106]** Therefore, according to the wet tissue packaging unit according to this embodiment, it is possible to largely improve ease of extraction of the wet tissue and ease of accommodation. Furthermore, according to the wet tissue packaging unit according to this embodiment, when the accommodation space 94 is widened, the relief portion 112 is also widened as well as the accommodation space 94. Therefore, according to the wet tissue packaging unit according to this embodiment, it is possible to further improve ease of accommodation of the wet tissue.

**[0107]** In addition, in the present specification, the example in which the lid 5 is integrally molded with the extraction hole forming member 4 through the hinge portion 5a is used for the description, but the lid 5 may also be molded separately from the extraction hole forming member 4. In addition, in the case where the lid 5 and the extraction hole forming member 4 are molded integrally with each other, the lid 5 and the extraction hole forming member 4 may be formed through a portion other than the hinge portion 5a, or may be formed without the hinge portion 5a or the portion other than the hinge portion 5a interposed therebetween.

**[0108]** Further, in the present specification, the fragile portion is a groove that is thinner than the partitioning portion. However, when the predetermined shear force is applied to the fragile portion, the fragile portion may

be broken due to stress concentration on the fragile portion, and a shape other than the shape of this embodiment may be arbitrarily selected. Further, as a method of forming the fragile portion, an existing method may be arbitrarily selected to be applied. For example, the fragile portion may be formed using ultrasonic waves, or the fragile portion may be formed through pressurization using a press. Otherwise, the fragile portion may be formed using a laser, or the fragile portion may be formed by a method other than the above-described methods. Furthermore, although the fragile portion is formed through the integral molding, this embodiment is not limited to the case of the integral molding.

**[0109]** Further, in the first, third, and fourth embodiments according to the present invention, the first and second slits are provided and the first and second protruding pieces are provided in the extraction hole forming portion, and in the second embodiment, the first and second extraction slits are provided in the extraction hole forming portion. However, these are merely examples and may be appropriately changed without departing from the spirit of the present invention. Further, the sizes of the first and second slits, the first and second protruding pieces, and the extraction hole formed in the first, third, and fourth embodiments may be arbitrarily selected as long as the front end of the wet tissue continuing material body may be extracted and the front end may pop up. Furthermore, the sizes of the extraction hole, the first and second extraction slits formed in the second embodiment may be arbitrarily selected as long as the front end of the wet tissue continuing material body may be extracted and the front end may pop up.

**[0110]** In the present specification, the example in which the extraction hole forming portion and the base plate are integrally formed with each other is used for the description. However, the present specification is not limited thereto, and the extraction hole forming portion and the base plate may be separately formed from each other. Further, in the present specification, the extraction hole forming member is formed to be curved, but the present specification is not limited thereto.

**[0111]** The wet tissue packaging unit that has been described so far is merely an example of the wet tissue packaging unit according to the present invention, and may be appropriately changed without departing from the spirit of the present invention.

#### Reference Signs List

#### **[0112]**

- 1 wet tissue packaging unit
- 2 opening
- 3 bag body (accommodation container)
- 4, 51, 71, 91 extraction hole forming member
- 5 lid
- 6 wet tissue continuing material body
- 7 wet tissue

- 10 separating portion (dividing portion)
- 23, 53, 74, 94 accommodation space
- 26, 54, 111 extraction hole
- 27, 78, 96 extraction hole forming portion
- 39 relief portion (communicating portion)
- 55 closing portion
- 97 first extraction hole forming portion
- 98 second extraction hole forming portion

#### **Claims**

#### **1. A wet tissue packaging unit comprising:**

an accommodation container that accommodates a wet tissue continuing material body having a dividing portion formed therein at a predetermined interval, and includes an opening formed to draw out a wet tissue divided from the wet tissue continuing material body at the dividing portion to the outside;  
an extraction hole forming member that is attached to the opening of the accommodation container and includes an extraction hole forming portion having an extraction hole formed to apply a resistance when the wet tissue continuing material body passes therethrough and an accommodation space which accommodates a front end of the wet tissue continuing material body that passes through the extraction hole;  
a lid that is provided at the outside of the accommodation space so as to freely close and open the accommodation space; and  
a communicating portion that allows the accommodation space of the extraction hole forming member and a space in the accommodation container to communicate with each other in an area excluding the extraction hole.

**2.** The wet tissue packaging unit according to claim 1, wherein the communicating portion is provided in a peripheral edge area of a bottom portion of the accommodation space.

**3.** The wet tissue packaging unit according to claim 2, wherein the extraction hole forming portion is formed in a plate that is convexly curved toward the inner side of the accommodation container, and the communicating portion is formed by a convexly swollen area of the extraction hole forming portion.

**4.** The wet tissue packaging unit according to any of claims 1 to 3, wherein the attachment hole forming portion is supported by the attachment hole forming member in a cantilevered manner, and the communicating portion is formed or is widened as a free end of the attachment hole forming portion

is turned toward the internal space of the accommodation container on the cantilevered portion as the center.

5. The wet tissue packaging unit according to claim 1, 5  
wherein the extraction hole forming member is at-  
tached to the accommodation container by allowing  
an attachment surface of the extraction hole forming  
member to face an inner surface of the accommo-  
dation container. 10

15

20

25

30

35

40

45

50

55

Fig. 1

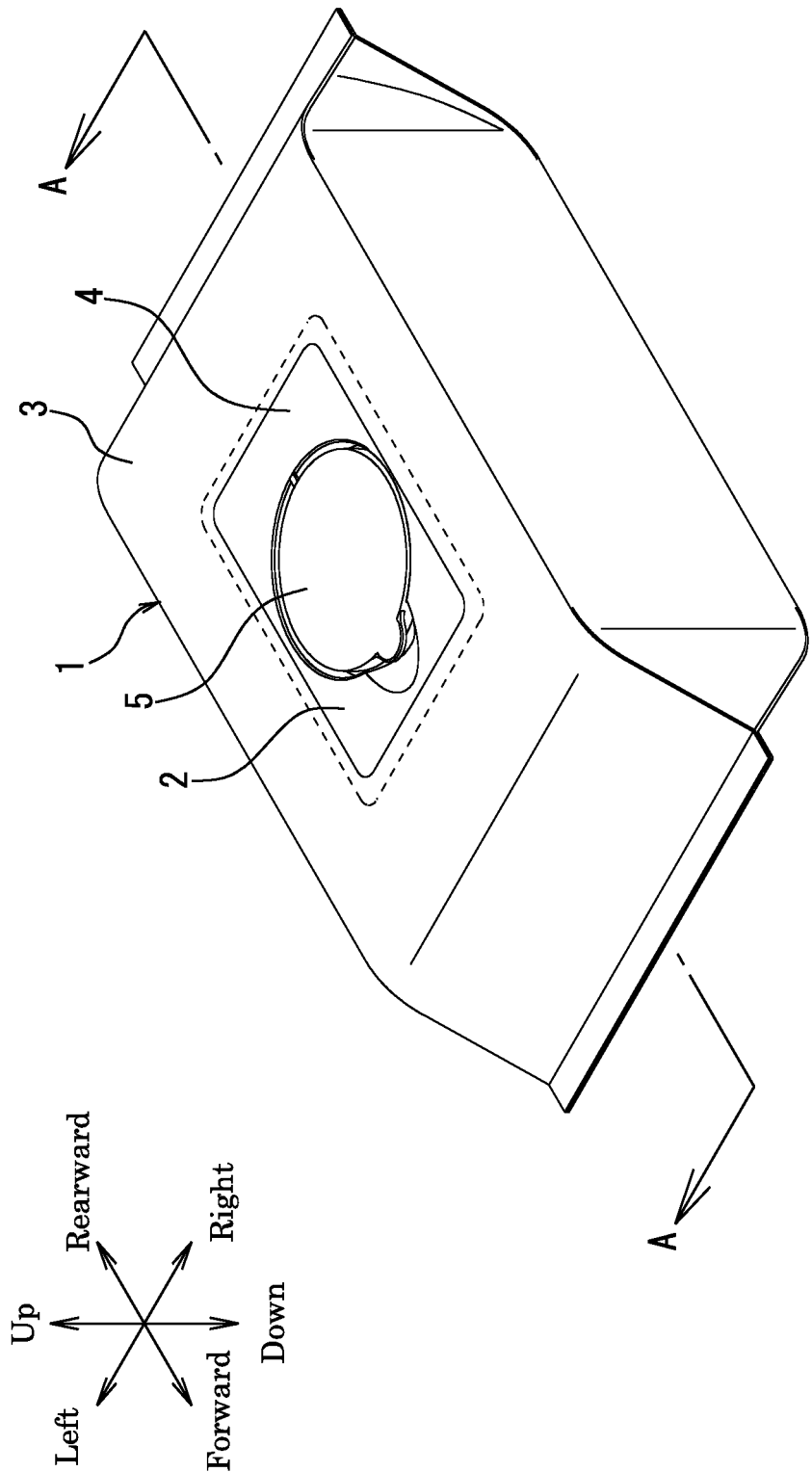


Fig. 2

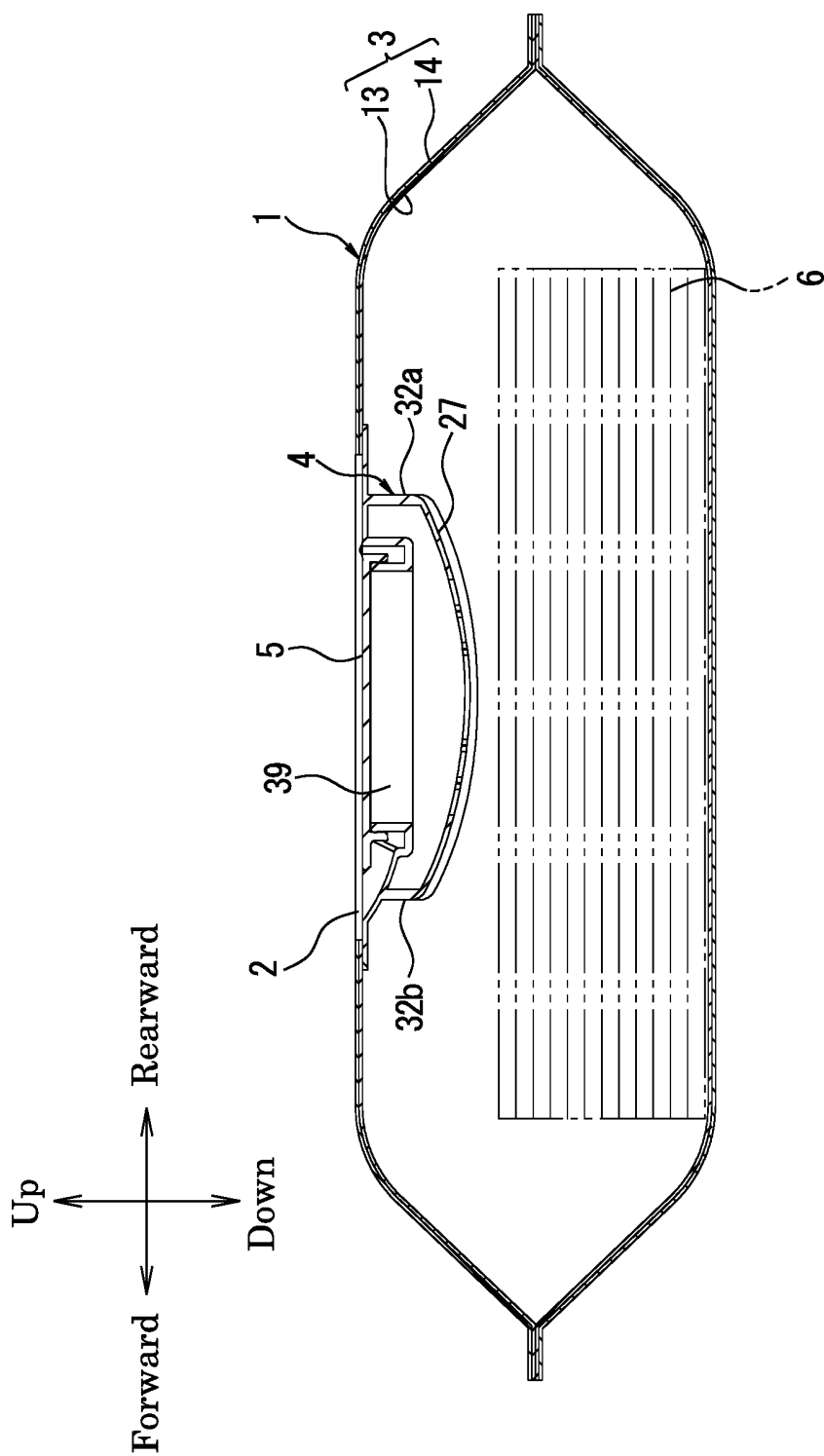


Fig. 3A

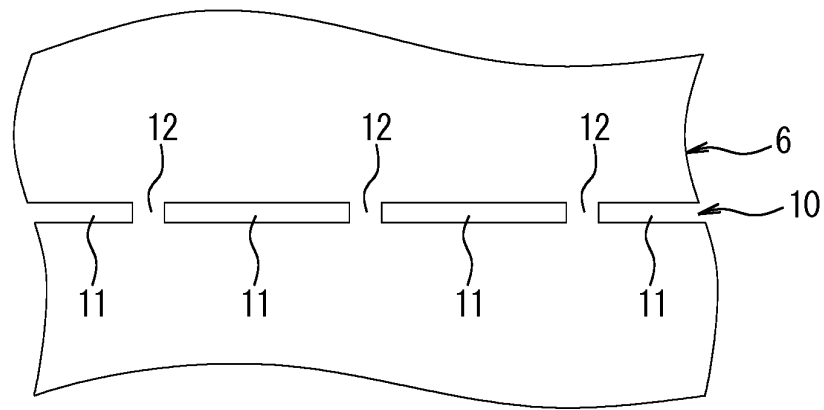


Fig. 3B

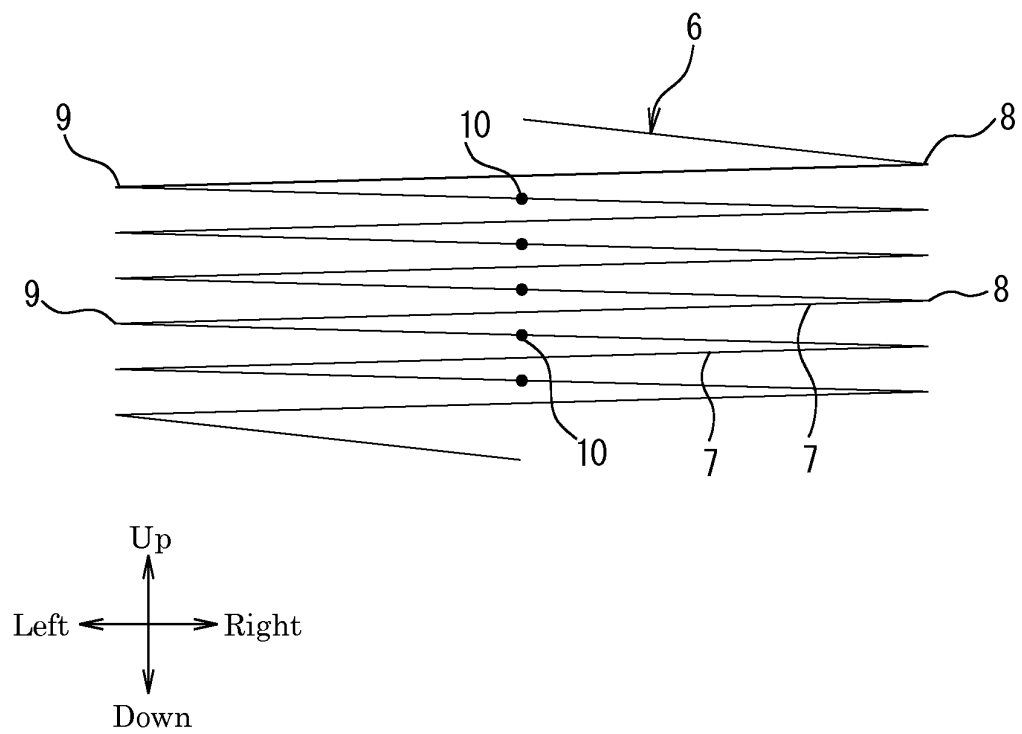


Fig. 4A

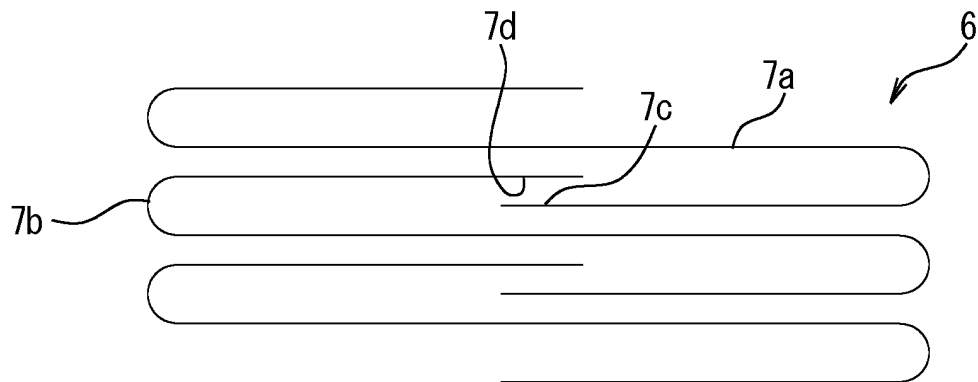


Fig. 4B

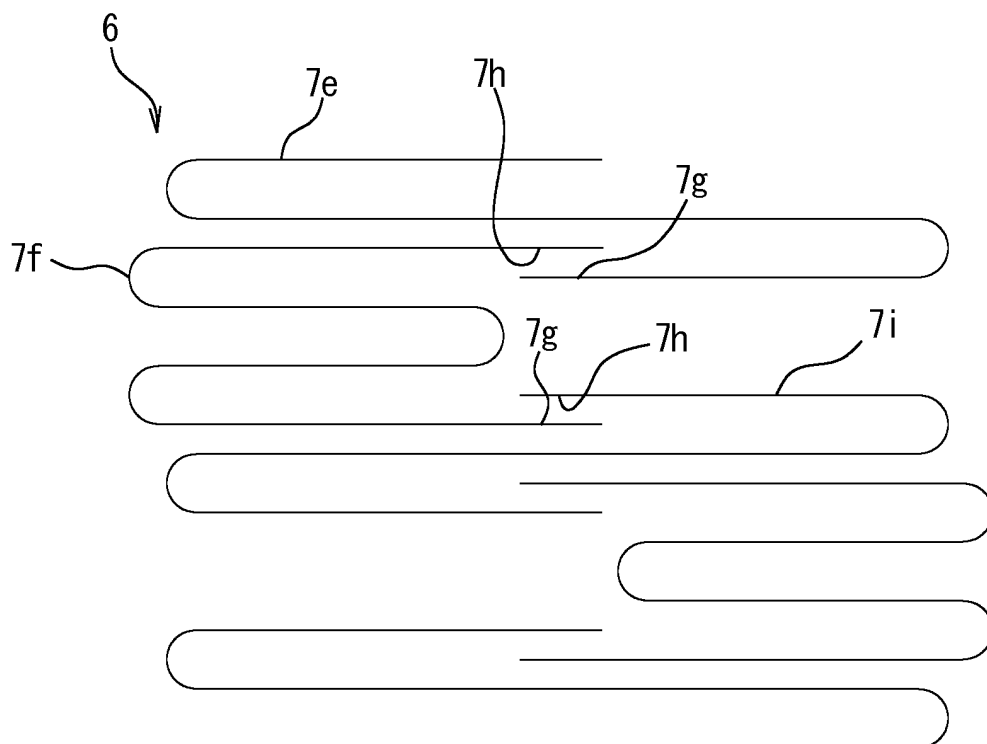


Fig. 5A

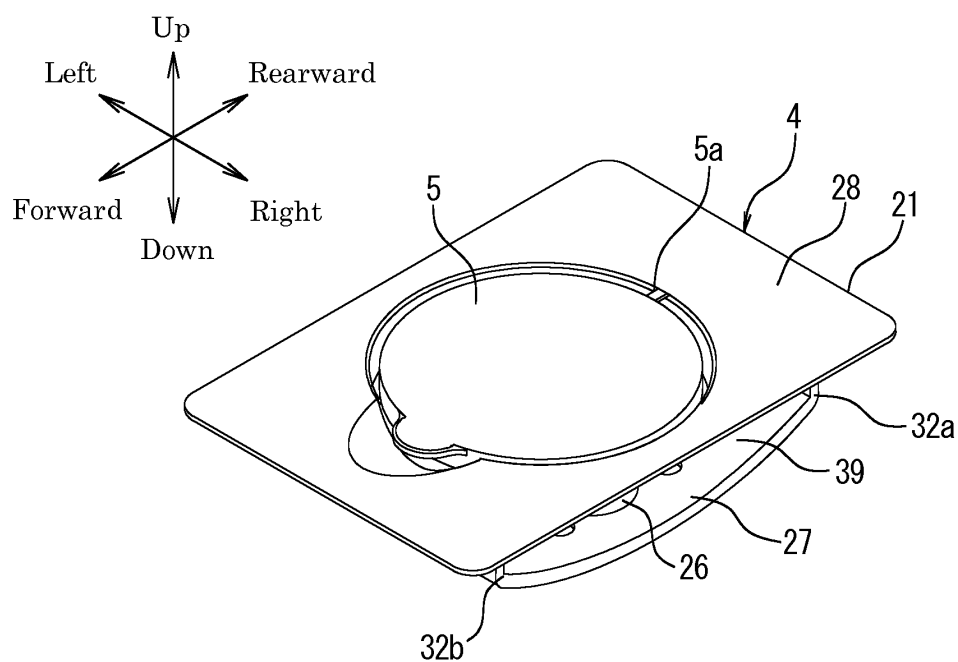


Fig. 5B

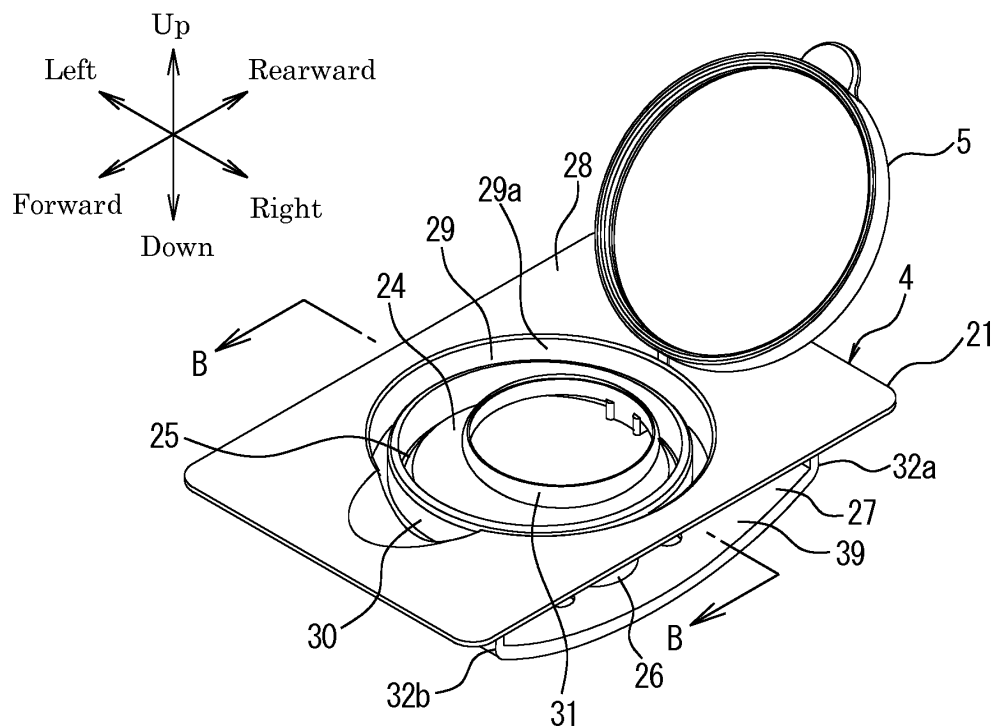




Fig. 6A

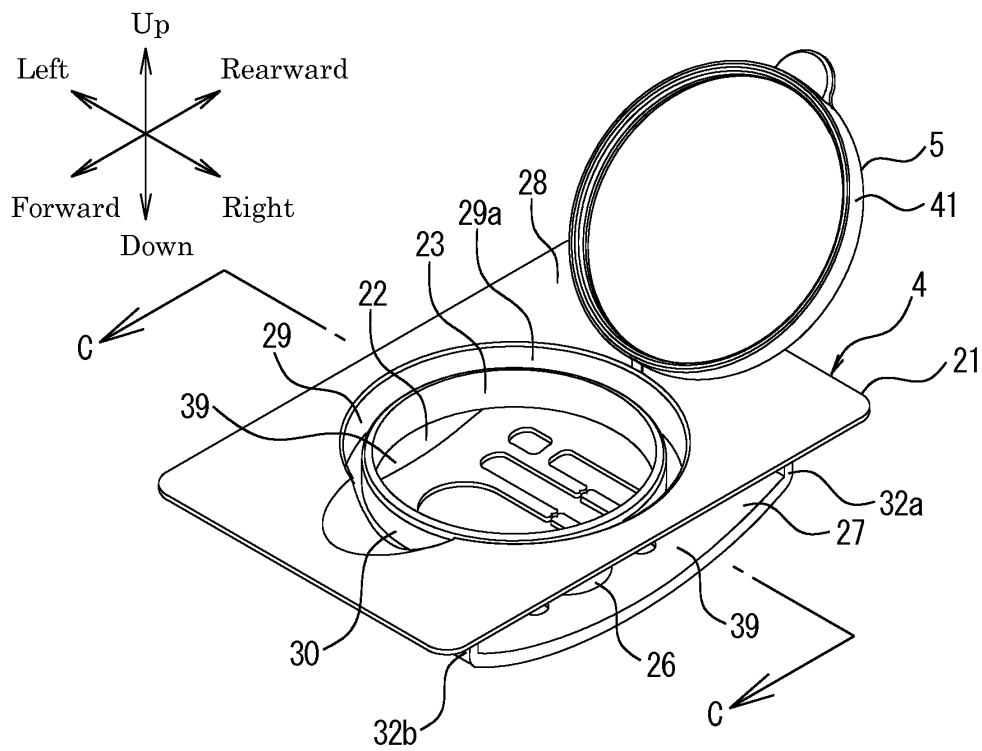


Fig. 6B

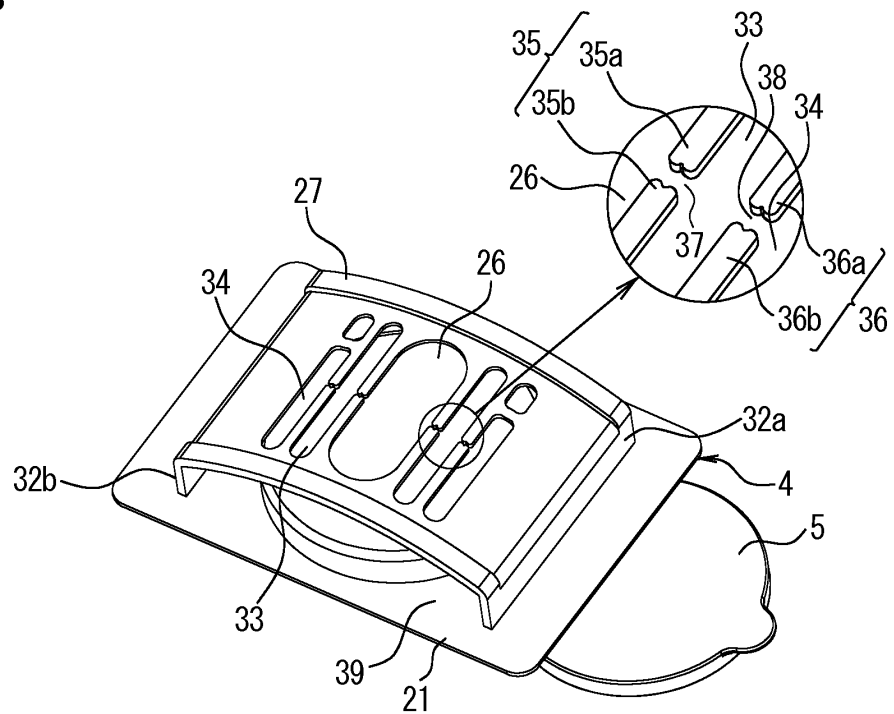


Fig. 7A

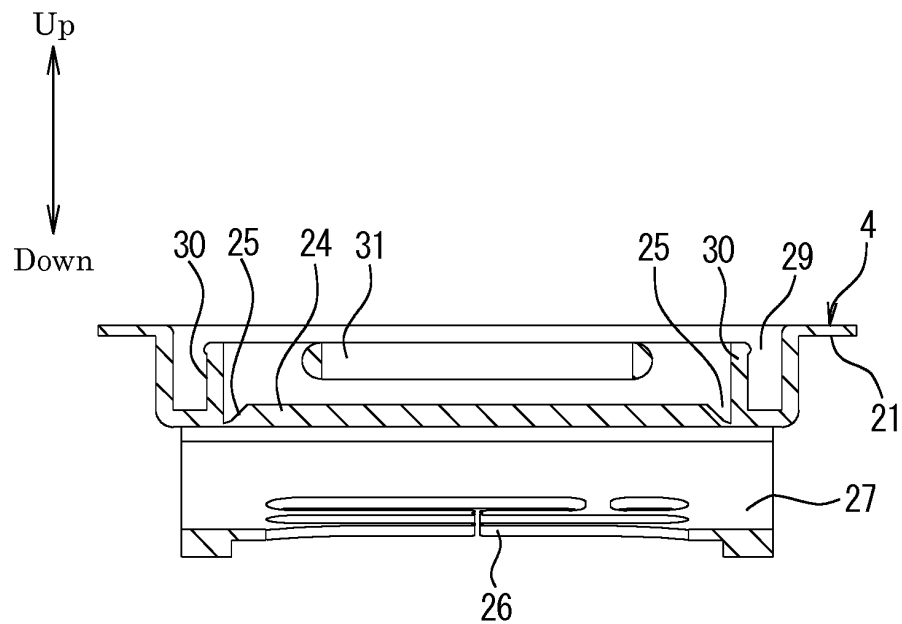


Fig. 7B

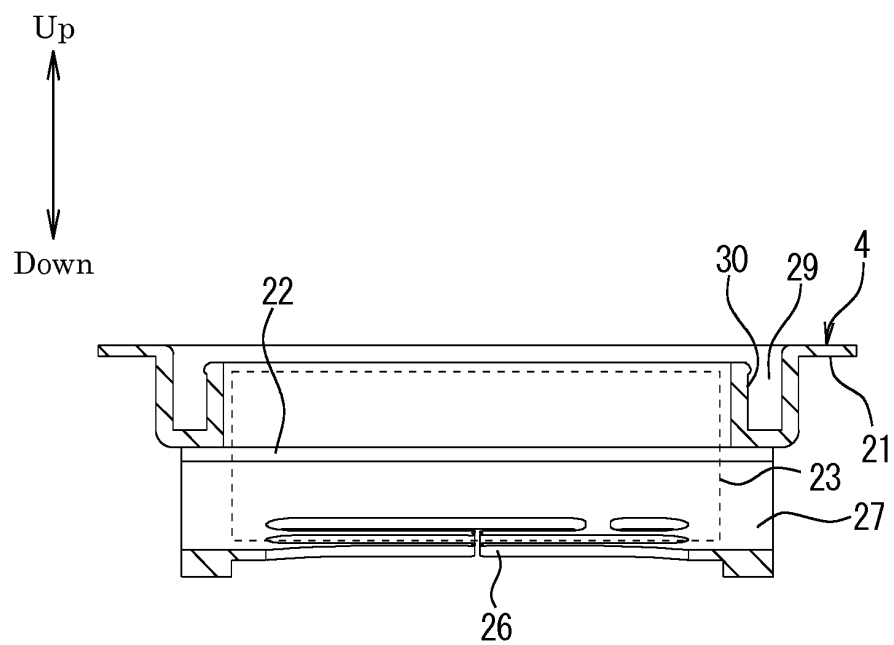


Fig. 8A

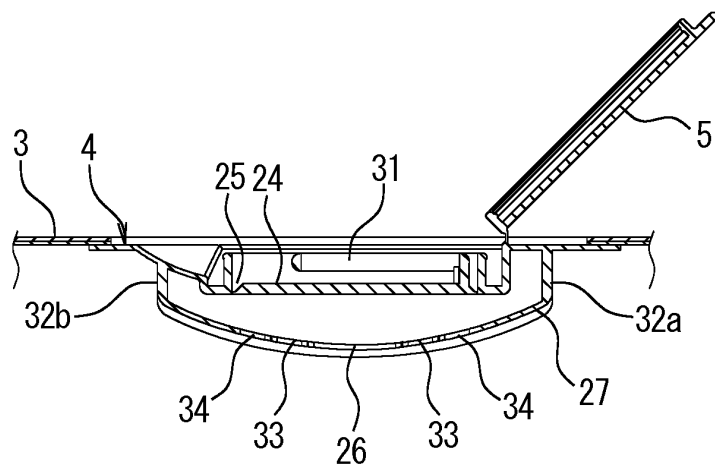


Fig. 8B

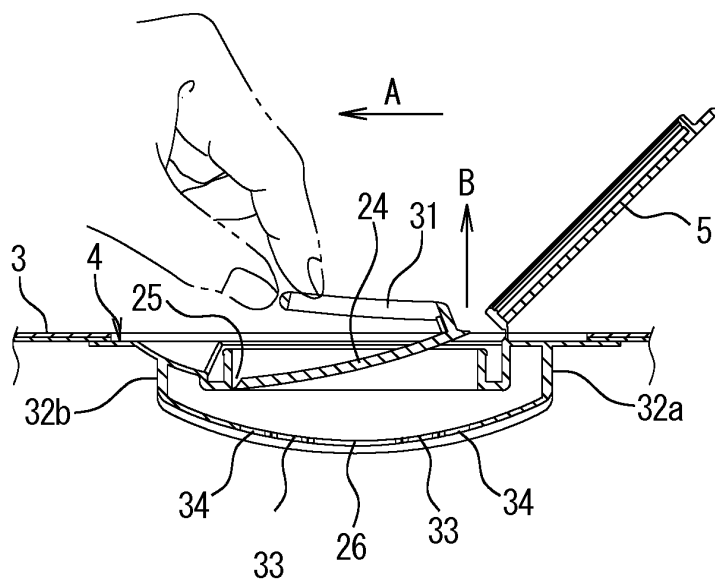


Fig. 8C

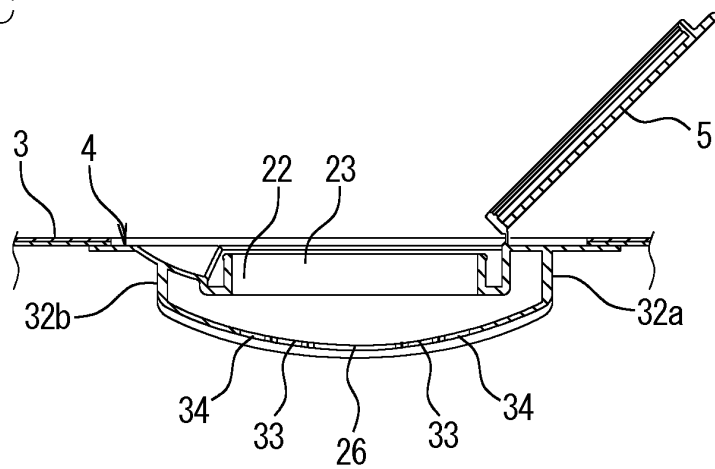


Fig. 9A

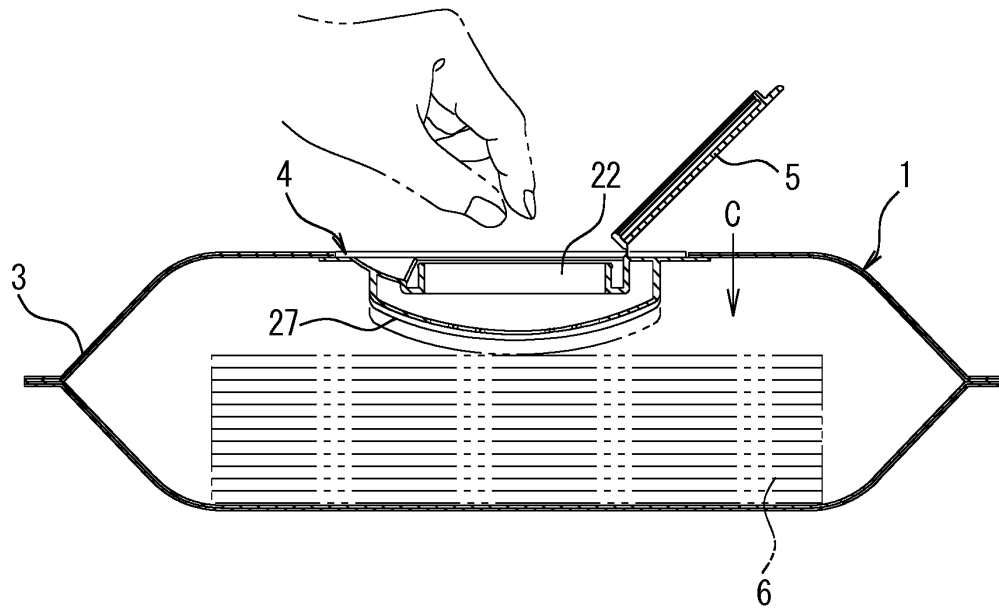


Fig. 9B

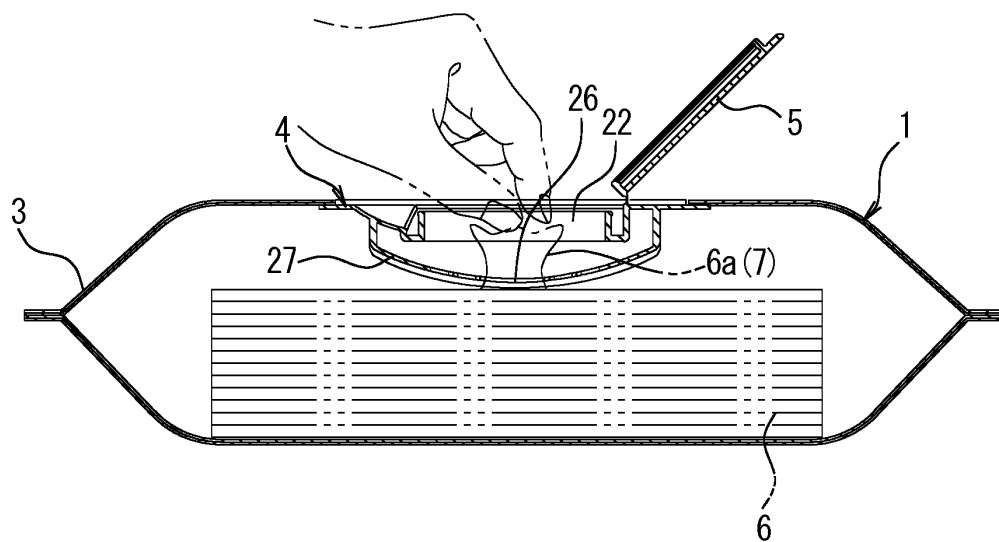


Fig. 10

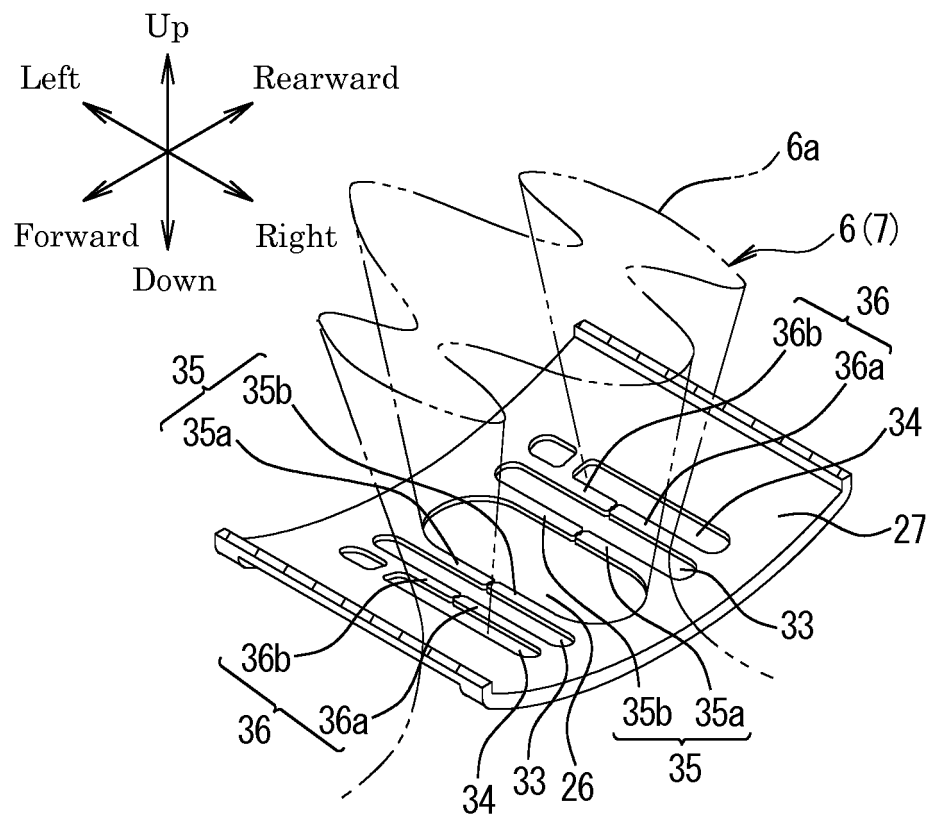


Fig. 11A

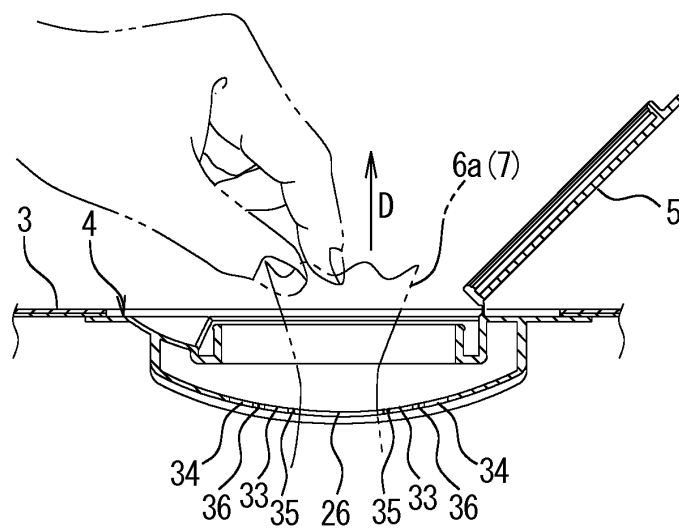


Fig. 11B

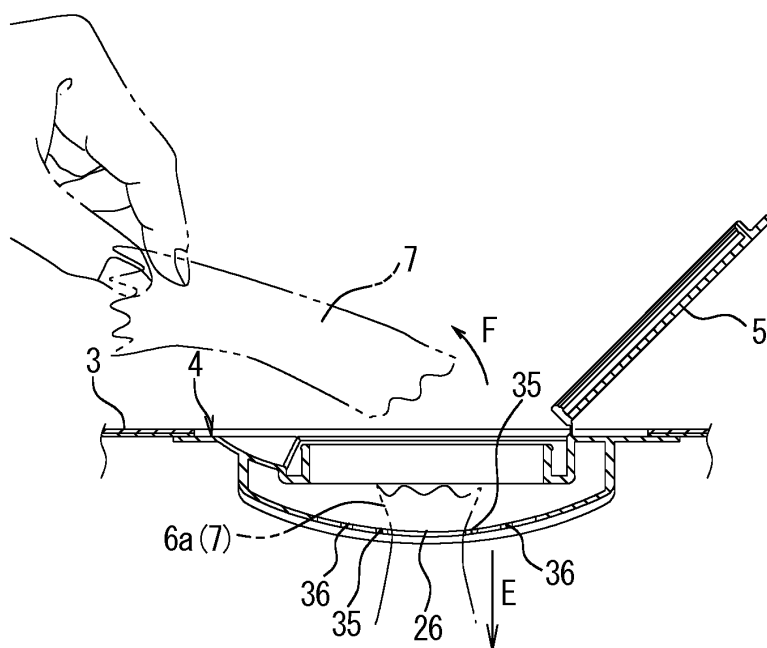


Fig. 11C

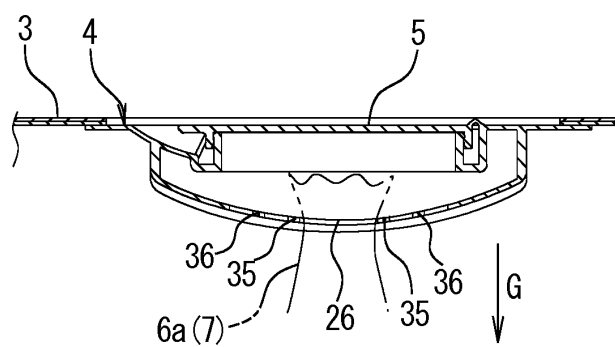


Fig. 12A

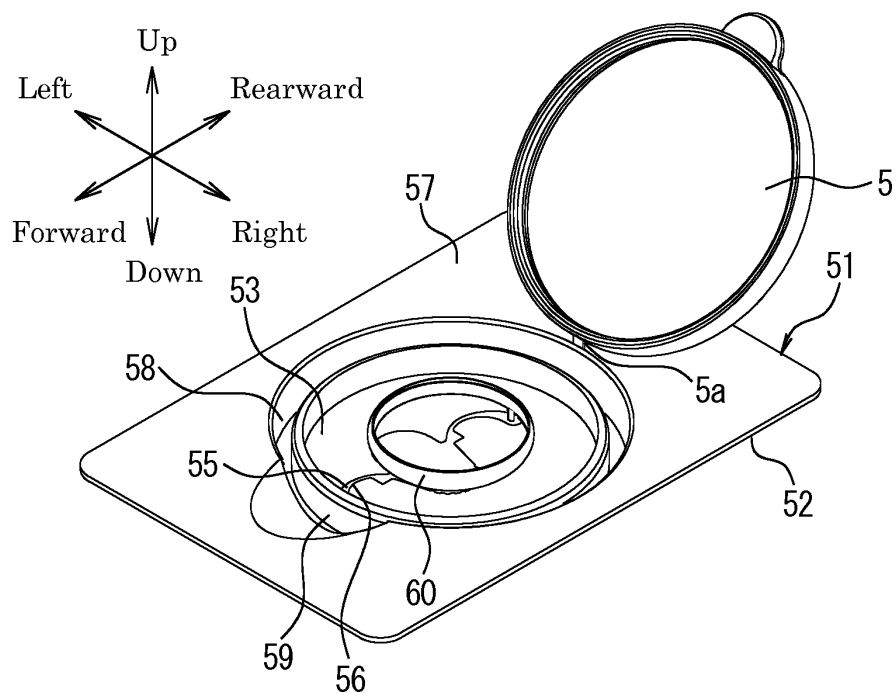


Fig. 12B

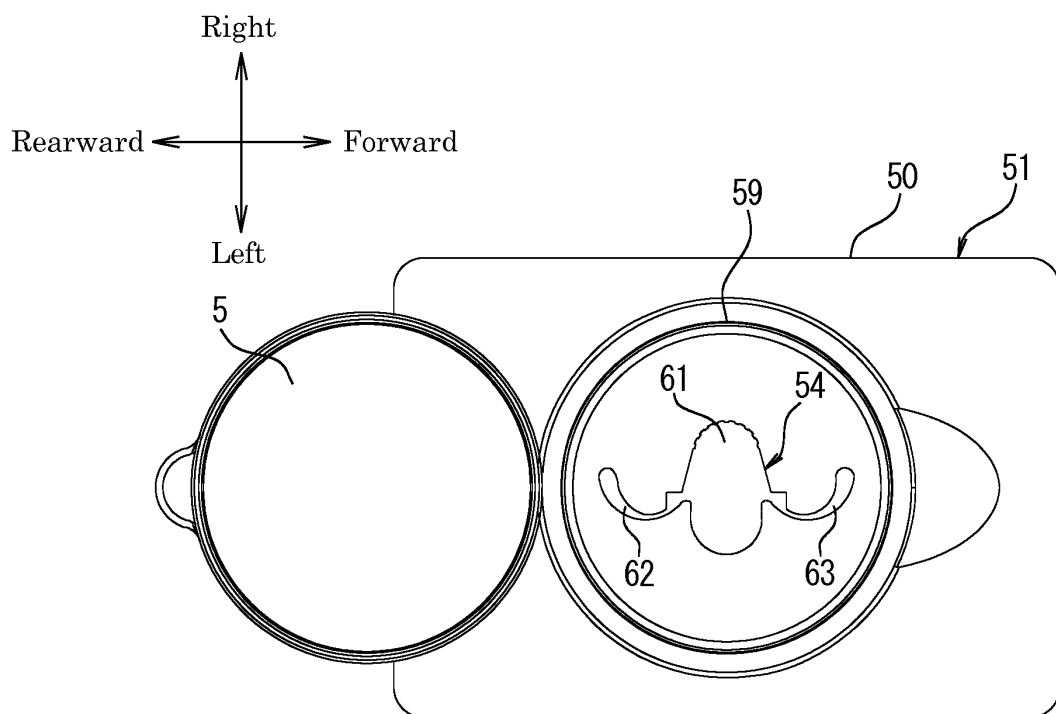


Fig. 13A

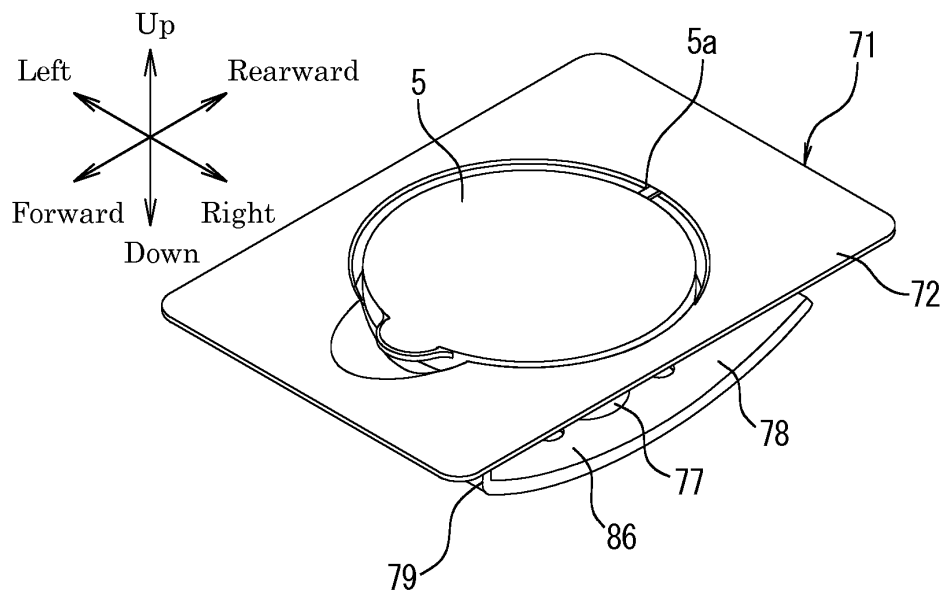


Fig. 13B

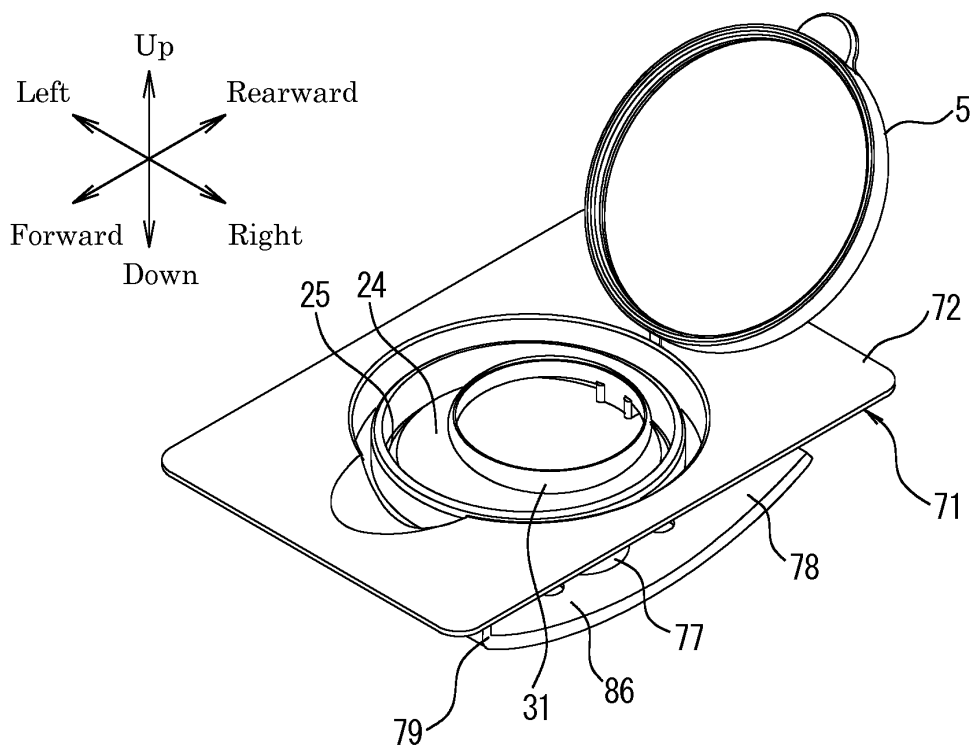




Fig. 14A

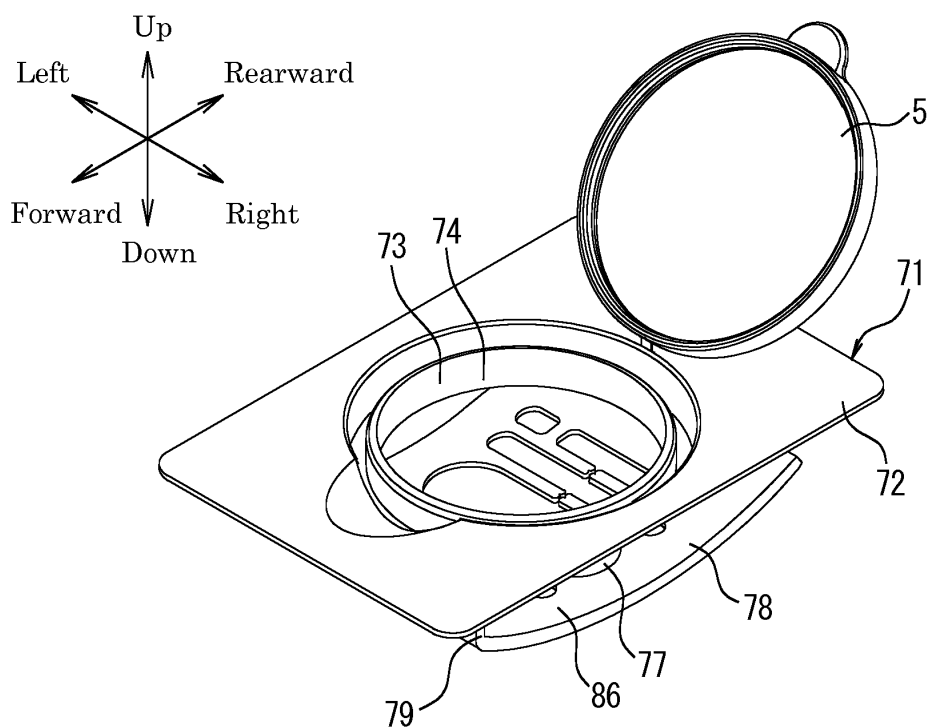


Fig. 14B

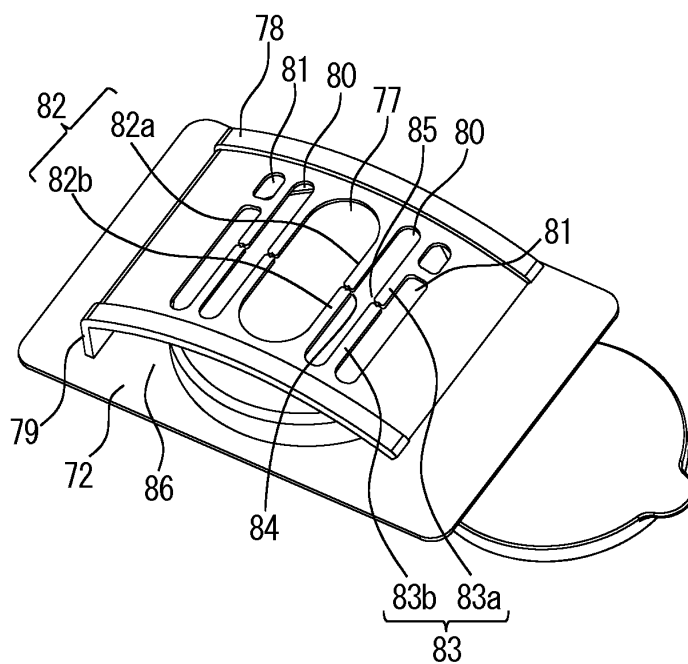


Fig. 15A

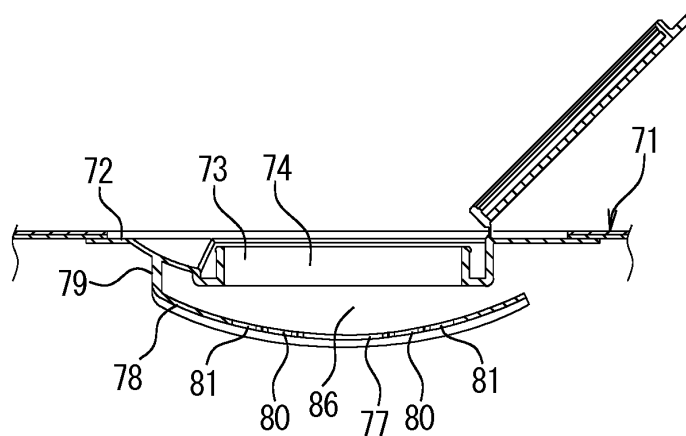


Fig. 15B

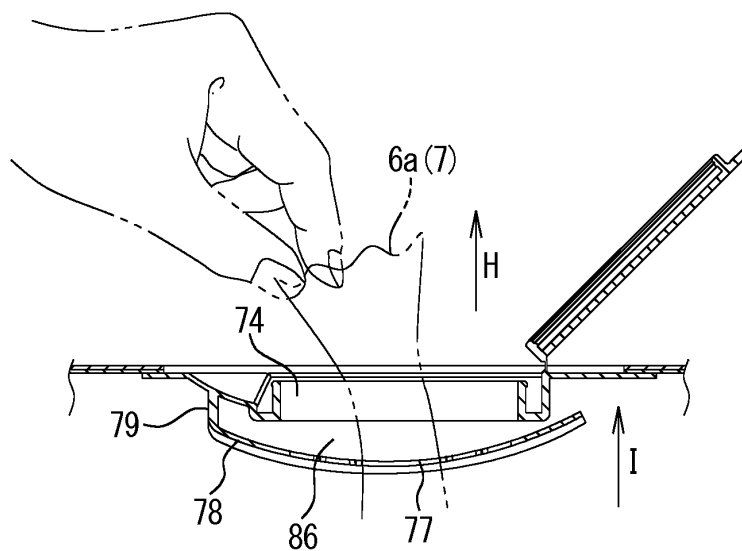


Fig. 15C

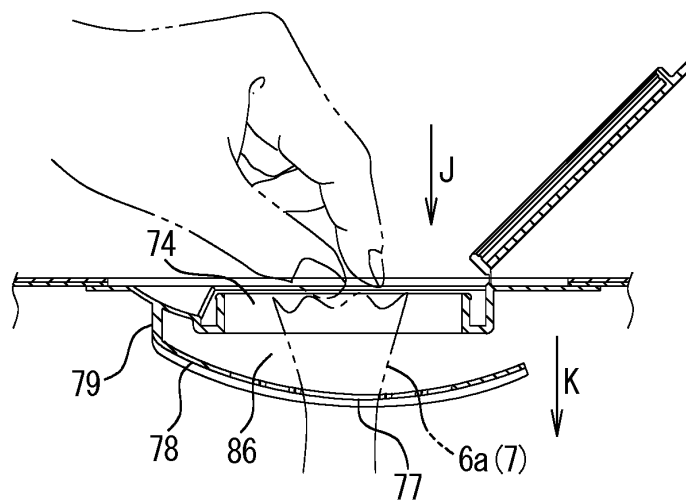


Fig. 16A

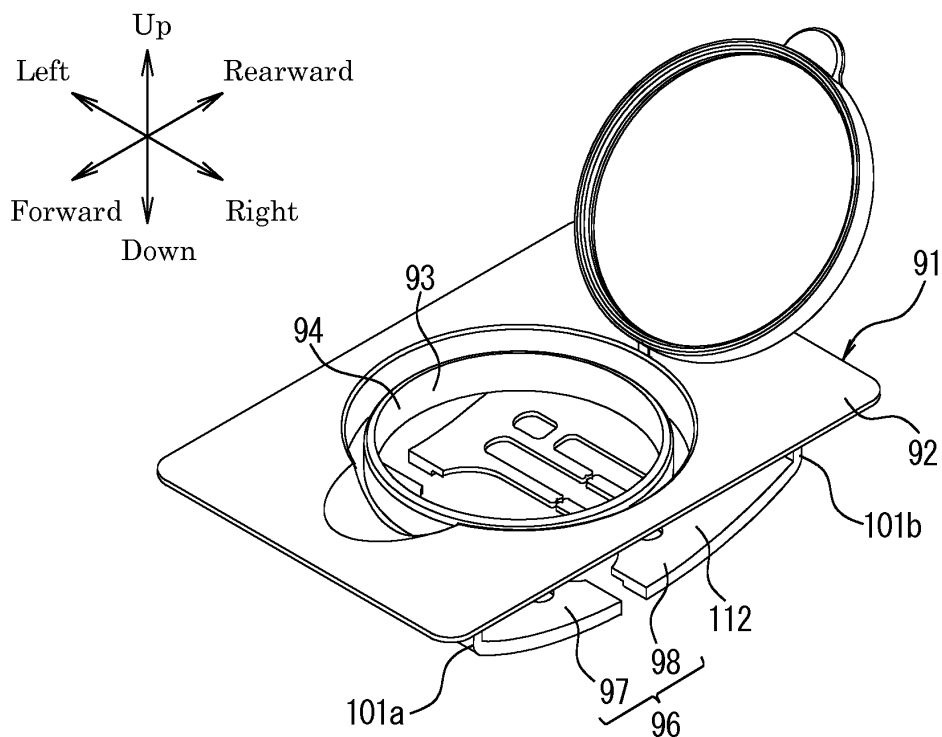


Fig. 16B

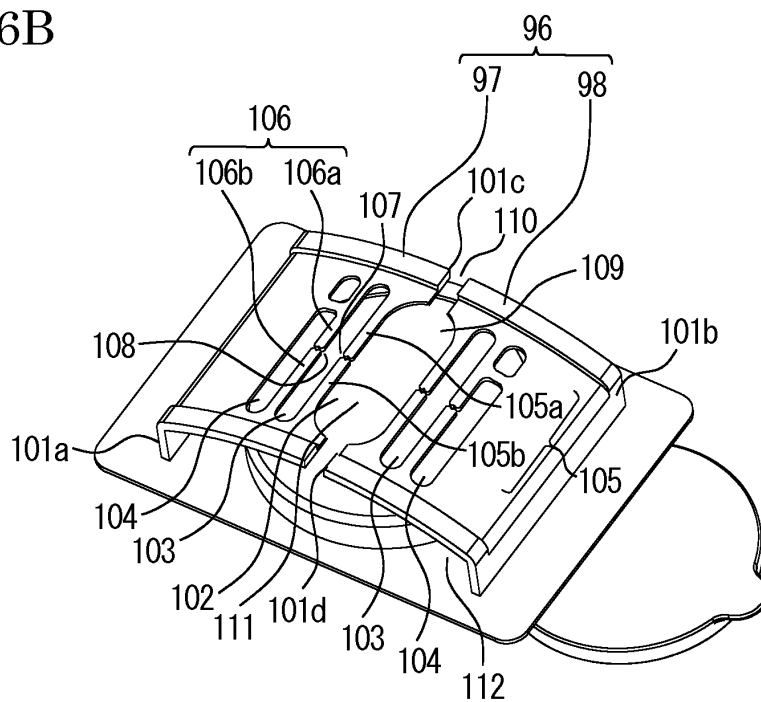


Fig. 17A

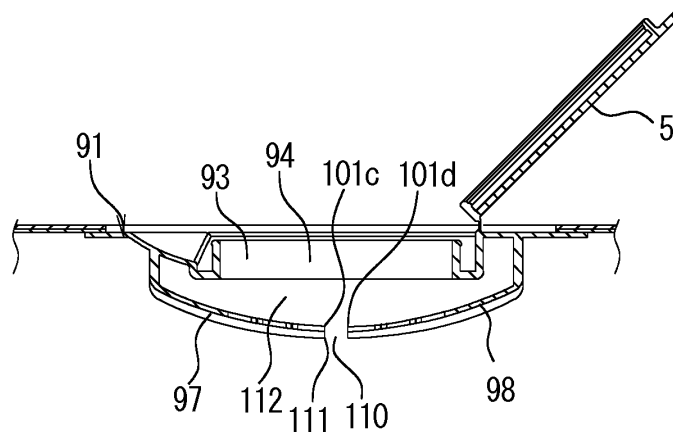


Fig. 17B

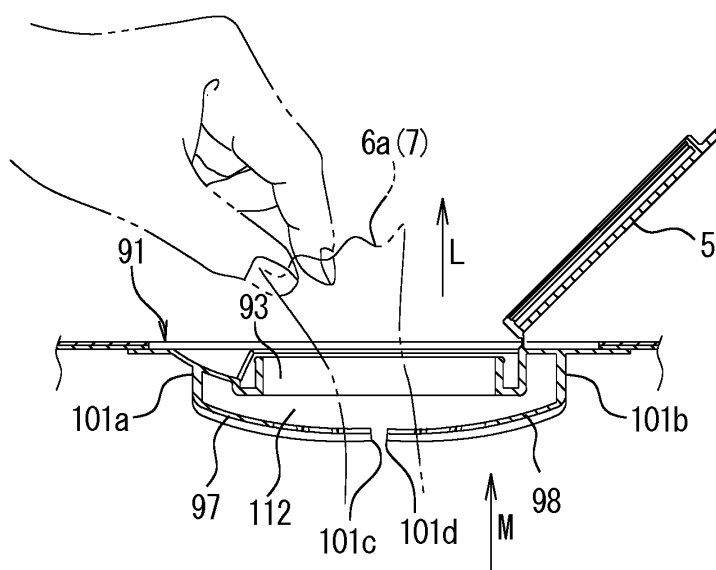
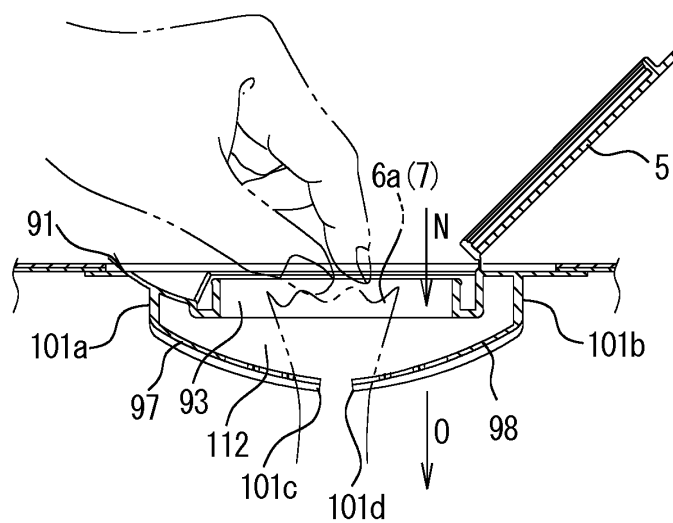


Fig. 17C



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2013/001115

## A. CLASSIFICATION OF SUBJECT MATTER

B65D83/08 (2006.01) i, A47K7/00 (2006.01) i

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)

B65D83/08, A47K7/00

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

Jitsuyo Shinan Koho	1922-1996	Jitsuyo Shinan Toroku Koho	1996-2013
Kokai Jitsuyo Shinan Koho	1971-2013	Toroku Jitsuyo Shinan Koho	1994-2013

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.
X A	JP 2008-44655 A (Nippon Paper Crecia Co., Ltd.), 28 February 2008 (28.02.2008), paragraphs [0009] to [0010], [0014]; fig. 1 to 7 (Family: none)	1-3, 5 4
A	JP 2003-40361 A (Daio Paper Corp.), 13 February 2003 (13.02.2003), fig. 3, 7 to 10 (Family: none)	1-5
A	JP 10-507106 A (Nice-Pak Products, Inc.), 14 July 1998 (14.07.1998), fig. 6, 9, 17 to 18 & US 5542568 A & EP 777435 A	1-5

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

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"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)

"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

"I" 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

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search  
23 May, 2013 (23.05.13)Date of mailing of the international search report  
04 June, 2013 (04.06.13)Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2013/001115

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 7-41061 A (JEX Co., Ltd.), 10 February 1995 (10.02.1995), fig. 4 to 7 (Family: none)	1-5
A	JP 1-226579 A (Kenji NAKAMURA), 11 September 1989 (11.09.1989), fig. 5, 8 to 10 & US 4848575 A & EP 331027 A1	1-5
A	JP 10-77076 A (Kenji NAKAMURA), 24 March 1998 (24.03.1998), fig. 2 (Family: none)	1-5

Form PCT/ISA/210 (continuation of second sheet) (July 2009)

**REFERENCES CITED IN THE DESCRIPTION**

*This list of references cited by the applicant is for the reader's convenience only. It does not form part of the European patent document. Even though great care has been taken in compiling the references, errors or omissions cannot be excluded and the EPO disclaims all liability in this regard.*

**Patent documents cited in the description**

- JP 2004196303 A [0005]
- JP 2010173649 A [0005]