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(54) **DISPENSING CONTAINER FOR WET SHEETS**

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## Description

Technical Field

**[0001]** The present invention relates generally to a dispensing container for containing and dispensing wet sheets.

Background Art

**[0002]** Conventionally, a wet sheet container 10 is known which comprises a container body A containing therein a stack of wet sheets 30 cylindrically rolled up and a cap C including a lid B attached thereto so as to be repetitively openable and closable, as shown in a Fig. 11(a) of the accompanying drawings (e.g., from PTL 1).

**[0003]** As shown in Fig. 11(b), with such container A, when it is desired to use wet sheets, the lid B is opened and, distal ends of the individual wet sheets 30 is pinched with a user's fingers and the wet sheets 30 are successively pulled out one by one through an opening D of the cap C. However, in order to prevent the wet sheets 30 from drying, the opening D must be dimensioned as small as possible to improve the seal performance essential for the container body A. As a disadvantageous consequence, it becomes difficult to pull out the wet sheets 30 through the opening D dimensioned small in this manner.

**[0004]** Particularly in the case of the wet sheets 30 impregnated with high volatile alcohol or the like for the purpose of disinfection, alcohol or the like rapidly evaporates even if the opening D is dimensioned small. To solve this problem, it is required to store the wet sheets in a perfectly sealed environment.

**[0005]** To overcome this problem, a wet sheet pack 20 characterized in that a laminate film having a high permeation resistance is used to make the individual pack of wet sheets as illustrated by Fig. 12(a) of the accompanying drawings has been proposed (e.g., disclosed in PTL 2).

**[0006]** In the case of the known wet sheet pack 20, when it is desired to use wet sheets 30, a film sheet 23 sealing an opening 21 is peeled off from the pack, the wet sheets 30 is pulled out and then the opening 21 is sealed again with the film sheet 23 so that the remaining wet sheets 30 may be perfectly sealed to protect them against drying.

**[0007]** However, this wet sheet pack 20 of prior art is based on a relatively simple construction in which the film sheet 21 is temporarily bonded to the pack 20 by the intermediary of a adhesive layer 22 formed around the opening 21 and repetitive operations of unsealing and sealing several times may reduce adhesive force of the adhesive layer 22. Consequently, the film sheet 23 to seal the opening 21 may be unintentionally peeled off from the pack 20 and the desired seal performance essential for the film sheet 23 may be unacceptably deteriorated.

**[0008]** To overcome such drawback, the wet sheet pack 20 provided with a cap C so as to seal the opening 21 as illustrated by Fig. 13(a) of the accompanying drawing has been proposed (e.g., disclosed in PTL 3).

**[0009]** However, the cap C covers merely a part of the pack 20 inclusive of the opening as will be apparent from Fig. 13(b) and there is an anxiety that a clearance may be left between the pack 20 including the laminate film and the cap C made of thermoplastic resin. In addition, even after the lid B has been closed, there is a possibility that a clearance may be often left between the lid B and the cap C and alcohol or the other may evaporate trough the clearance.

Citation List

Patent Literature

**[0010]**

PTL 1: Japanese Patent Application Laid-Open Publication No. 2007-217054
PTL 2: Japanese Patent Publication No. 3372692
PTL 3: Japanese Patent Publication No. 3706141

**[0011]** The prior art is also disclosed in documents JP 2006 341905A, JP 10 305 863 A and FR 2 786 374 A1.

## Summary of Invention

### Technical Problem

**[0012]** The present invention relates to a dispensing container for a stack of wet sheets.
One object of the present invention is to provide the container improved to have a sufficiently high seal performance essential to prevent the wet sheets impregnated with high volatile liquid such as alcohol from drying and thereby to store the wet sheets in useful condition over a long period.

**[0013]** Another object of the present is to provide the container improved to facilitate not only the individual wet sheets to be pulled out but also to facilitate the empty pack to be exchanged with a fresh pack so that the usability as well as the eco-friendliness may be improved.

**[0014]** A further object of the present invention is to provide such container formed with a hook for storage so that not only the usability but also the display effect may be improved.

### Solution to Problem

**[0015]** According to the invention, there is provided a dispensing container for containing and dispensing of wet sheets, comprising the following features:

a container body and movable lid being rigid, the container body having a first opposed surface and said lid having a second opposed surface, wherein

the first and second opposed surfaces are mutually opposed surfaces of the container body and the lid when the lid is closed; the container body is formed from plural walls and has an opening defined on the first opposed surface which is one of the walls, for pulling out the wet sheets through the opening; the lid is adapted to seal and unseal the opening and includes a proximal end portion hinged to the container body and a distal end portion; and engaging means are provided on the container body and the lid for disengageably engaging the lid to the container body.

**[0016]** The container further comprises an annular groove formed in a zone encircling the opening on the first opposed surface, the groove being defined by an annular second ridge and an annular third ridge spaced apart from the second ridge in a radius direction of the ridges and integrally formed on the first opposed surface, wherein the second and third ridges include distal ends, and the distal ends define therebetween a guide space which is a part of the groove;
an annular packing is elastically deformable and fixedly inserted in the groove and includes a distal end surface having a corner edge;
a gap is defined between a first side as one of mutually opposed sides of the packing and a second side as one of mutually opposed sides of the second and third ridges, wherein the gap is adjacent to the corner edge of the distal end surface of the packing; and
an annular first ridge is integrally formed on the second opposed surface and includes a distal end to deform the corner edge of the packing by pressure contact against the corner edge when the lid is closed, to tightly seal the opening; and further comprising an annular fourth ridge integrally formed on the second opposed surface with being spaced apart from the first ridge in the radius direction, the fourth ridge contacting with one of the second and third ridges when the lid is closed, to airtightly seal the opening.

## Advantageous Effects of Invention

**[0017]** According to the invention, even if the packing is formed of material having a relative high elastic rebound to provide a reliable sealing for the opening, the corner edge of the distal end surface of the packing, which is a part of the packing, is readily deformable by pressure contact of the first ridge against the corner edge of the distal end surface of the packing to seal the opening. Consequently, the invention ensures that the seal performance essential for the container body and thereby the wet sheets are reliably protected against drying for a long period.

## Brief Description of Drawings

**[0018]**

FIG. 1 shows a dispensing container for wet sheets according to the present invention (a) as the container has been unsealed and (b) as the container is kept in the sealed state.
FIG. 2 shows a wet sheet pack (a) in a perspective view as partially broken away and (b) in a sectional view taken in a transverse direction.
FIG. 3 shows a partially exploded perspective view of the container.
FIG. 4 shows the wet sheet pack according to the present invention as partially broken away (in upper page space) and a part defined by broken line in an enlarged scale (in lower page space).
FIGS. 5(a) and 5(b) show sectional views each of a part of the container according to the present invention.
FIGS. 6 (a) and 6(b) show sectional views of a part of the container according to the present invention.
FIG. 7 shows the container according to the present invention (a) with a bottom kept in sealed state and (b) with the bottom unsealed.
FIG. 8 shows the container (a) with a hook received in a depression and (b) with the hook raised from the depression.
FIGS. 9(a) and 9(b) show to one example for display the container according to the present invention.
FIG. 10 shows the container (a) as viewed obliquely from above and (b) obliquely viewed from below.
FIG. 11 shows a dispensing container of prior art.
FIG. 12 shows a dispensing container of prior art.
FIG. 13 shows a dispensing container of prior art.

## Description of Embodiments

**[0019]** At the outset, the summary of embodiments of the invention will be described as follows:

a container body and movable lid being rigid, the container body having a first opposed surface and said lid having a second opposed surface, wherein the first and second opposed surfaces are mutually opposed surfaces of the container body and the lid when the lid is closed; the container body is formed from plural walls and has an opening defined on the first opposed surface which is one of the walls, for pulling out the wet sheets through the opening; the lid is adapted to seal and unseal the opening and includes a proximal end portion hinged to the container body and a distal end portion; and engaging means are provided on the container body and the lid for disengageably engaging the lid to the container body.

**[0020]** The container further comprises
an annular groove formed in a zone encircling the opening on the first opposed surface, the groove being defined by an annular second ridge and an annular third ridge spaced apart from the second ridge in a radius direction

of the ridges and integrally formed on the first opposed surface, wherein the second and third ridges include distal ends, and the distal ends define therebetween a guide space which is a part of the groove;
an annular packing is elastically deformable and fixedly inserted in the groove and includes a distal end surface having a corner edge;
a gap is defined between a first side as one of mutually opposed sides of the packing and a second side as one of mutually opposed sides of the second and third ridges, wherein the gap is adjacent to the corner edge of the distal end surface of the packing;
an annular first ridge is integrally formed on the second opposed surface and includes a distal end to deform the corner edge of the packing by pressure contact against the corner edge when the lid is closed, to tightly seal the opening;
and further comprising an annular fourth ridge integrally formed on the second opposed surface with being spaced apart from the first ridge in the radius direction, the fourth ridge contacting with one of the second and third ridges when the lid is closed, to airtightly seal the opening.

**[0021]** The invention may include the following embodiments:

**[0022]** The distal end surface of the packing is located in a lower level than tips of the distal ends of the second and third ridges as viewed in high directions thereof.

**[0023]** At least one of the opposed surfaces of the distal ends of the second and third ridges is oblique so that the guide space is tapered from the distal ends of the second and third ridges toward the distal end surface of the packing.

**[0024]** The packing is substantially rectangular as viewed in a cross-section, wherein the corner edge of the distal end surface of the packing is one of corner edges defining both side edges of the distal end surface of the packing.

**[0025]** The first ridge, at least one of the second and third ridges, and the fourth ridge are tapered from respective proximal ends toward the respective distal ends.

**[0026]** The container includes a bottom adapted to be openable and closable with respect to the container body.

**[0027]** The container body is provided with a hook used to suspend the container body and said hook is collapsible into the container body.

**[0028]** Embodiments of the invention may be further described as follows:

**[0029]** As shown by Figs. 1 (a) and (b), one example of a dispensing container 10 for wet sheets comprises a container body 1 and a movable lid 2. The container body 1 includes plural walls and contains therein a wet sheet pack 20. The lid 2 includes a proximal end portion 2a and a distal end portion 2b and serves to seal an opening 3 formed in a central zone of a top wall, which is one of the plural walls, of the container body 1 through which individual wet sheets 30 are pulled out. The proximal end portion 2a of the lid 2 is hinged to the container body 1 by means of a hinge 4.

**[0030]** The lid 2 is integrally formed on its inner surface (opposed surface to the container body when the lid is closed) with an annular ridge 7a and an annular ridge 7b spaced apart from the ridge 7a in a radius direction of them. The container body 1 is provided on a zone encircling the opening 3 on the top surface (surface opposed to the lid when the lid is closed) of the container body 1 with an annular packing 6 which is elastically deformable. The packing 6 includes a distal end surface 6a (Fig. 4) which comes in contact with the distal end of the ridge 7a when the lid 2 is closed and thereby the opening 3 is tightly sealed.

**[0031]** With such an arrangement, even the wet sheets impregnated with high volatile antiseptic solution such as alcohol can be reliably prevented from drying for a long period.

**[0032]** Details of the container 10 according to the invention will be more fully understood from the description given hereunder.

**[0033]** First of all, a wet sheet pack 20 to be stored in the container 10 according to the invention will be described. As will be apparent from Figs. 2 (a) and 2 (b), the wet sheet pack 20 comprises a laminate film used as a wrapping member and a stack of wet sheets 30 each being folded back on itself and interleaved by the immediately following wet sheet 30.

**[0034]** A top surface of the pack 20 is formed with a substantially circular opening 21 through which the uppermost wet sheet 30 is pinched and pulled out and, upon pulling out the uppermost wet sheet, a distal end of the immediately following wet sheet 30 is put out from the aforesaid opening 3 so that the wet sheets 30 can be successively pulled out from the pack 20 and therefore from the container body 1.

**[0035]** More specifically, the individual wet sheets 30 are impregnated with high volatile liquid such as alcohol and must be stored in the condition wetted with such high volatile liquid. To meet this requirement, an initially unsealed sheet 23 is bonded to the top surface of the pack 20 by means of an adhesive region 22 formed around the opening 21 and thereby the wet sheet pack 20 is sealed.

**[0036]** When it is desired to use the wet sheets 30, the initially unsealed sheet 23 is removed from the pack 20 and the wet pack 20 is put into the container 10 as will be described later in more details. In this way, even after the initially unsealed sheet 23 has been removed and the pack 20 has been unsealed, the wet sheets 30 can be properly stored and used without the anxiety that the wet sheets might dry.

**[0037]** Now details of the container according to the invention serving to store the above-mentioned wet sheet pack 20 will be described.

**[0038]** The container 10 serving to store the pack 20 comprises, as shown in Figs. 3 and 4, the movable lid 2 and the container body 1 serving to store the pack 20 wherein the bottom 5 of the container body 1 is openable

and closable around the hinge 40b.

**[0039]** The bottom 5 of the container body 1 is provided with a movable leaf 15 connected with one side edge of the bottom 5 by means of the hinge 40a and this movable leaf 15 is formed on a distal end thereof with a latch 13 adapted to be engaged with a latch receiving groove 14 formed on the container body 1 so that the bottom 5 can be locked with the container body 1.

**[0040]** The lid 2 includes a proximal end portion 2a and a distal end portion 2b. The proximal end portion 2a is hinged to the container body 1 by means of hinge 4. The distal end portion 2b is formed with a latch 11 adapted to be engaged with a latch receiving groove 12 formed on the container body 1 so that the lid 2 can be locked with the container body 1.

**[0041]** More specifically, the container body 1 is formed around the opening 3 with annular ridges 8a, 8b so that the annular packing 6 may be inserted into an annular groove 8 defined between the ridge 8a and the ridge 8b (as indicated by dotted line). The ridges 8a, 8b are integrally formed on the top wall of one of plural walls defining the container body 1 so as to encircle the opening 3 with being spaced apart in a radius direction of them.

**[0042]** The lid 2 is formed with annular ridges 7a, 7b with being spaced apart in a radius direction of them so that the ridge 7a may come in contact with a corner edge 6b of a distal end surface 6a of the packing 6 and thereby the opening 3 of the container body 1 may be tightly sealed when the lid 2 is closed. The ridges 7a, 7b are tapered from their proximal ends toward their distal ends, as will be described later in more detail.

**[0043]** The ridge 7a of the lid 2 comes in contact with a corner edge 6b of the distal end surface 6a of the packing 6 fixedly inserted into the groove 8 defined between the ridges 8a, 8b of the container body 1 and thereupon the corner edge 6b of the distal end surface 6a of the packing 6 is deformed so as to come in close contact with the ridge 7a. More specifically, a small gap 9 is left between the packing 6 and the ridge 8b which allows the corner edge 6b of the packing 6 to be deformed outward.

**[0044]** Specifically, the ridge 7a of the lid 2 comes in contact with the corner edge 6b of the distal end surface 6a, which corner edge is one of plural edges, of the packing 6 on the container body 1 so as to deform the corner edge 6b of the packing 6 and thereby to make the contact between the ridge 7a and the packing 6 more tight. In this way, it is assured to seal the opening 3 of the container body 1. From this viewpoint, the small gap 9 is preferably left between the packing 6 and the ridge 8b of the container body 1.

**[0045]** The ridges 8a, 8b have respective distal ends which define therebetween a guide space 8c. The guide space 8c is tapered from distal ends of the ridges 8a, 8b toward the distal end surface 6a of the packing 6 by at least parts of mutually opposed sides of the ridges 8a, 8b being made oblique or small. The distal end surface 6a of the packing 6 is located in a lower level than tips of the distal ends of the ridges 8a, 8b. The ridge 8b also is tapered from a proximal end thereof toward a distal end so that the ridge 7b of the lid 2 comes in contact with the ridge 8b of the lid 2 when the lid 2 is closed.

**[0046]** The ridge 7a of the lid 2 comes in local contact with the packing 6 in the manner as has been described above (as indicated by small circles) and thereby it is assured that the corner edge 6b of the packing 6 comes in close contact with the ridge 7a. In this way, it is possible to achieve a high sealing effect for the container body. A relatively simple construction using the packing 6 having a rectangular cross-section makes it possible to manufacture the container 10 adapted to be tightly sealed at a low cost

**[0047]** Referring now to Fig. 5(a), the ridges 7a, 7b of the lid 2 come in contact with the ridge 8b of the container body 1 so as to nip the latter therebetween when the lid 2 is closed. Consequentially, the desired high sealing effect for the container body is achieved by two contact points of these ridges.

**[0048]** In addition to these two contacting points between the ridges 7a, 7b of the lid 2 and the ridge 8b of the container body 1, there is provided a contacting point between the ridge 7a and the packing 6. These three contact points (indicated by small circles in Fig. 5(a)) assure that the container body 1 can be tightly sealed. In this way, the wet sheets 30 can be stored for a long period without the anxiety that the wet sheets might dry even when the wet sheets are impregnated with high volatile alcohol.

**[0049]** The positional relationship between the ridges 7a, 7b, 8a, 8b formed on the lid 2 and the container body 1 and the packing 6 is not specified so far as the ridges formed on the container body 1 and the lid 2 come in contact with the corner edge 6b of the distal end surface 6a of the packing 6 so as to deform the packing 6 toward the gap 9 and thereby to assure the desired tight contact between the ridges 7a, 8a and the packing 6.

**[0050]** It is possible, for example, to seal the container body 1 tightly at a total of three contact points, i.e., at two contact points between the ridge 7a of the lid 2 on one hand and the ridge 8a of the container main body and the packing 6 on the other hand, and one contact point between the annular ridge 7b of the lid 2 and the ridge 8b of the container body, as shown by Fig. 5(b).

**[0051]** It is also possible to provide for the packing 6 on the lid 2 so that the ridge 8a of the container body 1 comes in contact with the corner edge 6b of the packing 6 and the ridge 7b both formed on the lid as shown by Fig. 6 (a) and thereby the container body can be tightly sealed.

**[0052]** As still another alternative arrangement, it is possible to seal the container body 1 further tightly at a total of three contact points (as indicated by small circles in Fig. 6(a)), i.e., at one contact point between the ridge 8b of the container body on one hand and the corner edge of the packing 6 on the lid 2 on the other hand and at two contact points between the ridges 8a, 8b of the container body on one hand and both sides of the ridge

7a of the lid 2, as shown by Fig. 6(a).

**[0053]** In the manner as has been described above, the container 10 according to the invention is constructed so that the ridge 7a, 7b formed on the lid 2, the packing 6 and the ridges 8a, 8b formed on the container body 1 come in contact with one another to seal the opening 3 and thereby the opening 3 of the container body 1 is sealed. The ridge 7a, 8a come in contact with the corner edge 6b of the packing 6 to deform the packing 6 so that the sealing effect for the container body 1 can be improved and the wet sheets 30 can be prevent from drying for a long period.

**[0054]** The container 10 can be constructed not only to improve the sealing effect for the container body as has been described above but also to improve a displaying effect.

**[0055]** Referring to Fig. 7 showing an alternative construction of the container 10, the bottom 5 of the container body 1 is openable and closable around the hinge 40b and the latch 13 of the movable leaf 15 formed along the side edge of the bottom 5 by the intermediary of the hinge 40a is locked with the latch receiving groove 14 formed on the container body 1. When it is desired to exchange the empty pack with a fresh pack, the movable leaf 15 may be collapsed toward the front side to unlock the bottom 5 from the container main body 1 as illustrated by Fig. 7(a) and then the container body 1 may be swung upward as illustrated by Fig. 7(b). In this way, the empty pack 20 can be easily exchanged with a fresh pack 20. Such unique construction makes it possible to provide the container 10 improved in the aspect of its usability as well as in the aspect of its environmental friendliness.

**[0056]** Referring to Fig. 8, the container body 1 may be formed with a hook 16 used to suspend said container body 1 by the intermediary of the hinge 40c so that the hook 16 can be received in a correspondingly shaped depression in the container main body 1.

**[0057]** When the hook 16 is collapsed into the depression 18 formed on the bottom 5 of the container body 1, the inner side of the hook 16 at its distal end is locked by a latch 17 formed in the depression, as shown by Fig. 8(a).

**[0058]** When it is desired to use the hook 16 for suspension of the container body 1, the distal end of the hook 16 may be pinched by the user's fingers and pulled out to unlock the hook 16 from the latch 17 so that the hook may be turned up around the hinge 40c and extend outward as will be seen in Fig. 8(b).

**[0059]** After the hook 16 has been turned up from the depression of the container 10, a hanger member 19 such as an S-shaped hook or a hanging bar may be engaged with or inserted through the hook 16 as illustrated by Fig. 9 (a) or Fig. 9(b), respectively, for the purpose of personal use or commercial display. In this way, the hook 16 collapsible into the container 10 makes it possible to provide the container improved in the usability as well as in the display effect.

**[0060]** As aforementioned, the present invention provides the container 10 having sufficiently high seal performance essential to protect the wet sheets 30 contained therein from drying for a long period even if the wet sheets 30 are impregnated with highly volatile alcohol or the like. The present invention further provides the container 10 improved in its usability as well as in its environmental friendliness because this container 10 facilitates the individual wet sheets to be pulled out from the container 10 and the empty pack 20 to be exchanged with a fresh pack 20. In addition, the present invention provides the container 10 improved in its usability as well as in its display effect by forming the container 10 with the hook 16 which is collapsible into the container 10.

**[0061]** While, in general, both the container body 1 and the lid 2 cooperating together to form the container 10 which has been described hereinabove may be obtained by injection molding of thermoplastic resin, thermally resistant PP, PS, PC, PET and the like may be preferably used as the thermoplastic resin to be injection-molded.

**[0062]** The container 10 is preferably formed with strength enhancing ribs 40 on both the container body 1 and the lid 2 in order to enhance the strength of the container 10. In this case, the container body 1 may be formed on the top wall and side walls, as seen in Fig. 10(a), or on the bottom 5 as seen in Fig. 10(b), with convex reinforcing ribs 40 extending in a longitudinal direction. The presence of these reinforcing ribs 40 protects the container 10 from being undesirably deformed and enhances strength of both the container body 1 and the bottom 5 so that the container 10 is protected from being deformed due to repetitive operations of opening and closing the lid 2 and the bottom 5. In this way, the presence of these reinforcing ribs 40 makes it possible to use the storage container 10 without any problem for a long period. The strength of the container 10 enhanced in this manner makes it possible, in turn, to keep the container body 1 tightly in contact with the bottom 5 and thereby to achieve further higher seal performance essential for the container 10.

**[0063]** While water-soluble material has been commonly used as material for the wet sheets 30, it is also possible to use the other types of material, fibrous material such as a non-woven fabric, paper or gauze, or sheet-like foam or paper-based soft material. The wet sheets 30 may be impregnated with disinfection solution, antiseptic solution or rinse solution each containing alcohol, or cosmetics such as face lotion or emulsion.

**[0064]** Material for the wet sheet pack 20 includes, in the order from the outer side, oriented polyester (PET)/non-oriented polypropylene (CPP), polyvinylidene chloride (PVDC)-coated PET/CPP, PET/polyethylene (PE)/CPP, oriented polypropylene (OPP)/CPP, PVDC-coated OPP/CPP, inorganic material (e.g., silicon oxide (SiOx)-deposited OPP/CPP and oriented nylon (ON)/CPP. Vapor deposition of aluminum foil may be used to enhance barrier performance.

**[0065]** As the packing 6, the conventional rubber packing may be used and material for such rubber packing

includes nitrile rubber (NBR), fluorine-containing rubber (FKM), ethylene-propylene rubber (EPDM), acrylic rubber (ACM), hydrogenated nitrile rubber (HNBR), polyurethane rubber, styrene-butadiene rubber, chloroprene rubber and butyl rubber.

**[0066]** Among them, the ethylene-propylene rubber (EPDM) which is terpolymer consisting of ethylene, propylene and diene monomer used for cross-linking and classified as olefinic rubber may be preferably used as material for the packing 6 in consideration of its high resistance property to adverse affection of highly volatile alcohol or the like such as swelling, its anti-allergy value higher than that of natural rubber and its high resistance property to adverse affection of solar light such as crack generation. In other words, said ethylene-propylene rubber can be effectively and stably used for a long period.

**[0067]** The material for the packing is not limited to the rubber packing but resin packing also may be used. For example, ethylene tetrafluoride resin or polyamide resin may be used. In contrast with this, silicone rubber (VMQ) is alcohol-pervious and therefore not preferable as material for said annular synthetic resin packing 6 when the wet sheets are impregnated with volatile alcohol or the like.

**[0068]** It is desired for the packing 6 to have a suitable value of hardness to be appropriately deformed when the ridges come in contact with the packing 6. More specifically, the packing 6 has rubber hardness (the rubber hardness based on JIS K 6253 Durometer Type A, i.e., "hardness measured by Type A Durometer Hardness Test"). Suitable A-value is in a range of A20 to 40, preferably in a range of A23 to 30 and more preferably A25.

## Claims

1. A dispensing container (10) for containing and pull-out dispensing of wet sheets (30), comprising:

   a container body (1) and movable lid (2) being rigid, said container body having a first opposed surface and said lid having a second opposed surface, wherein said first and second opposed surfaces are mutually opposed surfaces when said lid is closed;
   said container body being formed from plural walls and having an opening (3) defined on said first opposed surface which is one of said walls, for pulling out said wet sheets through said opening;
   said lid being adapted to seal and unseal said opening and including a proximal end portion (2a) hinged to said container body and a distal end portion (2b);
   engaging means provided on said container body and said lid for disengageably engaging said lid to said container body;
   an annular groove (8) is formed in a zone encircling said opening on said first opposed surface, said groove being defined by an annular second ridge (8a) and an annular third ridge (8b) spaced apart from said second ridge in a radius direction of said ridges and integrally formed on said first opposed surface, wherein said second and third ridges include distal ends, and said distal ends define therebetween a guide space (8c) which is a part of said groove;
   an annular packing (6) is elastically deformable and fixedly inserted in said groove and includes a distal end surface (6a) having a corner edge (6b);
   a gap (9) is defined between a first side as one of mutually opposed sides of said packing and a second side as one of mutually opposed sides of said second and third ridges, wherein said gap is adjacent to said corner edge of said distal end surface of said packing;
   an annular first ridge (7a) is integrally formed on said second opposed surface and includes a distal end to deform said corner edge of said packing by pressure contact against said corner edge when said lid is closed, to tightly seal said opening; **characterised in that**
   the dispensing container further comprising an annular fourth ridge (7b) integrally formed on said second opposed surface with being spaced apart from said first ridge in said radius direction, said fourth ridge contacting with one of said second and third ridges when said lid is closed, to airtightly seal said opening.

2. The dispensing container defined by Claim 1, wherein said distal end surface of said packing is located in a lower level than tips of said distal ends of said second and third ridges as viewed in high directions thereof.

3. The dispensing container defined by any one of Claims 1 and 2, wherein at least one of said mutually opposed surfaces of said distal ends of said second and third ridges is oblique so that said guide space is tapered from said distal ends of said second and third ridges toward said distal end surface of said packing.

4. The dispensing container defined by any one of Claims 1 through 3, wherein said packing is substantially rectangular as viewed in a cross-section, wherein said corner edge of said distal end surface of said packing is one of corner edges defining both side edges of said distal end surface of said packing.

5. The dispensing container defined by any one of Claims 1 through 4, wherein said first ridge, at least one of said second and third ridges, and said fourth ridge are tapered from respective proximal ends to-

ward respective said distal ends.

**6.** The dispensing container defined by any one of Claims 1 through 5, wherein said container includes a bottom (5) adapted to be openable and closable with respect to said container body.

**7.** The dispensing container defined by any one of Claims 1 through 6, wherein said container is provided with a hook (16) used to suspend said container body and said hook is collapsible into said container body.

**Patentansprüche**

**1.** Ausgabebehälter (10) zum Speichern und Herausziehen von feuchten Tüchern (30), umfassend:

einen starren Behälterkörper (1) und einen starren beweglichen Deckel (2), wobei der besagte Behälterkörper eine erste Gegenfläche und der besagte Deckel eine zweite Gegenfläche aufweist, wobei die besagten ersten und zweiten Gegenflächen bei geschlossenem Deckel einander gegenüber liegen;
wobei der besagte Behälterkörper aus mehreren Wänden gebildet ist und auf der besagten ersten Gegenfläche, die eine der besagten Wände bildet, eine Öffnung (3) zum Herausziehen der besagten feuchten Tücher durch die besagte Öffnung aufweist;
wobei der besagte Deckel zum Verschließen und Öffnen der besagten Öffnung ausgelegt ist und eine proximale am besagten Behälterkörper angelenkte Endpartie (2a) und eine distale Endpartie (2b) aufweist;
wobei am besagten Behälterkörper und am besagten Deckel Eingriffmittel zum lösbaren Eingriff des besagten Deckels mit dem besagten Behälterkörper vorgesehen sind;
wobei in einer die besagte Öffnung auf der besagten ersten Gegenfläche umgrenzenden Zone eine ringförmige Nut (8) ausgebildet ist, die von einer ringförmigen zweiten Rippe (8a) und einer von der besagten zweiten Rippe in Radiusrichtung der besagten Rippen beabstandeten ringförmigen dritten Rippe (8b) definiert wird und an die besagte erste Gegenfläche angeformt ist,
wobei die besagten zweiten und dritten Rippen distale Enden umfassen und die besagten distalen Enden dazwischen einen Führungsraum (8c) definieren, der einen Teil der besagten Nut bildet;
wobei eine ringförmige Packung (6) elastisch verformbar und fest in die besagte Nut eingefügt ist und eine distale Endfläche (6a) mit einem Eckrand (6b) aufweist;
wobei ein Spalt (9) zwischen einer ersten Seite, die eine von einander gegenüber liegenden Seiten der besagten Packung bildet, und einer zweiten Seite, die eine von einander gegenüber liegenden Seiten der besagten zweiten und dritten Rippen bildet, definiert ist, wobei der besagte Spalt neben dem besagten Eckrand der besagten distalen Endfläche der besagten Packung angeordnet ist;
wobei auf der besagten zweiten Gegenfläche eine ringförmige erste Rippe (7a) angeformt ist und ein distales Ende zur Verformung des besagten Eckrandes der besagten Packung zum dichten Verschließen der besagten Öffnung durch Druckkontakt gegen den besagten Eckrand bei geschlossenem Deckel aufweist;
**dadurch gekennzeichnet, dass**
der Ausgabebehälter weiter eine ringförmige vierte Rippe (7b) aufweist, die an die besagte zweite Gegenfläche angeformt und von der besagten ersten Rippe in der besagten Radiusrichtung beabstandet ist, wobei die besagte vierte Rippe bei geschlossenem Deckel zum luftdichten Verschließen der besagten Öffnung die besagte zweite oder die besagte dritte Rippe kontaktiert.

**2.** Ausgabebehälter nach Anspruch 1, wobei die besagte distale Endfläche der besagten Packung in Höhenrichtung betrachtet niedriger angeordnet ist als die Spitzen der besagten distalen Enden der besagten zweiten und dritten Rippen.

**3.** Ausgabebehälter nach Anspruch 1 oder 2, wobei mindestens eine der besagten einander gegenüber liegenden Oberflächen der besagten distalen Enden der besagten zweiten und dritten Rippen schräg ist, so dass sich der besagte Führungsraum von den besagten distalen Enden der besagten zweiten und dritten Rippen aus in Richtung der besagten distalen Endfläche der besagten Packung verjüngt.

**4.** Ausgabebehälter nach einem der Ansprüche 1 bis 3, wobei die besagte Packung im Querschnitt betrachtet im Wesentlichen rechteckig ist, wobei der besagte Eckrand der besagten distalen Endfläche der besagten Packung einer der Eckränder ist, die die beiden Seitenränder der besagten distalen Endfläche der besagten Packung definieren.

**5.** Ausgabebehälter nach einem der Ansprüche 1 bis 4, wobei sich die besagte erste Rippe, die besagte zweite und/oder dritte Rippe und die besagte vierte Rippe von ihren jeweiligen proximalen Enden aus in Richtung der jeweiligen besagten distalen Enden verjüngen.

**6.** Ausgabebehälter nach einem der Ansprüche 1 bis

5, wobei der besagte Behälter einen Boden (5) umfasst, der im Verhältnis zum besagten Behälterkörper geöffnet und geschlossen werden kann.

**7.** Ausgabebehälter nach einem der Ansprüche 1 bis 6, wobei der besagte Behälter mit einem Haken (16) ausgestattet ist, der zum Aufhängen des besagten Behälterkörpers dient, und wobei der besagte Haken in den besagten Behälterkörper hinein geklappt werden kann.

**Revendications**

**1.** Récipient de distribution (10) servant à contenir et aussi à distribuer des feuilles humides (30) après les avoir détachées, comportant:

un corps (1) de récipient et un couvercle articulé (2) qui sont tous deux rigides, le corps de récipient comportant une première surface opposée et le couvercle comportant une deuxième surface opposée, **caractérisé en ce que** les première et deuxième surfaces opposées sont des surfaces mutuellement opposées lorsque le couvercle est fermé;
le corps de récipient étant constitué de plusieurs parois et comportant une ouverture (3) définie sur la première surface opposée qui est l'une des parois, à travers laquelle on peut détacher les feuilles humides;
le couvercle étant adapté de manière à fermer et à ouvrir l'ouverture, et comprenant une extrémité proche (2a) articulée sur le corps de récipient ainsi qu'une extrémité distale (2b);
un moyen de mise en prise prévu sur le corps de récipient et aussi sur le couvercle servant à mettre en prise, de manière séparable, le couvercle et le corps de récipient;
une rainure annulaire (8) formée dans une zone qui entoure l'ouverture sur la première surface opposée, cette rainure étant définie par une deuxième nervure annulaire (8a) et une troisième nervure annulaire (8b) qui est écartée de la deuxième nervure dans le sens radial de ces nervures, et étant intégralement formée sur la première surface opposée, **caractérisée en ce que** les deuxième et troisième nervures comportent des extrémités distales, et **en ce que** ces extrémités distales définissent entre elles un espace de guidage (8c) qui fait partie de la rainure;
une garniture annulaire (6) qui est déformable de manière élastique et insérée de manière fixe dans la rainure, et qui comprend une surface d'extrémité distale (6a) dotée d'un bord en coin (6b);
un intervalle (9) qui est défini entre un premier côté qui est l'un des côtés mutuellement opposés de la garniture et un deuxième côté qui est l'un des côtés mutuellement opposés des deuxième et troisième nervures, **caractérisé en ce que** l'intervalle est contigu au bord en coin de la surface d'extrémité distale de la garniture;
une première nervure annulaire (7a) qui est formée intégralement sur la deuxième surface opposée et qui comprend une extrémité distale servant à déformer le bord en coin de la garniture par contact sous pression contre le bord en coin lorsque le couvercle est fermé, assurant ainsi l'étanchéité de l'ouverture;
**caractérisé en ce que**
le récipient de distribution comprend par ailleurs une quatrième nervure annulaire (7b) formée intégralement sur la deuxième surface opposée et qui est écartée de la première nervure dans le sens radial de ces nervures, cette quatrième nervure entrant en contact avec la deuxième ou bien la troisième nervure lorsque le couvercle est fermé, assurant ainsi l'étanchéité de l'ouverture.

**2.** Récipient de distribution défini selon la revendication 1, **caractérisé en ce que** la surface d'extrémité distale de la garniture se trouve à un niveau plus bas que les bouts des extrémités distales des deuxième et troisième nervures observés dans un sens élevé.

**3.** Récipient de distribution défini selon l'une quelconque des revendications 1 et 2, **caractérisé en ce qu'**au moins l'une des surfaces mutuellement opposées des extrémités distales des deuxième et troisième nervures est oblique, de sorte que l'espace de guidage est biseauté depuis les extrémités distales des deuxième et troisième nervures vers la surface d'extrémité distale de la garniture.

**4.** Récipient de distribution défini selon l'une quelconque des revendications 1 à 3, **caractérisé en ce que** la garniture est essentiellement de forme rectangulaire vue en coupe, **caractérisé en ce que** le bord en coin de la surface d'extrémité distale de la garniture est l'un des bords en coin qui définissent les deux bords latéraux de la surface d'extrémité distale de la garniture.

**5.** Récipient de distribution défini selon l'une quelconque des revendications 1 à 4, **caractérisé en ce que** la première garniture, au moins l'une des deuxième et troisième garnitures, et la quatrième garniture sont biseautées depuis les extrémités proches respectives vers les extrémités distales respectives.

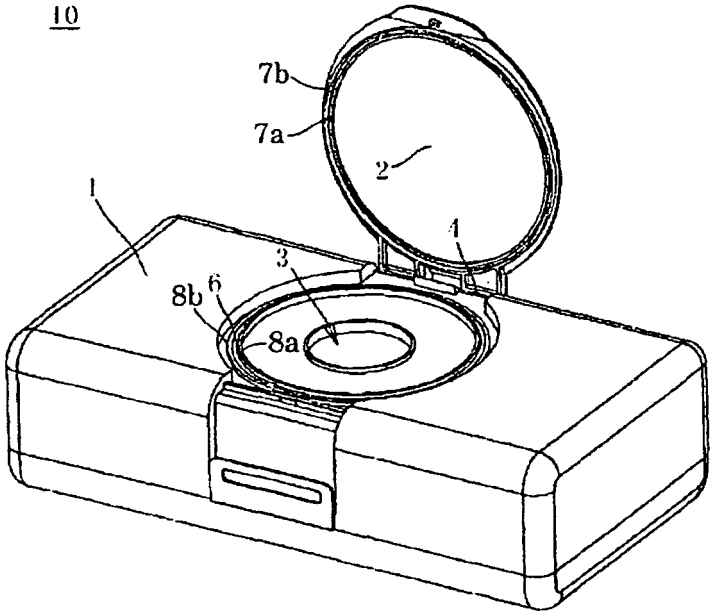
**6.** Récipient de distribution défini selon l'une quelconque des revendications 1 à 5, **caractérisé en ce que** ce récipient comprend un fond (5) qui est adapté de

manière à pouvoir s'ouvrir et se fermer par rapport au corps de récipient.

**7.** Récipient de distribution défini selon l'une quelconque des revendications 1 à 6, **caractérisé en ce que** ce récipient est doté d'un crochet (16) servant à suspendre le corps de récipient, et **en ce que** ce crochet peut se replier dans le corps de récipient.

[Fig. 1]

(a)

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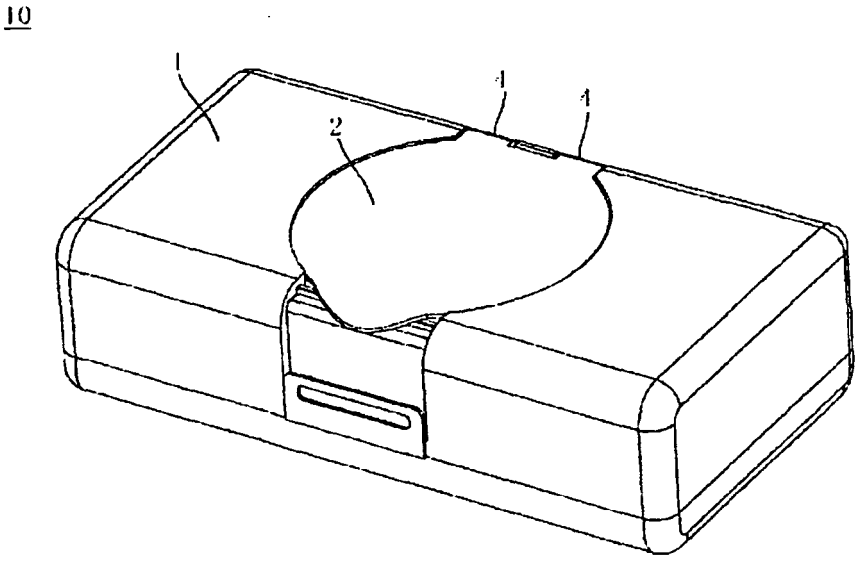
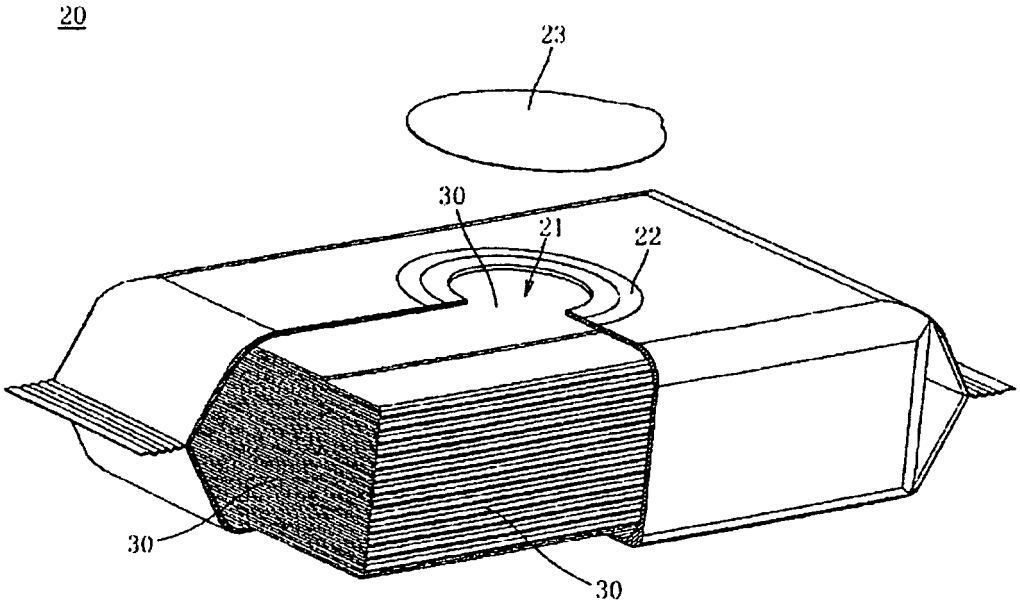


[Fig. 2]

(a)

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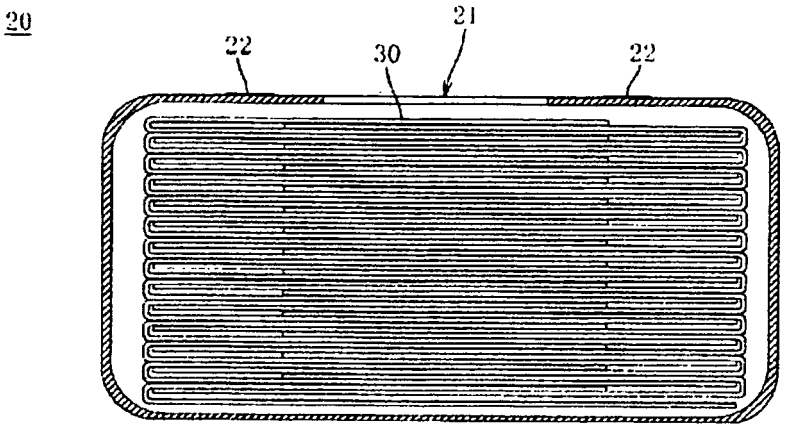
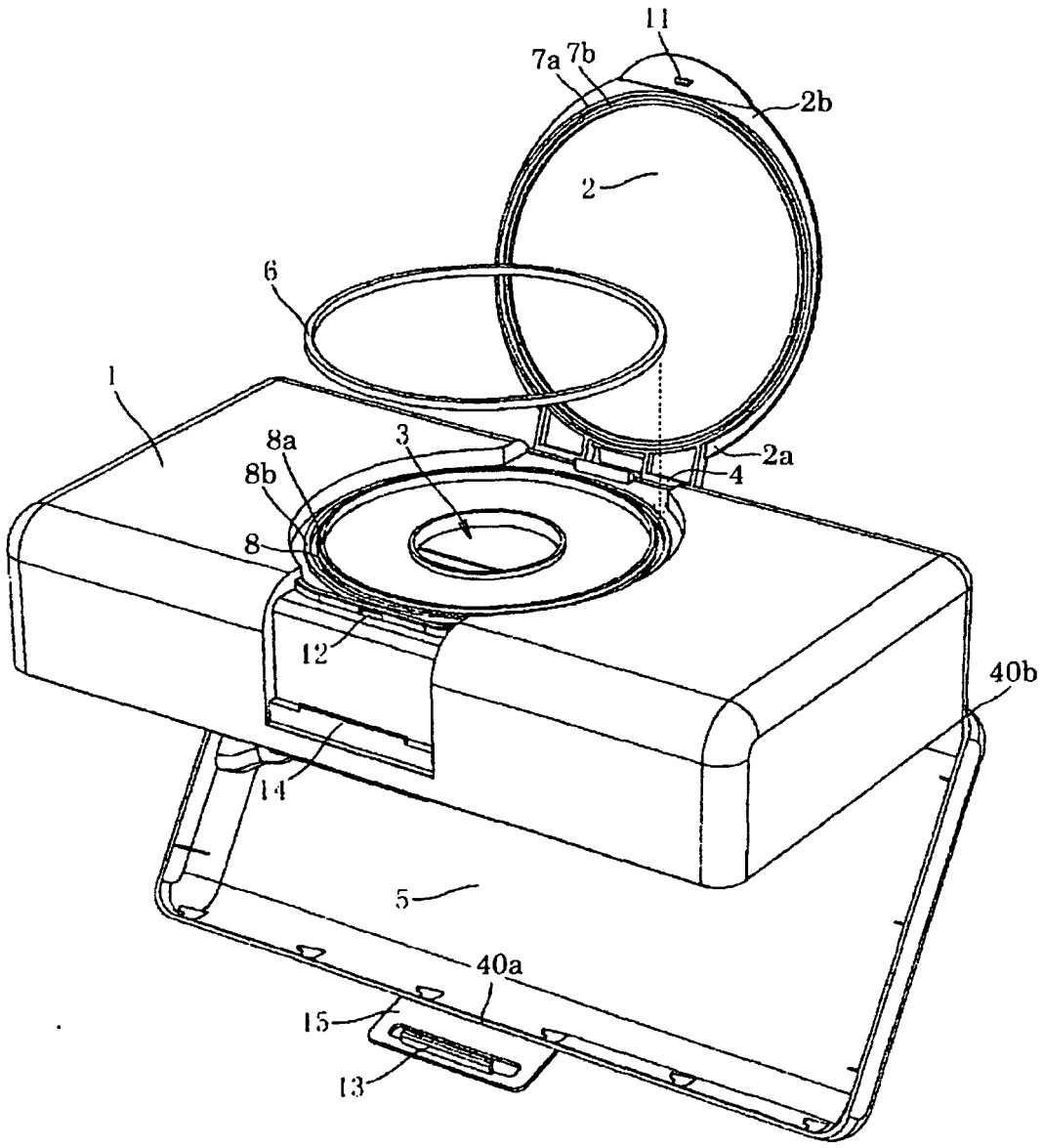
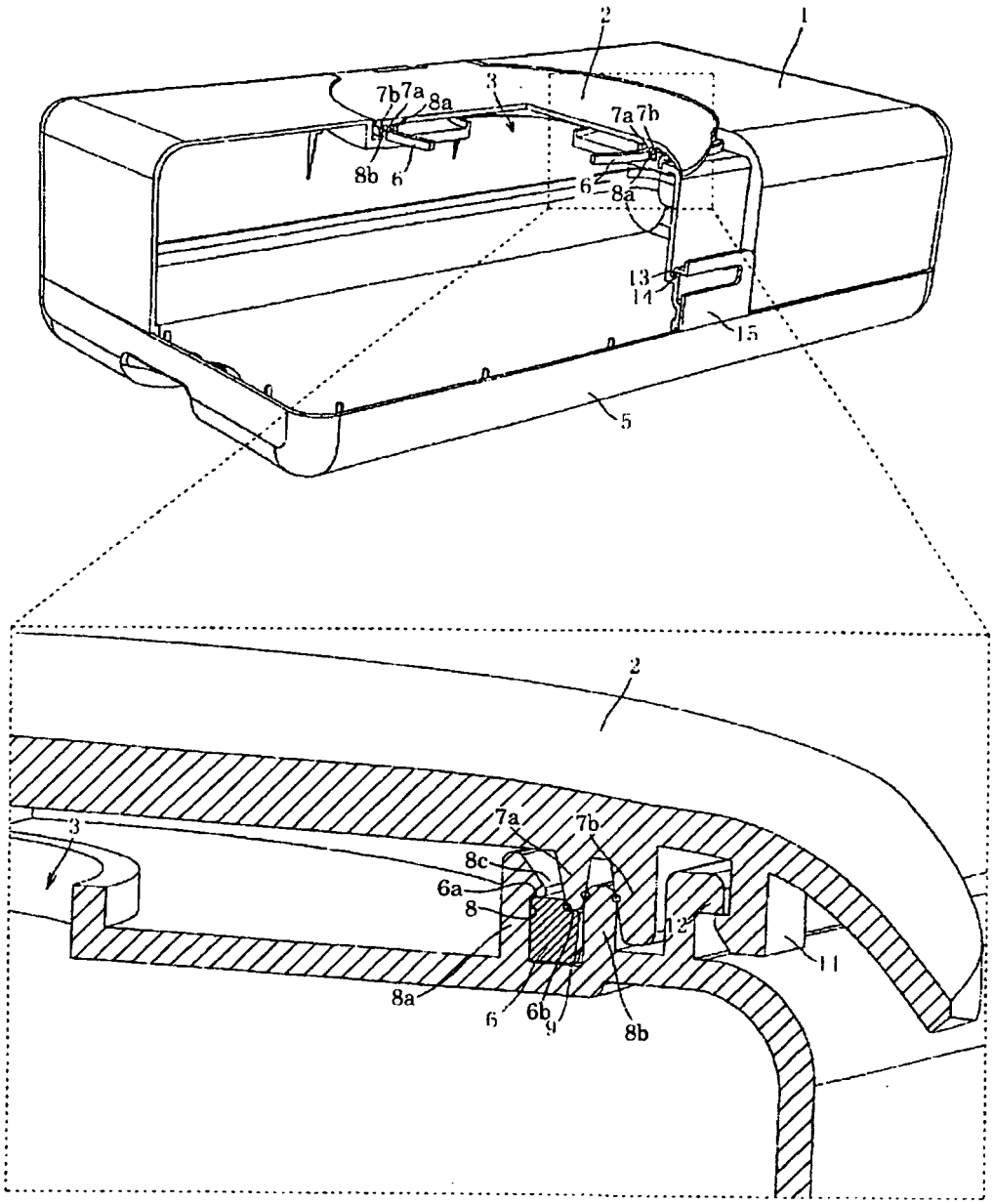


[Fig. 3]

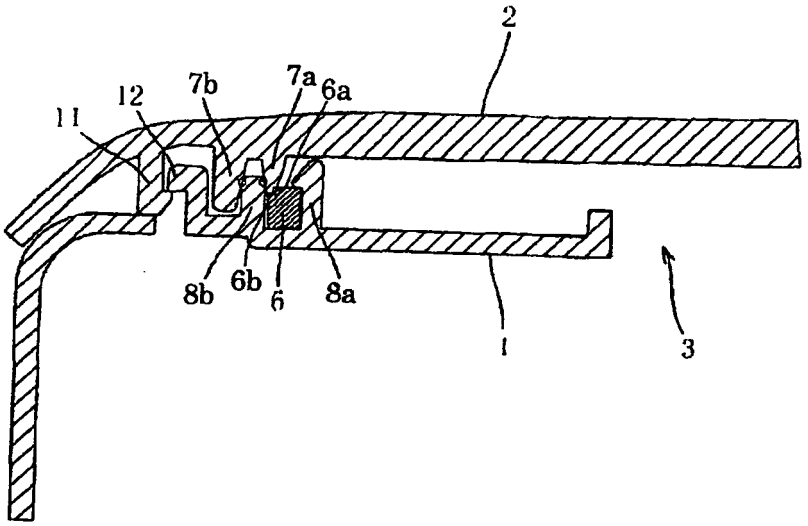


[Fig. 4]



[Fig. 5]

(a)

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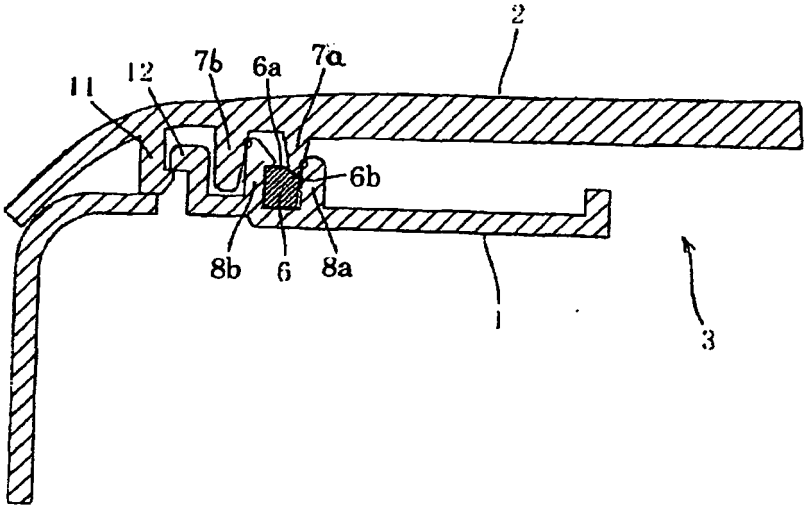
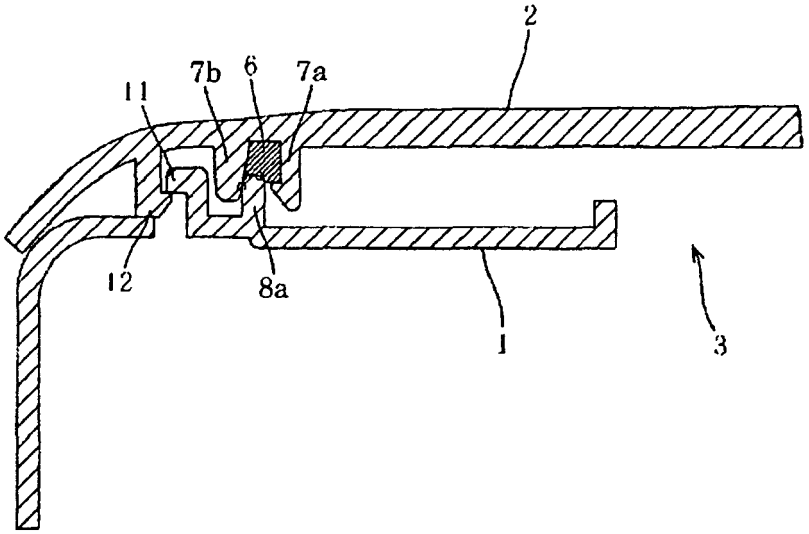


[Fig. 6]

(a)

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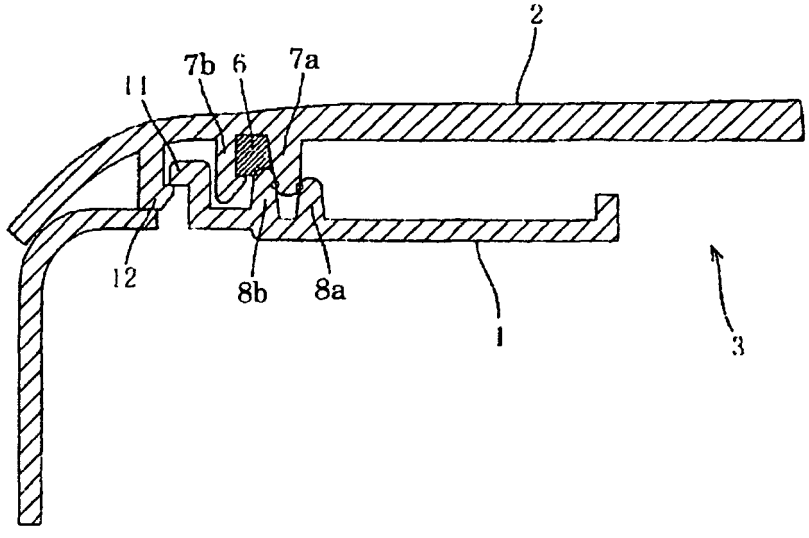
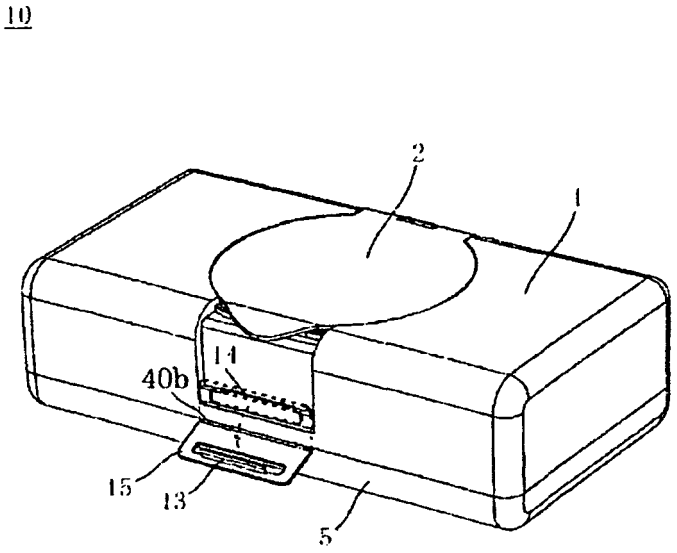


[Fig. 7]

(a)

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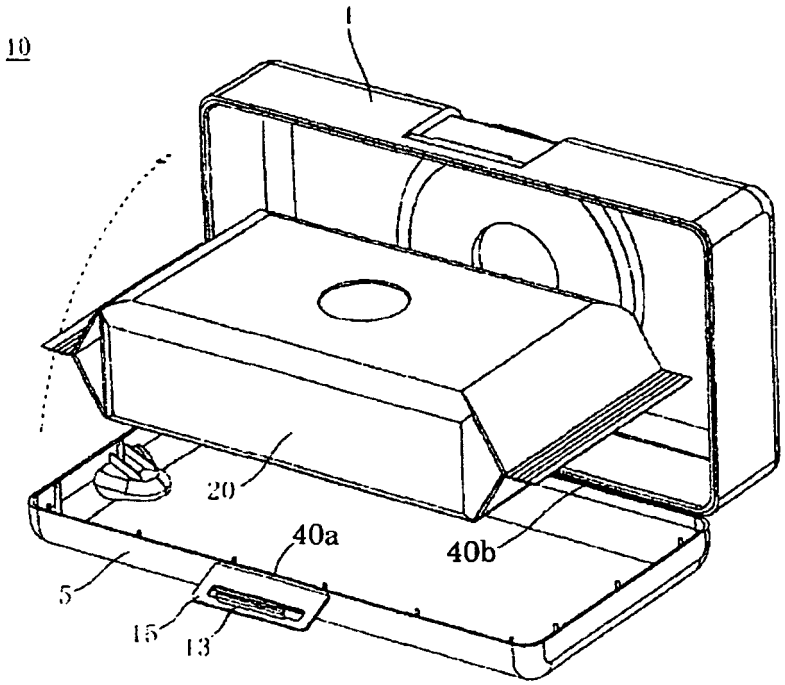
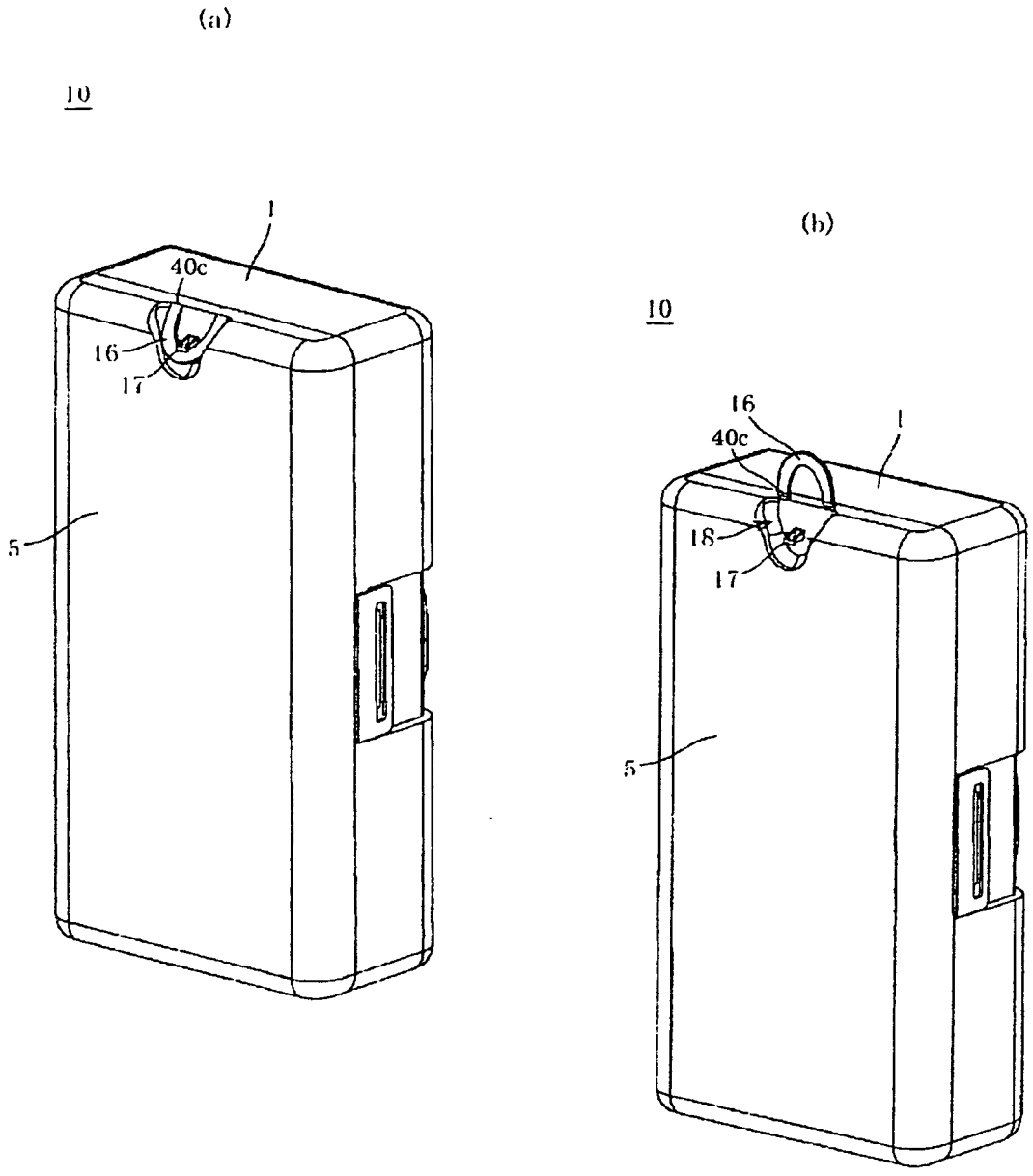
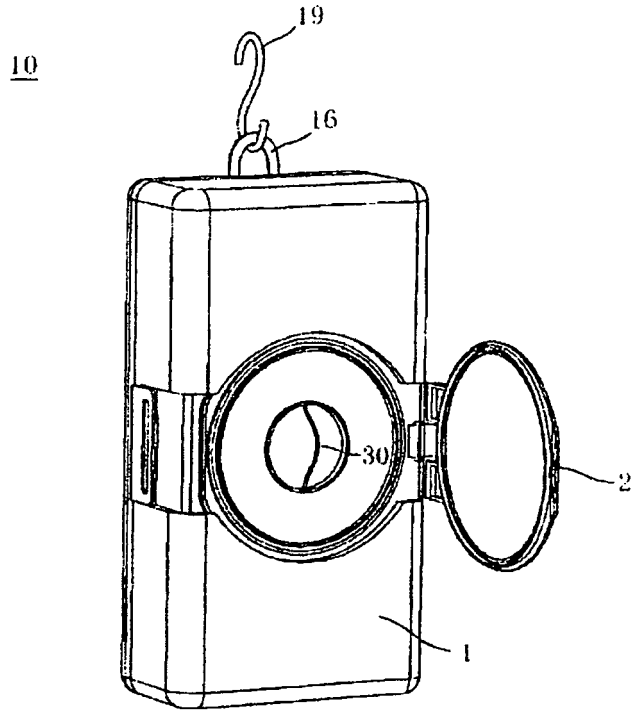


[Fig. 8]



[Fig. 9]

(a)

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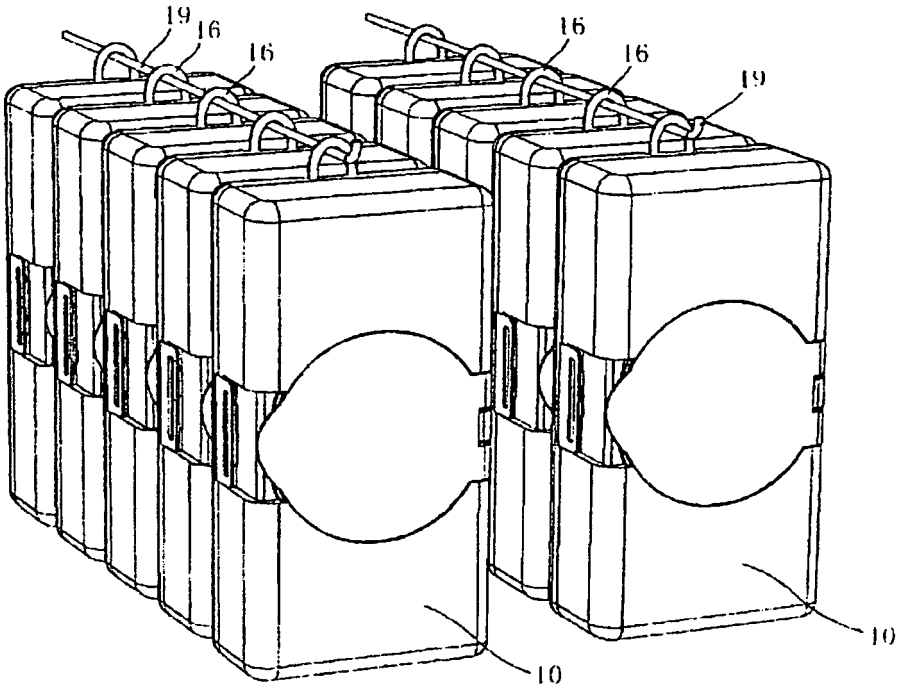
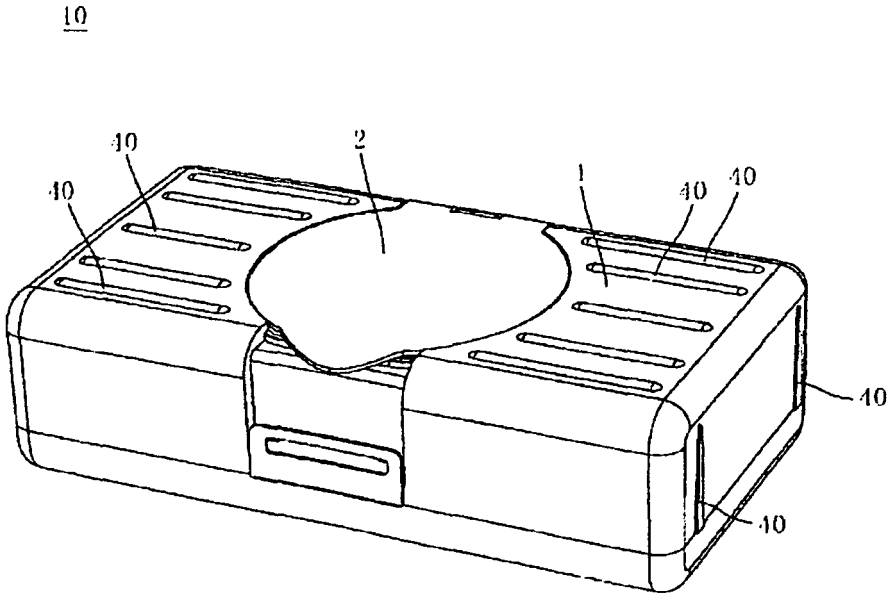


[Fig. 10]

(a)

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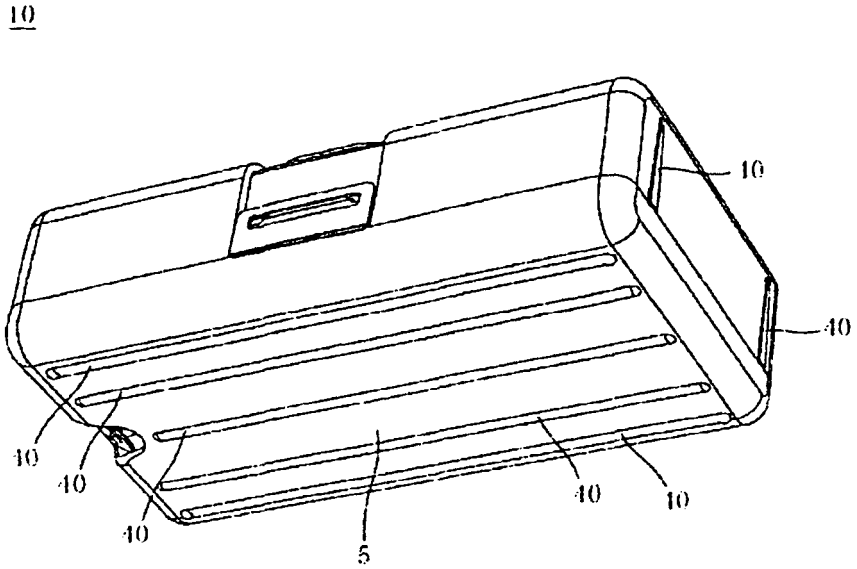
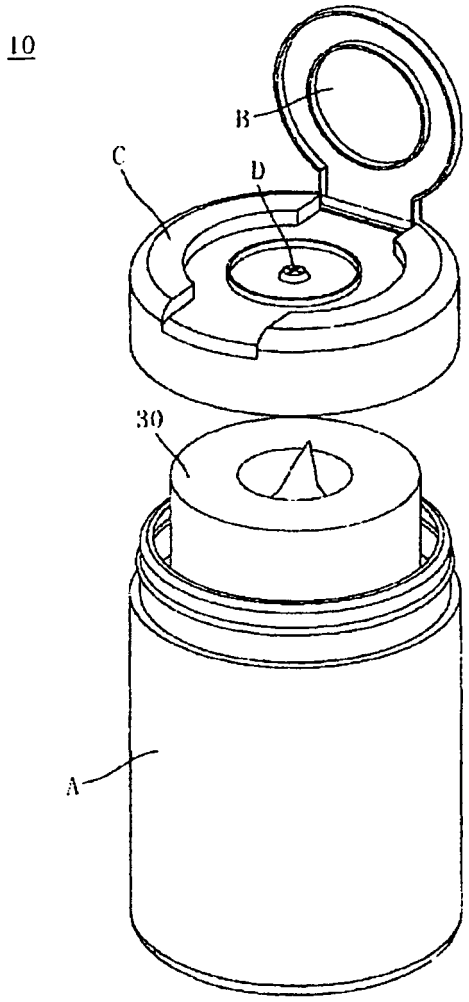


[Fig. 11]

Prior Art

(a)

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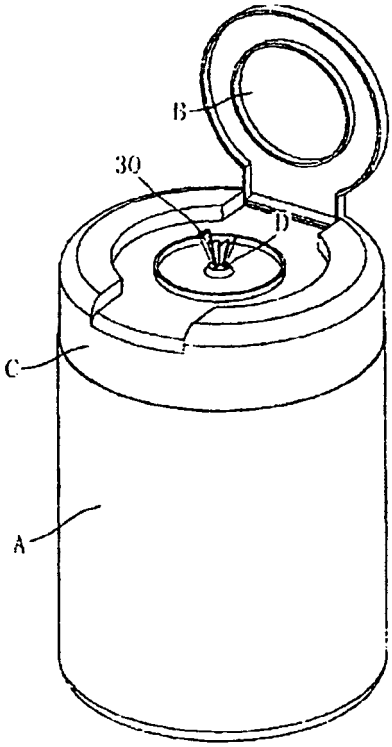
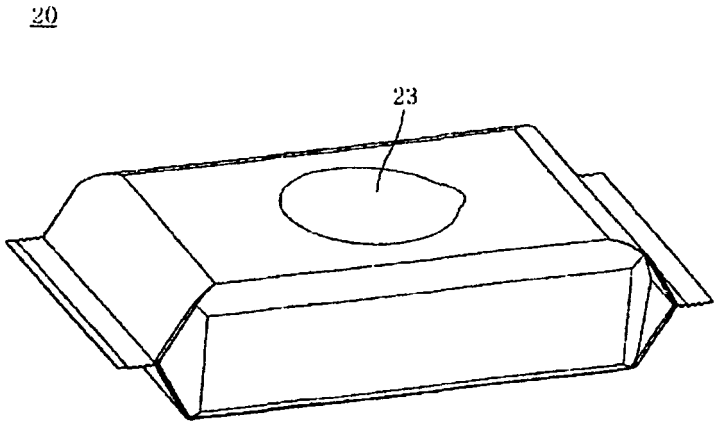


[Fig. 12]

Prior Art

(a)

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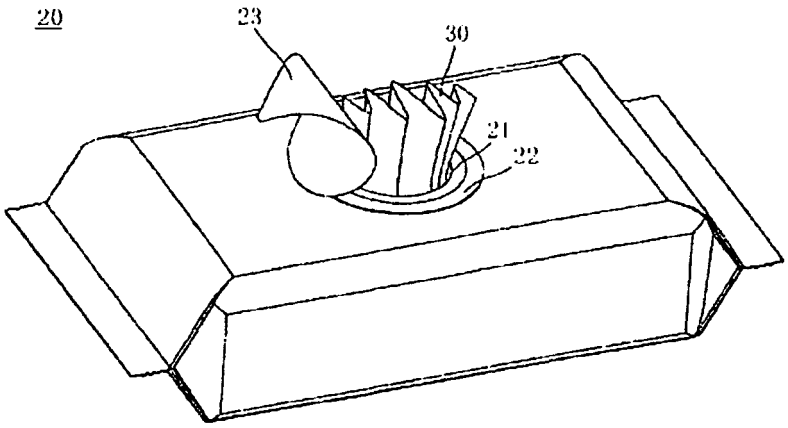
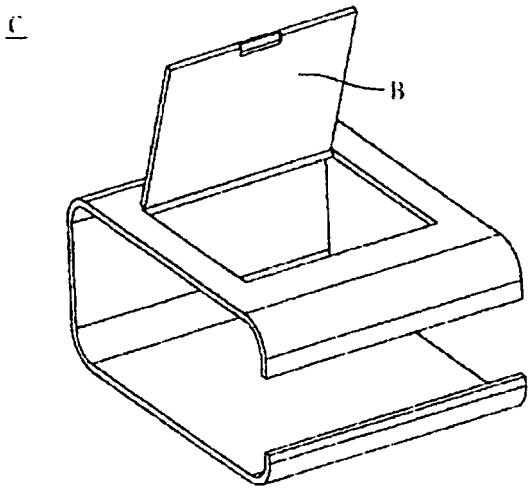


[Fig. 13]

Prior Art

(a)

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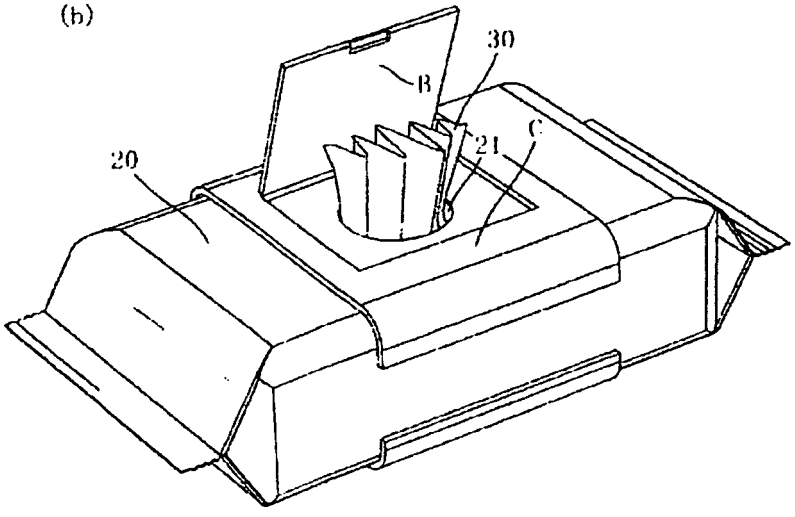

## REFERENCES CITED IN THE DESCRIPTION

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