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

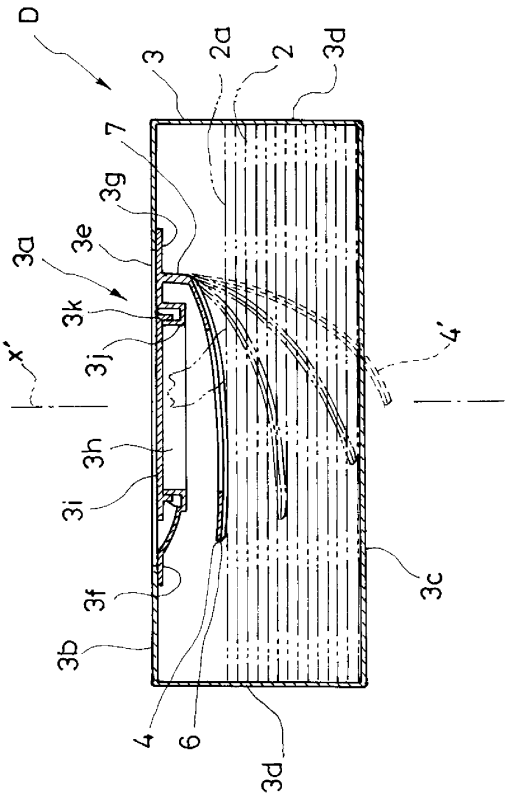
(72) Inventor: **Yamada, Kikuo**
Shinagawa-ku
Tokyo 141-0022 (JP)

(74) Representative: **Ishiguro, Masaoki**
IPecunia Patents B.V.
P.O. Box 593
6160 AN Geleen (NL)

(54) **WIPE DISPENSER**

(57) A wipe dispenser has: a stacked body configured by stacking sheet-like folded wipes; a storage body for storing the stacked body and having, at an upper portion, a dispenser opening from which the wipes are pulled out; and a pressing member that is pressed against an upper surface of the stacked body by biasing force, wherein the pressing member ensures that resistance generated when pulling the wipes through the dispenser opening is uneven between the left-hand side and the right-hand side of the upper surface of the stacked body, which is divided by a virtual straight line therebetween that is perpendicular to a fold line of each of the wipes.

fig. 2



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Description

TECHNICAL FIELD

[0001] The present invention relates to an improved wipe dispenser with a storage body in which a stacked body of sheet-like wipes is stored. In the present invention, the term "wipe (s) " means wiping members, or more specifically, soft fiber sheets impregnated with fluid, functioning to wipe off unwanted matters and the like on the surface of a subject that is to be wiped. Examples of the concept of such wipes include wiping cloths, body wipes, makeup remover wipes, toilet seat cleaning wipes, and the like.

BACKGROUND ART

[0002] A wipe dispenser has a storage body for storing a stacked body of sheet-like wipes. The stacked body is typically configured by a number of wipes that are folded along two or more fold lines and stacked on top of each other. Therefore, the stacked body is practically in the shape of a hexahedron. The storage body has a dispenser opening from which wipes can be pulled out one by one, starting from the wipe placed at the top of the stacked body. The stacked body can also be configured by folding a long sheet that has a plurality of lines of perforations extending along the width direction of the long sheet. These lines of perforations are formed at certain intervals in the lengthwise direction of the long sheet, in which a section between adjacent lines of perforations is a single wipe.

[0003] These wipes configuring the stacked body are connected so that when the first wipe is pulled out, the second wipe follows. Typically, the wipes are stacked in such a manner that the front edge of the second wipe which is pulled by the first wipe is positioned above the rear edge of the first wipe. In this design, the front edge of the wipe located at the top of the stacked body is lifted, allowing the front edge of this top wipe to be picked up easily when pulled.

[0004] In some of the wipe dispensers of this type, the dispenser opening of the storage body is structured to apply resistance to the wipes passing therethrough, in order to prevent two or more wipes from being pulled out of the storage body at the same time (see Patent Literature 1 and Patent Literature 2, for example). This structure separates the first wipe from the second wipe when the first wipe is pulled out of the storage body, in which when the front edge of the second wipe is lifted, this front edge is prevented from sticking out of the storage body through the dispenser opening.

[0005] However, the capacity of the storage body configuring the wipe dispensers of this type is always greater than the volume of the stacked body because the stacked body is stored in the storage body. The difference between the capacity and the volume increases as the number of wipes consumed increases. The invention disclosed in Patent Literature 1, therefore, is not particularly inconvenient when placed horizontally with its dispenser opening facing up, but is not for vertical use with the dispenser opening facing sideways. If the storage body is in the form of a pouch made of soft packaging material, the shape-retaining ability of the storage body deteriorates as the number of wipes consumed increases, because the shape-retaining ability of the storage body is dependent on the stacked body.

[0006] Moreover, owing to the effect of the fluid, the wipes that are adjacent to each other vertically stick together tightly. Particularly, even when the wipes are increasingly consumed, the amount of this fluid does not easily decrease relative to the consumption of the wipes. For this reason, the moisture content of the wipes remaining in the storage body is likely to increase as the number of wipes consumed increases, and therefore the adhesion between the vertically adjacent wipes increases as the number of wipes consumed increases. Consequently, the wipe dispensers of this type are strongly required to be able to separate a wipe from the subsequent wipe smoothly and more reliably.

Patent Literature 1: Japanese Patent Application Publication No. 2012-206781
Patent Literature 2: Japanese Utility Model Application Publication No. HI-178791

DISCLOSURE OF THE INVENTION

[0007] The first object of the present invention is to enable a wipe dispenser of this type to be used vertically without causing inconvenience, prevent the stacked body of wipes from becoming untidy in the storage body of the wipe dispenser as much as possible, and separate, smoothly and more reliably, a wipe from the subsequent wipe while preventing as much as possible consumption of the wipes from affecting the shape-retaining ability of the storage body.

[0008] The second object of the present invention is to provide a wipe dispenser that is capable of separating a wipe from the subsequent wipe as described above and at the same time moderately lifting the front edge of the subsequent wipe.

[0009] The third object of the present invention is to provide a wipe dispenser that can be manufactured smoothly and easily using an automatic manufacturing machine, so as not to cause a pressing member of the wipe dispenser to unnecessarily come into contact and interfere with the other members when assembling the storage body and an outlet member into the wipe dispenser or when packing the stacked body of wipes in the storage body.

[0010] In order to achieve the first object, the present invention is a wipe dispenser that has a stacked body configured by stacking sheet-like folded wipes, a storage body for storing the stacked body and having, at an upper portion, a dispenser opening from which the wipes are

pulled out, and a pressing member that is pressed against an upper surface of the stacked body by biasing force, wherein the pressing member ensures that resistance generated when pulling the wipes through the dispenser opening is uneven between a left-hand side and a right-hand side of the upper surface of the stacked body, which is divided by a virtual straight line therebetween that is perpendicular to a fold line of each of the wipes.

[0011] In order to achieve the second object, the present invention provides one favorable aspect of the wipe dispenser in which the pressing member has an additional resistance application portion that acts on the wipes being pulled. This additional resistance application portion is formed of a large resistance portion and a small resistance portion that each generate frictional force in the passage of the wipes, the frictional force of the large resistance portion being greater than that of the small resistance portion. The large resistance portion is located, across the virtual strait line, on the side where resistance induced by the biasing force exists or on the side where the resistance is large.

[0012] In order to achieve the third object, the present invention is the wipe dispenser that also has a retaining member for keeping the pressing member in a state where the pressing is pulled in a direction against the biasing force, the retaining member being capable of releasing the pressing member from this direction.

[0013] In another favorable aspect of this wipe dispenser according to the present invention, the pressing member has one end serving as a pressing portion that comes into abutment with the upper surface of the stacked body, and has the other end supported by an outlet member having a dispenser port for the wipes.

[0014] In another favorable aspect of this wipe dispenser according to the present invention, the pressing member has one end serving as a pressing portion that comes into abutment with the upper surface of the stacked body, and is supported on the side of the pressing portion by the outlet member having the dispenser port for the wipes, via a momentum maintaining member, and the additional resistance application portion is provided between the pressing portion and the other end of the pressing member.

[0015] In another favorable aspect of this wipe dispenser according to the present invention, the pressing member is supported by the outlet member with the dispenser port for the wipes, via momentum maintaining members disposed on the left-hand side and the right-hand side with the virtual straight line therebetween, and biasing force of the left-side momentum maintaining member is different from that of the right-side momentum maintaining member.

[0016] According to the wipe dispenser of the present invention, the function of the pressing member not only enables convenient vertical use but also prevents the stacked body of wipes from becoming untidy in the storage body. In addition, the function of the pressing member can prevent the shape-retaining ability of the storage body from being affected by the consumption of wipes, and separates a wipe from the subsequent wipe smoothly and more reliably.

[0017] According to the wipe dispenser of the present invention, the function of the additional resistance application portion can separate a wipe from the subsequent wipe as described above and at the same time moderately lift the front edge of the subsequent wipe.

[0018] The wipe dispenser according to the present invention can be manufactured smoothly and easily using an automatic manufacturing machine due to the function of the retaining member that prevents the pressing member of the wipe dispenser from unnecessarily coming into contact and interfere with the other members when assembling the storage body and an outlet member into the wipe dispenser or when packing the stacked body of wipes in the storage body.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019]

Fig. 1 is a perspective configuration diagram showing the exterior of a wipe dispenser (a first example) according to an embodiment of the present invention;

Fig. 2 is a cross-sectional diagram, taken along line A-A of Fig. 1;

Fig. 3 is a cross-sectional diagram, taken along line A-A of Fig. 1, showing a state in which the wipes are consumed;

Fig. 4 is a perspective view showing an outlet member and a pressing member that configure the first example;

Fig. 5 is a perspective view showing, from below, the outlet member and the pressing member that configure the first example;

Fig. 6 is a perspective configuration diagram showing the pressing member and a stacked body that configure the first example;

Fig. 7 is a perspective configuration diagram showing a partial modification of the configuration of the pressing member of the first example;

Fig. 8 is a perspective configuration diagram showing a pressing member and a stacked body that configure a wipe dispenser (a second example) according to an embodiment of the present invention;

Fig. 9 is a perspective view showing, from below, an outlet member and a pressing member that configure a wipe dispenser (a third example) according to an embodiment of the present invention;

Fig. 10 is a cross-sectional configuration diagram showing principal parts of the third example;

Fig. 11 is a cross-sectional configuration diagram of a wipe dispenser (a fourth example) according to an embodiment of the present invention;

Fig. 12 is a perspective view showing, from below, an outlet member and a pressing member that con-

figure the fourth example;
Fig. 13 is a cross-sectional diagram of principal parts of the fourth example, showing a state before an opening member is removed;
Fig. 14 is a cross-sectional diagram of principal parts of the fourth example, showing a state after the opening member is removed;
Fig. 15 is a configuration diagram of the wipe dispenser that has a stacked body of wipes folded into an alphabet letter Z;
Fig. 16 is a side configuration diagram showing a state in which the wipe stacked at the top of the stacked body shown in Fig. 15 is started to be pulled out;
Fig. 17 is a side configuration diagram showing the step of pulling out the wipe stacked at the top of the stacked body shown in Fig. 15, the wipe being pulled out more than it is as shown in Fig. 16;
Fig. 18 is a side configuration diagram showing the step of pulling out the wipe stacked at the top of the stacked body shown in Fig. 15, the wipe being pulled out more than it is as shown in Fig. 17;
Fig. 19 shows a state in which the wipe following the wipe stacked at the top of the stacked body shown in Fig. 15 is lifted significantly when the wipe stacked at the top of the stacked body is pulled out;
Fig. 20 is a side configuration diagram of a state in which the wipe stacked at the top of the stacked body shown in Fig. 15 is started to be pulled out, showing a state in which resistance is applied by the pressing member;
Fig. 21 is a side configuration diagram of the step of pulling out the wipe stacked at the top of the stacked body, with the resistance applied by the pressing member, showing a state in which the wipe is pulled out more than it is shown in Fig. 20;
Fig. 22 is a perspective configuration diagram showing a state in which the wipe that is stacked at the top of the stacked body is about to be pulled out in which the resistance of the pressing member is applied only to the right-hand side of an upper surface of the stacked body, the right-hand side, along with the left-hand side, having a virtual straight line therebetween which is perpendicular to the fold lines of the wipes of the stacked body and dividing the upper surface of the stacked body into two, the right-hand side and the left-hand side;
Fig. 23 is a perspective configuration diagram showing a state following the state shown in Fig. 22, in which the wipe stacked at the top of the stacked body is still being pulled;
Fig. 24 is a perspective configuration diagram showing a state following the state shown in Fig. 23, in which the wipe stacked at the top of the stacked body is completely pulled out; and
Fig. 25 is a side configuration diagram showing a state immediately before the wipe stacked at the top of the stacked body is completely pulled out, the wipe being folded into an alphabet letter W.

BEST MODE FOR CARRYING OUT THE INVENTION

[0020] A typical embodiment of the present invention is now described hereinafter with reference to Figs. 1 to 25. A wipe dispenser D according to this embodiment has a stacked body 2 configured by sheet-like wipes 1, a storage body 3 that stores the stacked body 2 and has, at its upper portion 3b, a dispenser opening 3a from which the wipes 1 are pulled out, and a pressing member 4 that is pressed against an upper surface 2a of the stacked body 2 by biasing force. The present specification illustrates a typical form of using the wipe dispenser D in which the storage body 3 is set up with the top wipe 1 of the stacked body 2 being positioned on the top side of the wipe dispenser D (horizontal use/see Fig. 1). In this typical form of using the wipe dispenser D, the section on the top side is defined as the upper portion 3b of the storage body 3 and the upper surface 2a of the stacked body 2, and the section on the bottom side is defined as a lower portion 3c of the storage body 3 and a lower surface 2b of the stacked body 2. When using the wipe dispenser D vertically, the upper portion 3b faces sideways. In the illustrated example, the stacked body 2 is in the shape of a hexahedron formed with the rectangular upper and lower surfaces 2a and 2b. For convenience of explanation, hereinafter, one of the large sides of this hexahedron is described as "front side surface 2c" of the stacked body, the other one as "rear side surface 2d" of the stacked body, one of the small sides of the hexahedron that is located to the right of the front side surface 2c as "right side surface 2e," and the other side located to the left of the front side surface 2c as "left side surface 2f."

[0021] Figs. 1 to 3 each show an example of the storage body 3 made of soft packaging material such as a plastic film. The storage body 3 has the upper portion 3b, the lower portion 3c, four side portions 3d, configuring a hexahedral exterior. Although not shown, the storage body 3 may be in the shape of a box made of plastic or the like.

[0022] The dispenser opening 3a from which the wipes 1 are pulled out is formed in the upper portion 3b of the storage body 3. In the illustrated example, the dispenser opening 3a is configured with an opening 3e provided at the upper portion 3b of the storage body 3 and an outlet member 3f attached on the inside of the upper portion 3b of the storage body 3. Although not shown, the outlet member 3f may be attached on the outside of the upper portion 3b of the storage body 3.

[0023] The outlet member 3f has a base 3g larger than the opening 3e and a lid 3i for closing a dispenser port 3h provided on the base 3g. In the illustrated example, the outer rim of the base 3g of the outlet member 3f is fixed to the rim surrounding the opening 3e of the storage body 3 so that the opening 3e of the storage body 3 can be closed by the outlet member 3f. By opening the lid 3i,

the front edge of the top wipe 1 of the stacked body 2 in the storage body 3 can be picked up through the dispenser port 3h, and this wipe 1 can be pulled out of the storage body 3.

[0024] In the illustrated example, the base 3g has, in an upper surface thereof, a peripheral wall 3j surrounding the dispenser port 3h, and the lid 3i has, in a lower surface thereof, a peripheral wall 3k that is fitted to the peripheral wall 3j. The dispenser port 3h can be kept closed by the lid 3i by fitting the peripheral wall 3k to the peripheral wall 3j. In the illustrated example, the lid 3i and the base 3g are integrated into a plastic molded article with an elastically deformable hinge portion 3m therebetween. The dispenser port 3h is opened by turning the lid 3i upward about the hinge portion 3m with the amount of force enough to release the peripheral walls 3j and 3k. Aside from the illustrated example, when assembled, the lid 3i may be configured as a unit independent from the base 3g that closes the dispenser port 3h.

[0025] In the illustrated example, the stacked body 2 is configured by stacking a plurality of wipes 1 on top of each other, the wipes 1 being folded along two or more fold lines 1a. Therefore, the stacked body 2 is practically in the shape of a hexahedron. The wipes 1 configuring the stacked body 2 are connected vertically so that when the first wipe 1 is pulled out, the second wipe 1 follows. In the illustrated example, the wipes 1 are stacked in such a manner that a front edge 1b - the leading end - of the second wipe 1, which is pulled by the first wipe, is positioned above a rear edge 1c of the first wipe 1 (see Fig. 15).

[0026] In the illustrated example, the stacked body 2 has the rectangular upper and lower surfaces 2a and 2b and the four side surfaces (the front side surface 2c, the rear side surface 2d, the right side surface 2e, and the left side surface 2f). (See Fig. 1) The fold lines 1a of each wipe 1 are parallel to the long sides of the upper surface 2a and the lower surface 2b of the stacked body 2, and the front side surface 2c and the rear side surface 2d are shaped by the fold lines 1a of the plurality of wipes 1 (see Fig. 16).

[0027] Figs. 15 to 21 each show an example in which each of the wipes 1 is folded into an alphabet letter Z along the two fold lines 1a (referred to as "Z-folded" , hereinafter). In the stacked body 2 configured by the Z-folded wipes 1, the fold line 1a in the vicinity of the front edge 1b of the second wipe 1 is located at either the front side surface 2c or the rear side surface 2d of the stacked body 2.

[0028] Fig. 25 shows an example in which each of the wipes 1 is folded into an alphabet letter W along the three fold lines 1a (referred to as "W-folded," hereinafter). In the stacked body 2 configured with the W-folded wipes 1, when the fold line 1a in the vicinity of the front edge 1b of the second wipe 1 is located at the front side surface 2c of the stacked body 2, the fold line 1a in the vicinity of the front edge 1b of the wipe 1 following the second wipe 1 is located at the rear side surface 2d of the stacked body 2.

[0029] The wipes 1 are typically created by impregnating fabrics formed with paper, woven fabrics, non-woven fabrics or the like of synthetic fiber or natural fiber, with a chemical solution. Examples of the chemical solution include alcohols, water, and a mixture thereof in which fragrances, antibacterial agents, deodorants, surfactants, antiseptics, dyes, antifoaming agents, antioxidants, clarifying agents, solubilizers and the like can be blended, if necessary.

[0030] In the illustrated example, the pressing member 4 is located between the outlet member 3f and the upper surface 2a of the stacked body 2 and pressed against the upper surface 2a of the stacked body 2 by biasing force.

[0031] In the wipe dispenser D according to this embodiment, first of all, the pressing member 4 prevents the stacked body 2 configured by the wipes 1 from collapsing even when the wipe dispenser D is used vertically with the dispenser opening 3a facing sideways. Therefore, the wipe dispenser D can be used vertically without any inconvenience. Second of all, the pressing member 4 can prevent the stacked body 2 configured by the wipes 1 from becoming untidy in the storage body 3. Thirdly, the pressing member 4 can prevent as much as possible the shape-retaining ability of the storage body 3 from being affected by the consumption of the wipes 1.

[0032] In the illustrated example, the pressing member 4 is supported by the outlet member 3f. The pressing member 4 may be supported by the outlet member 3f at one area or two or more areas.

[0033] In the first example shown in Figs. 1 to 6, the pressing member 4 is in a shape of a rectangular plate, the lower surface of which comes into abutment with the upper surface 2a of the stacked body 2. The wipes 1 configuring the stacked body 2 are each folded into a rectangle, in which the fold lines 1a extend in the horizontal direction as shown in Fig. 2. The pressing member 4 has its width direction aligned perpendicular to the fold lines 1a of the wipes 1 and has one end serving as a pressing portion 6 abutting the upper surface of the stacked body and the other end connected to the outlet member 3f having the dispenser port 3h by a connecting portion 7. Between the dispenser port 3h and one of the sides of the base 3g of the outlet member 3f, the connecting portion 7 protrudes downward from the lower surface of the base 3g that faces the stacked body 2, and is in the shape of a rib extending in a direction perpendicular to the fold lines 1a of the wipes 1. The other end of the pressing member 4 is integrated with the protruding end of the connecting portion 7. In the first example, the pressing member 4 is integrated with the outlet member 3f into a plastic molded article. The pressing member 4 is located between the outlet member 3f and the upper surface 2a of the stacked body 2 while being elastically deformable so as to reduce the distance between the pressing portion 6 and the base 3g. The pressing member 4 elastically returns to increase the distance between the

free end 6 and the outlet member 3f as the number of wipes 1 consumed increases. In the first example, the position shown by a numeral 4' in Fig. 2 represents the state obtained before the pressing member 4 is elastically deformed. Also in the first example, the pressing member 4 is bent, in which the lower surface thereof is bent outward.

[0034] In this embodiment, the pressing member 4 ensures that the resistance that is generated when the wipes 1 are each pulled out of the dispenser opening 3a is uneven between the left-hand side and the right-hand side of the upper surface 2a of the stacked body 2 with a virtual straight line x therebetween, the virtual straight line being perpendicular to the fold lines 1a of the wipes 1 (see Figs. 1, 6, 7 and 8).

[0035] As described above, when the first wipe 1 of the stacked body 2 is pulled out, the second wipe 1 follows. Without the pressing member 4, the front edge 1b of the second wipe 1 is lifted significantly (Fig. 19).

[0036] However, with the presence of the pressing member 4, the resistance of the pressing member 4 acts on the front edge 1b of the second wipe 1. Therefore, the rear edge 1c of the first wipe 1 can easily separated from the front edge 1b of the second wipe 1, preventing the front edge 1b of the second wipe 1 from being lifted excessively (Fig. 21).

[0037] The resistance of the pressing member 4 is ensured to be uneven between the left-hand side and the right-hand side with the virtual straight line x therebetween. Therefore, starting from the side where the resistance acts more, the separation between the first wipe 1 and the second wipe 1 begins, and these wipes 1 continue to separate from each other in the remaining section. In other words, the wipe dispenser D of this embodiment can smoothly separate the first wipe 1 from the second wipe 1 (Figs. 22 to 24).

[0038] In the first example, the pressing portion 6 of the pressing member 4 is in abutment with the upper surface 2a of the stacked body 2 at the left-hand side with respect to the virtual straight line x extending between the left-hand side and the right-hand side as shown in Fig. 1 (see Fig. 2. In Figs. 2 and 10, the virtual vertical plane having this virtual straight line x is denoted by "x'"). In other words, in the first example, the resistance of the pressing member 4 acts only on one of the sides of the upper surface 2a of the stacked body 2 having the virtual straight line x therebetween.

[0039] Moreover, an additional resistance application portion 8 that generates frictional force when the wipes 1 are pulled out is formed in the pressing member 4. In other words, the wipes 1 are pulled out of the storage body 3 through this additional resistance application portion 8 and the dispenser port 3h.

[0040] The additional resistance application portion 8 is configured with a large resistance portion 8a and a small resistance portion 8c that apply frictional force in the passage of the wipes 1, in which the frictional force of the large resistance portion 8a is greater than that of the small resistance portion 8c. In addition to this, in the first example, the large resistance portion 8a is located on the side where resistance induced by the biasing force is present, with the side having the virtual straight line x therebetween.

[0041] In the first example, the small resistance portion 8c is practically configured by a circular hole that is big enough to allow each of the wipes 1 to be picked up. The large resistance portion 8a, on the other hand, is in the shape of a split groove that has its groove end communicated with the small resistance portion 8c and extends toward the pressing portion 6 of the pressing member 4. The large resistance portion 8a has front and rear groove edges along its extending direction and a plurality of sawtooth edges 8b that are arranged in the horizontal direction with spaces therebetween.

[0042] Therefore, in the first example, each of the wipes 1 passing through the additional resistance application portion 8 can be applied with large frictional force by the sawtooth edges 8b of the large resistance portion 8a at the pressing portion 6 side of the pressing member 4. With this mechanism, therefore, the first wipe 1 and the second wipe 1 can reliably be separated from each other. In addition, on the other side away from the pressing portion 6 of the pressing member 4, the small resistance portion 8c allows the second wipe 1 to be lifted up moderately.

[0043] Fig. 7 shows a partial modification of the first example, in which the lower surface of the pressing member 4 at the pressing portion 6 side is bent inward.

[0044] In the second example shown in Fig. 8, the pressing member 4 has one end serving as a pressing portion 9 that comes into abutment with the upper surface of the stacked body 2, and is supported by the outlet member 3f with the dispenser port 3h of the wipe 1 at the pressing portion 9 side via a momentum maintaining member 10. An additional resistance application portion 11 is disposed between the pressing portion 9 and the other end of the pressing member 4. In the second example, the pressing member 4 has a right side 12 parallel to the virtual straight line x, front and rear sides 13 and 14 perpendicular to the right side 12, and a left side 15, and is configured by a plate in which the left side 15 is in the shape of a semicircular arc extending along a virtual arc, not shown. In the second example, the momentum maintaining member 10 is in the shape of a strip in which its upper end is integrated with the base 3g of the outlet member 3f and its lower end integrated with the right side 12 of the pressing member 4. The momentum maintaining member 10 has a plurality of fold lines 10a that are adjacent to one another extending along the width direction and that are formed at certain intervals in the vertical direction. With the momentum maintaining member 10 bent elastically along the plurality of fold lines 10a, the right side of the pressing member 4 is brought into abutment with the upper surface 2a of the stacked body 2 at the right-hand side with respect to the virtual straight line x extending between the left-hand side and the right-hand

side. In this state, the pressing member 4 is placed in the storage body 3 at a tilt, with the right side 12 being at the lowest position and the left side 15 being at the top position. In other words, in the second example, the right side 12 of the pressing member 4 functions as the pressing portion 9. In the second example, a groove end that is connected to the left side 15 is formed in the pressing member 4. This forms a split groove extending toward the pressing portion 9. This split groove has front and rear groove edges along its extending direction in which a plurality of sawtooth edges 11b are arranged in the horizontal direction) with spaces therebetween. In the second example, the wipes 1 can be pulled out through the split groove of the pressing member 4 and the left side 15. In the second example, each of the wipes 1 passing through the split groove can be applied with large frictional force by the sawtooth edges 11b at the pressing portion 9 side of the pressing member 4. In other words, in the second example, the split groove functions as a large resistance portion 11a and the left side 15 of the pressing member 4 as a small resistance portion 11c.

[0045] In the third example shown in Figs. 9 and 10, the pressing member 4 is supported by the outlet member 3f with the dispenser port 3h of the wipe 1 via momentum maintaining members 16 on both the left-hand side and the right-hand side having the virtual straight line x therebetween. In addition, the biasing force of the momentum maintaining member 16 on the left-hand side is different from the biasing force of the momentum maintaining member 16 on the right-hand side. In the third example, the pressing member 4 is in a shape of a rectangular plate, the entire lower surface of which comes into abutment with the upper surface 2a of the stacked body 2. The pressing member 4 is connected to the base 3g of the outlet member 3f via the momentum maintaining members 16 on the right-hand side and the left-hand side with the dispenser port 3h therebetween. The left and right momentum maintaining members 16 each is in the shape of a strip in which the upper end thereof is integrated with the base 3g and the lower end thereof integrated with the upper surface of the pressing member 4. Each of the momentum maintaining members 16 has a plurality of fold lines 16a which are adjacent to one another extending along the width direction of each momentum maintaining member 16 and which are disposed in the vertical direction with spaces therebetween. The pressing member 4 has its lower surface in abutment with the upper surface 2a of the stacked body 2 when elastically bent along the plurality of fold lines 16a. In the third example, the width of the right-side momentum maintaining member 16 is smaller than that of the left-side momentum maintaining member 16. Thus, the biasing force of the right-side momentum maintaining member 16 is smaller than that of the left-side momentum maintaining member 16. In the third example, therefore, the resistance of the pressing member 4 acts on both sides having the virtual straight line x therebetween but prevents the biasing force on one of the sides having the virtual straight line x therebetween from becoming equivalent to the biasing force on the other side. In the third example, the pressing member 4 has a passage hole 17 for the wipes 1 that is elongated in the horizontal direction. The rim of the passage hole 17 on the right-hand side with respect to substantially the middle of the pressing member 4 in its lengthwise direction is in the form of an arc of a virtual ellipse. On the left-hand side, on the other hand, the front and rear rims of the passage hole 17 configure a plurality of sawtooth edges 18a that protrude inward and are arranged in the horizontal direction with spaces therebetween. In the third example, therefore, each of the wipes 1 is applied with resistance by the sawtooth edges 18a on the left-hand side of the passage hole 17 but does not receive such resistance on the right-hand side of the passage hole 17. In other words, in the third example, the right-hand side of the passage hole 17 of the pressing member 4 functions as a small resistance portion 18c of an additional resistance application portion 18, and the left-hand side of the passage hole 17 functions as a large resistance portion 18a of the additional resistance application portion 18. The large resistance portion 18a is located on the side where the biasing force-induced resistance is large, with the virtual straight line x between the right-hand side and the left-hand side.

[0046] In the fourth example shown in Figs. 11 to 14, the wipe 1 dispenser D has a retaining member 24 for keeping the pressing member 4 pulled in a direction against the biasing force. This retaining member 24 is capable of releasing the pressing from this direction. The fourth example is added with the retaining member 24 of the first example.

[0047] Fig. 11 is a cross-sectional diagram taken along line AA of Fig. 1, showing a state before the wipe 1 dispenser D is used. When the wipe 1 dispenser D is not used (i.e., prior to the use of the wipe dispenser D), the dispenser port 3h is completely sealed by an opening member 25 provided below the lid 3i, in order to prevent the stacked body 2 from completely drying out in the storage body 3. The sealed state of the dispenser port 3h is cancelled by removing the opening member 25 from the dispenser port 3h to the outside.

[0048] The opening member 25 is integrated with the outlet member 3f. A fragile portion 26 having a V-shaped cross section is formed over the entire circumference of the outer periphery of the opening member 25. A pull-top ring 27 that can be pulled outward by a fingertip is integrated with the opening member 25.

[0049] In the unused state of the wipe 1 dispenser D in which the opening member 25 is not yet removed from the dispenser port 3h, the dispenser port 3h is sealed with the opening member 25. When the pull-top ring 27 is pulled outward, the fragile portion 26 collapses by shear failure and the opening member 25 is removed to the outside, creating the state in which the wipes 1 can be pulled out of the storage body 3 through the dispenser port 3h of the outlet member 3f.

[0050] In the fourth example, the pair of retaining mem-

bers 24 protrudes from the rear surface of the opening member 25 (i.e., the surface that faces the inside of the storage body 3) toward the inside of the storage body 3. The retaining members 24 keep the pressing member 4 pulled toward the outlet member 3f against the biasing force, so that the pressing member 4 is not pressed against the stacked body 2.

[0051] In the illustrated example, each of the retaining members 24 is in the shape of a thin rod protruding from the rear surface side of the opening member 25 and is connected to the opening member 25, as shown in Fig. 12 and the like showing the back of the pressing member 4. Specifically, the retaining members 24 of this example are integrated with the opening member 25. Also, in this example, these two retaining members 24 are formed at the front and back, in which an engaging portion 24a that removably comes into engagement with the rear surface of the rim of the pressing member 4 in the lengthwise direction is formed at a tip of each retaining member 24. Each of the engaging portions 24a is in the shape of a hook in the illustrated example, but may be in any shape. In the illustrated example, the engagement between the pressing member 4 and the engaging portions 24a is released by elastic deformation of the retaining members 24, by moving the retaining member 24 to the outside by a certain distance.

[0052] As shown in Fig. 13, in the unused state in which the opening member 25 is not yet removed, the engaging portions are in engagement with the rim of the pressing member 4 along the lengthwise direction, and keep the pressing member 4 pulled toward the vicinity of the rear surface of the outlet member 3f against the biasing force that tries to rotate the pressing member 4.

[0053] Such a configuration in which the pressing member 4 of the wipe 1 dispenser D kept pulled toward the vicinity of the rear surface of the outlet member 3f enables smooth execution of the work processes in the process of manufacturing the wipe 1 dispenser D. In other words, such a configuration can reduce the possibility that the pressing member 4 might carelessly project toward the inside of the storage body 3 during the work processes performed after the pressing member 4 is kept pulled toward the vicinity of the rear surface of the outlet member 3f. Therefore, the step of fixing the storage body 3 and the outlet member 3f to each other, the step of packing the stacked body 2 in the storage body 3 to which the outlet member 3f is fixed, and various other steps can be executed smoothly and easily using an automatic manufacturing machine.

[0054] As shown in Fig. 14, by removing the opening member 25 to the outside in the beginning of the use of the wipe 1 dispenser D, the engagement between the pressing member 4 and the engaging portions 24a of the retaining members 24 integrated with the opening member 25 is released. Consequently, the pressing member 4 is turned toward the inside of the storage body 3 by the biasing force, as shown by the arrow F in Fig. 14. As a result, when the wipe 1 dispenser D is being used, the pressing member 4 is pressed against the upper surface 2a of the stacked body 2.

[0055] Although not shown, the retaining members 24 can each be configured with an adhesive for adhering the rear surface of the opening member 25 to the pressing member 4. In such a case, the opening member 25 and the pressing member 4 are formed into the shapes that enable the adhesion with the adhesive (e.g., in the form of sheets, etc.). In the unused state of the wipe 1 dispenser D of this configuration in which the dispenser port 3h is sealed with the opening member 25, the rear surface of the opening member 25 and the pressing member 4 are adhered to each other, and the pressing member 4 is kept pulled toward the vicinity of the rear surface of the outlet member 3f. Then, once the opening member 25 is removed from the dispenser port 3h, the adhesion between the opening member 25 and the pressing member 4 is released, pressing the pressing member 4 against the stacked body 2.

[0056] The present invention is not limited to the foregoing examples and encompasses all the aspects included in the concept of the present invention described in the claims.

Claims

1. A wipe dispenser, comprising:

a stacked body configured by stacking sheet-like folded wipes;
a storage body for storing the stacked body and having, at an upper portion, a dispenser opening from which the wipes are pulled out; and
a pressing member that is pressed against an upper surface of the stacked body by biasing force, wherein
the pressing member ensures that resistance generated when pulling the wipes through the dispenser opening is uneven between a left-hand side and a right-hand side of the upper surface of the stacked body, which is divided by a virtual straight line therebetween that is perpendicular to a fold line of each of the wipes.

2. The wipe dispenser according to claim 1, wherein the pressing member has an additional resistance application portion that acts on the wipes being pulled.

3. The wipe dispenser according to claim 2, wherein
the additional resistance application portion is formed of a large resistance portion and a small resistance portion that each generate frictional force in the passage of the wipes, the frictional force of the large resistance portion being greater than that of the small resistance portion, and
the large resistance portion is located, across the

virtual strait line, on the side where resistance induced by the biasing force exists or on the side where the resistance is large.

4. The wipe dispenser according to claim 3, wherein the pressing member has one end serving as a pressing portion that comes into abutment with the upper surface of the stacked body, and has the other end supported by an outlet member.

5. The wipe dispenser according to claim 3, wherein the pressing member has one end serving as a pressing portion that comes into abutment with the upper surface of the stacked body, and is supported on the side of the pressing portion by the outlet member via a momentum maintaining member, and the additional resistance application portion is provided between the pressing portion and the other end of the pressing member.

6. The wipe dispenser according to claim 3, wherein the pressing member is supported by the outlet member via momentum maintaining members disposed on the left-hand side and the right-hand side with the virtual straight line therebetween, and biasing force of the left-side momentum maintaining member is different from that of the right-side momentum maintaining member.

7. The wipe dispenser according to claim 1, further comprising a retaining member for keeping the pressing member in the state where the pressing member is pulled in a direction against the biasing force, the retaining member being capable of releasing the pressing member from this direction.

Fig. 1

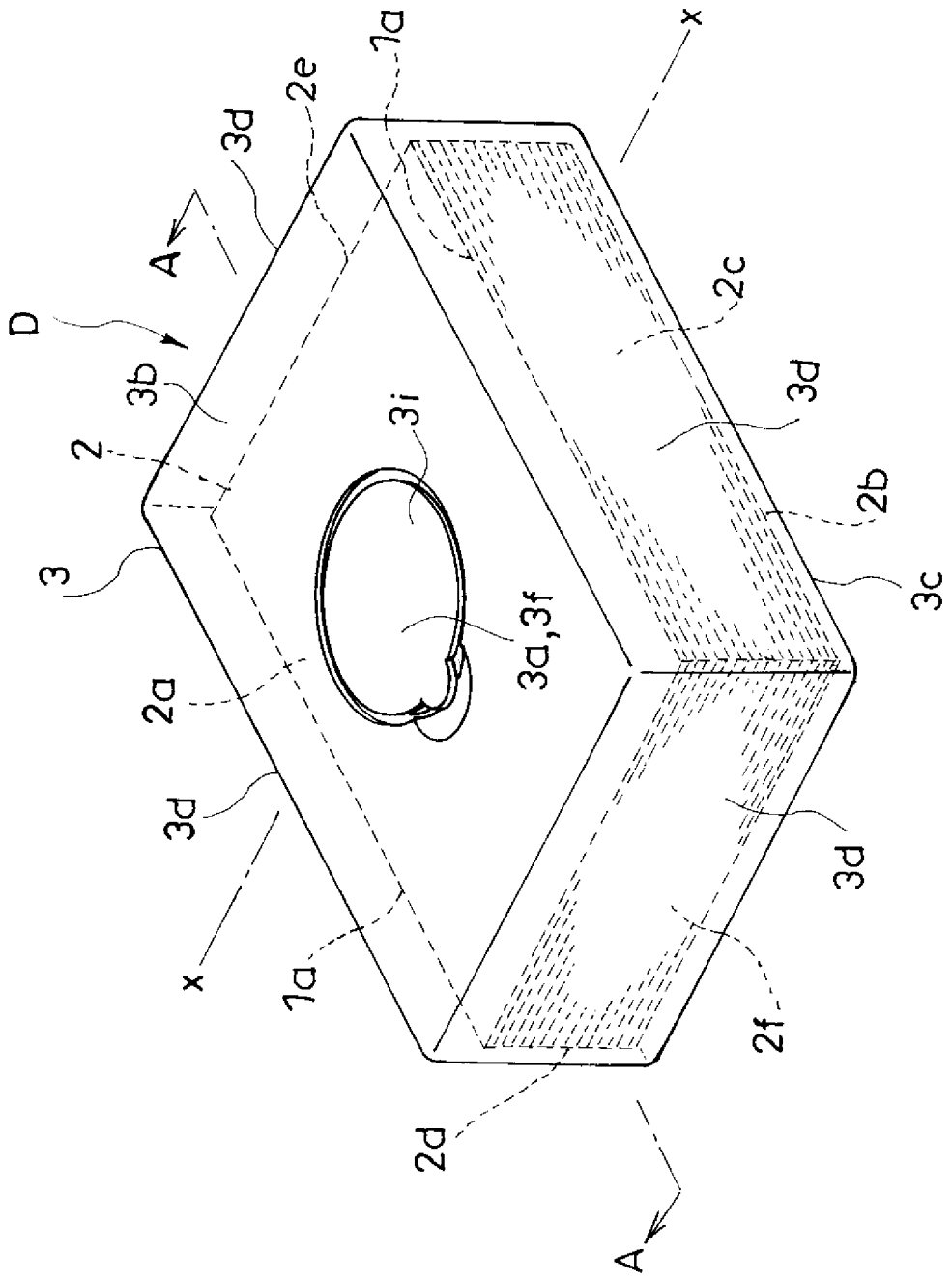


fig. 2

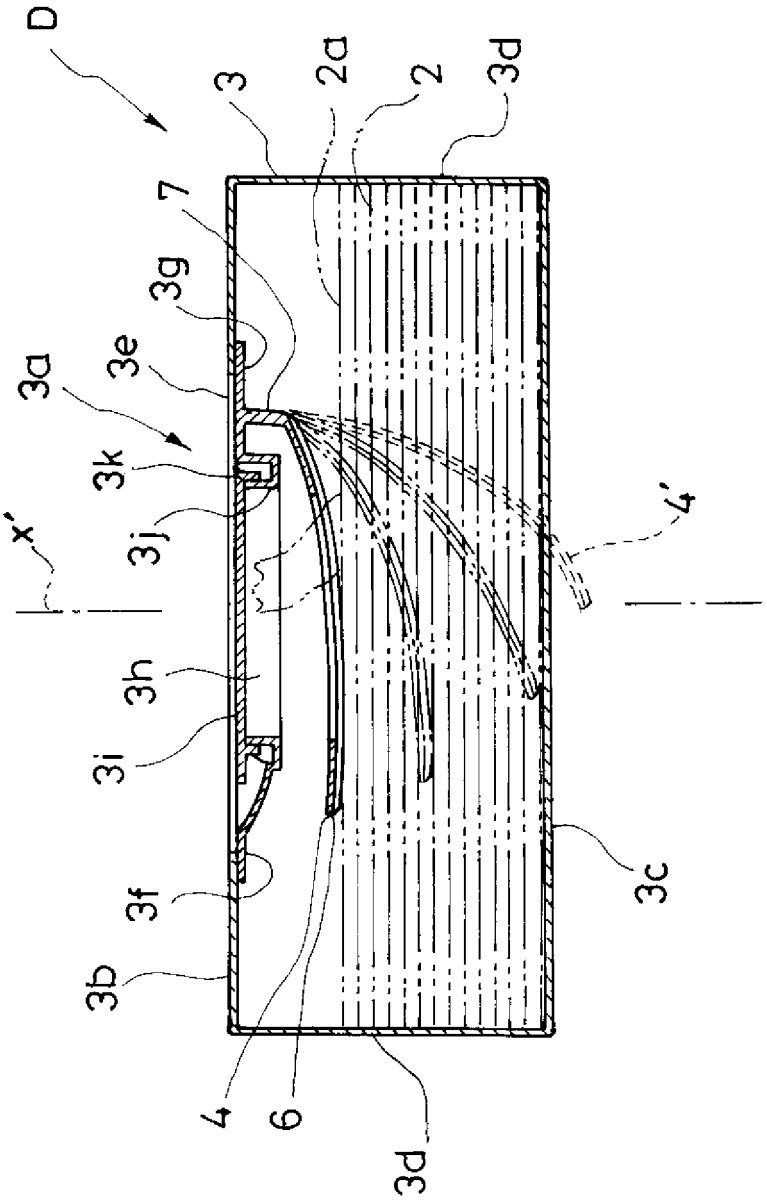


fig. 3

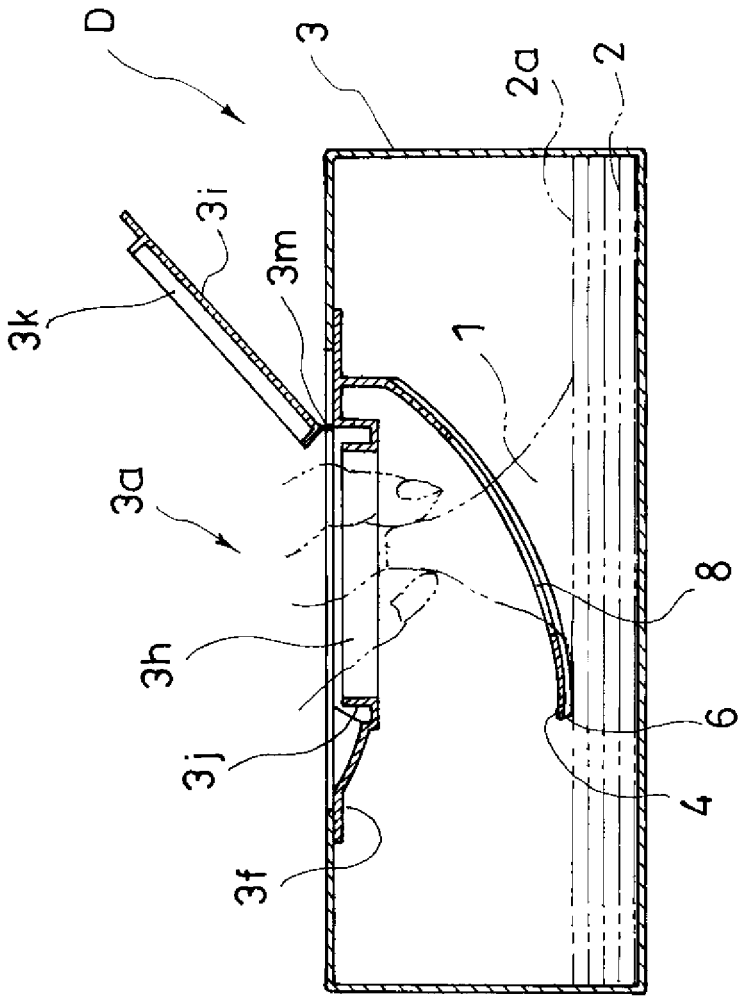


Fig 4.

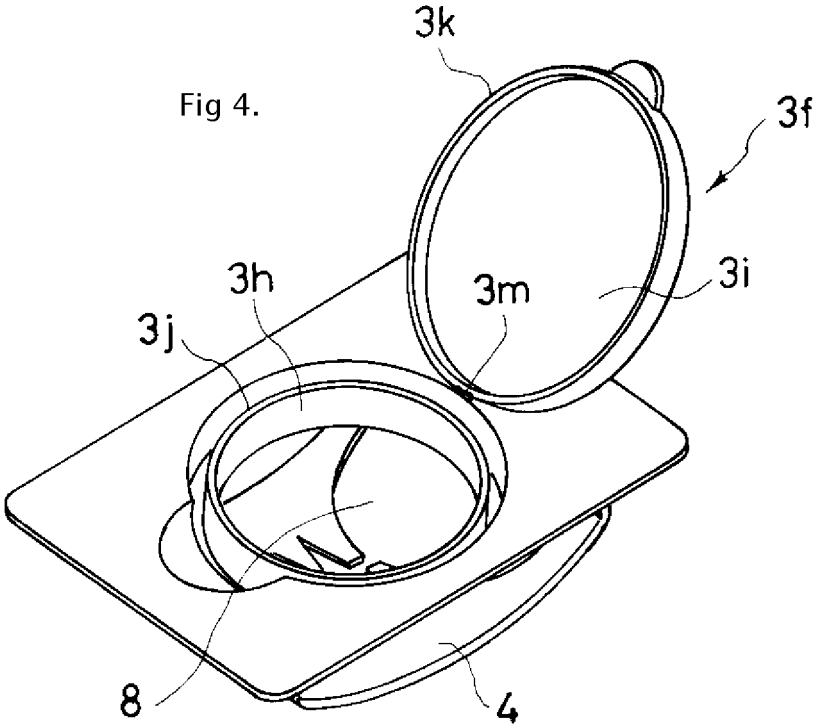


Fig. 5

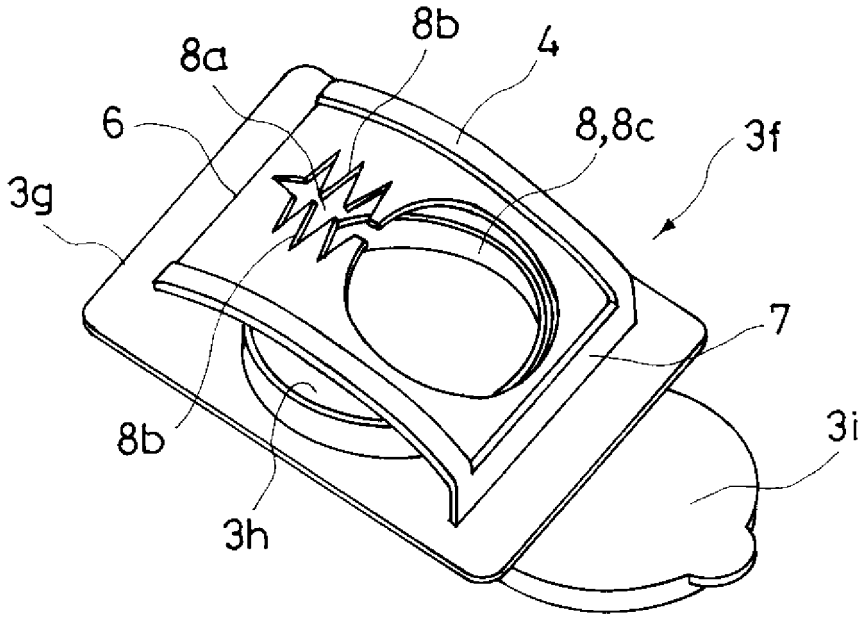


Fig. 6

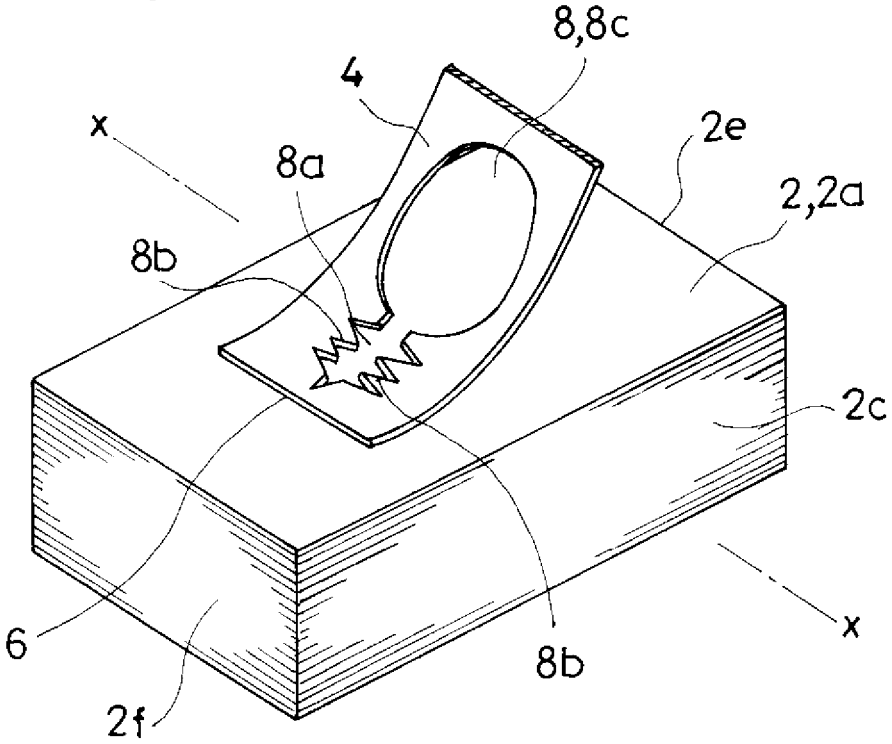


fig. 7

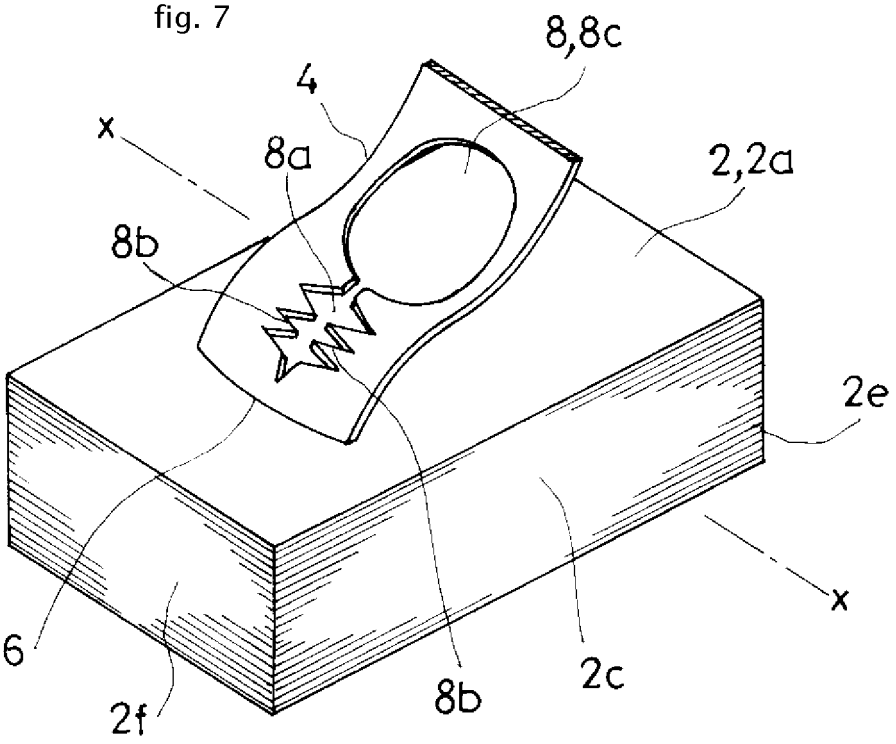


fig. 8

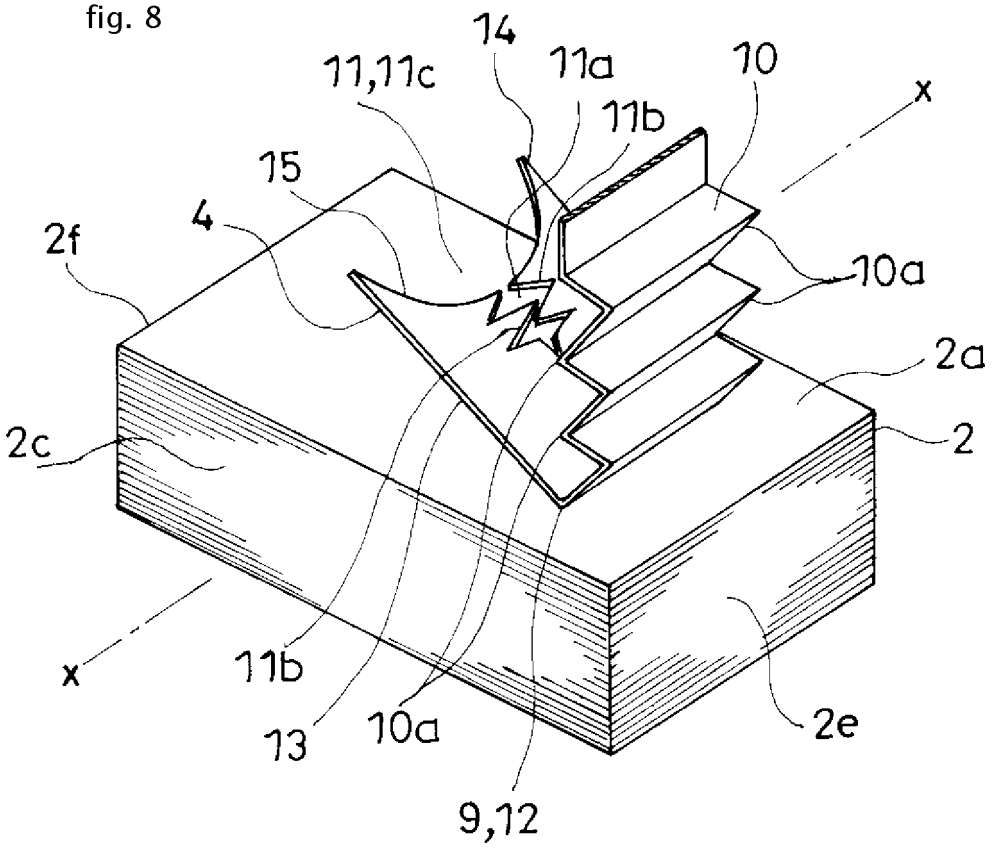
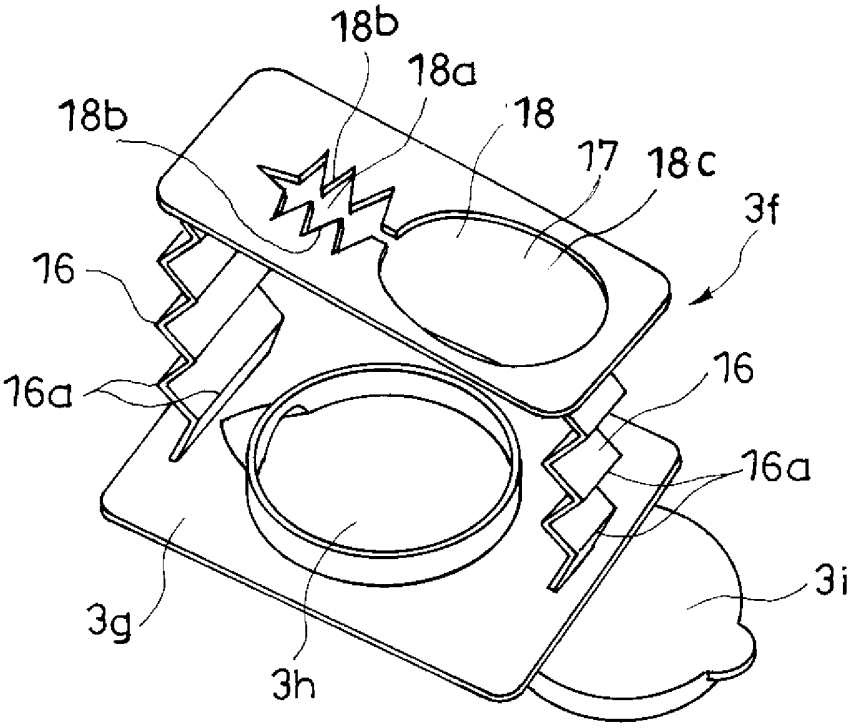


Fig. 9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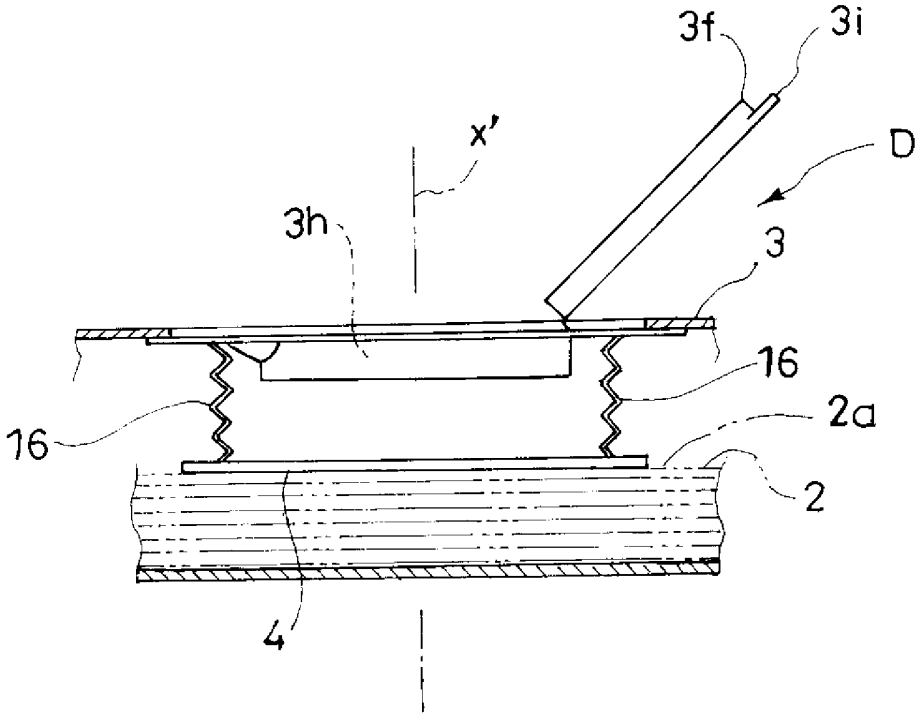
18b
18
17
18c
3f
16
16a
16
16a
3i
3g
3h

Fig. 10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3i
x'
D
3h
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16
16
2a
2
4

Fig. 11

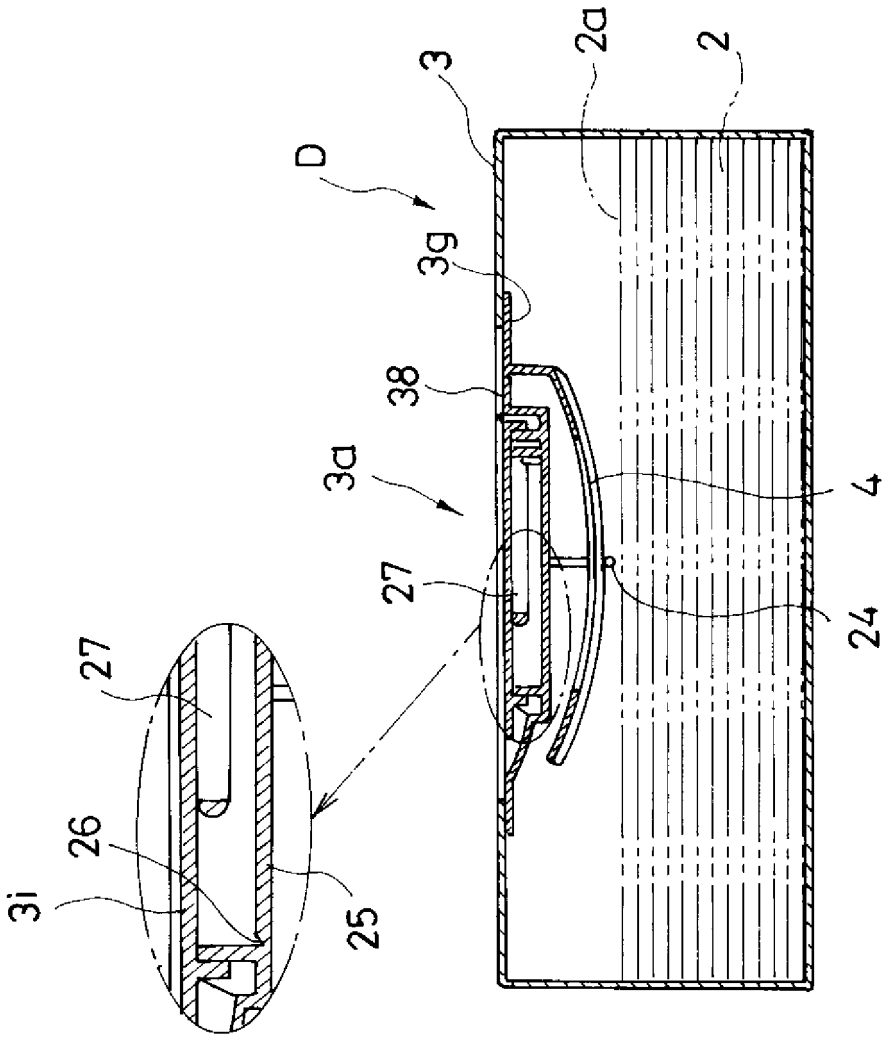


Fig. 12

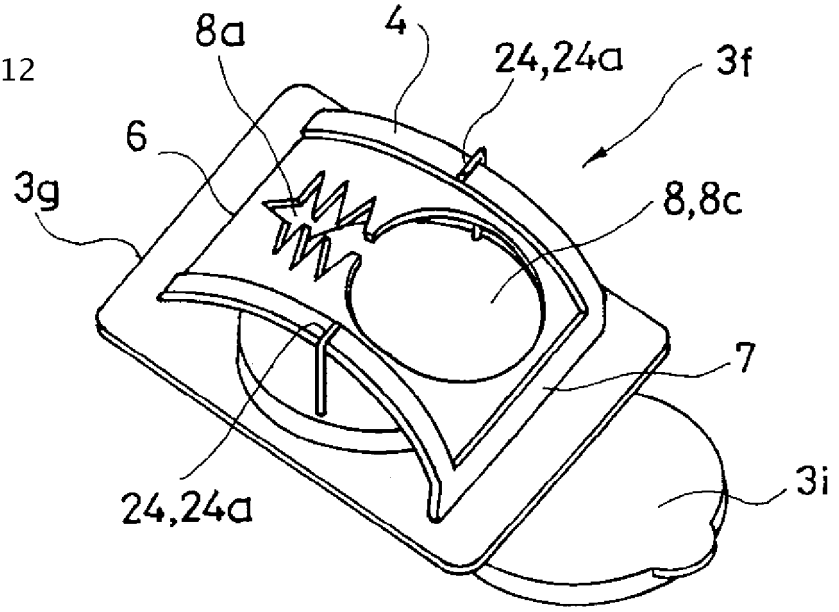


Fig. 13

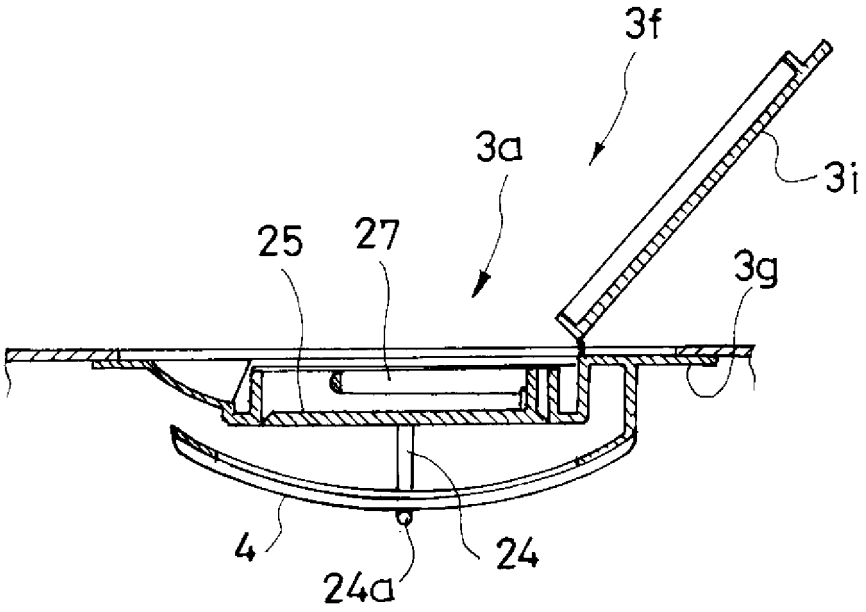


Fig. 14

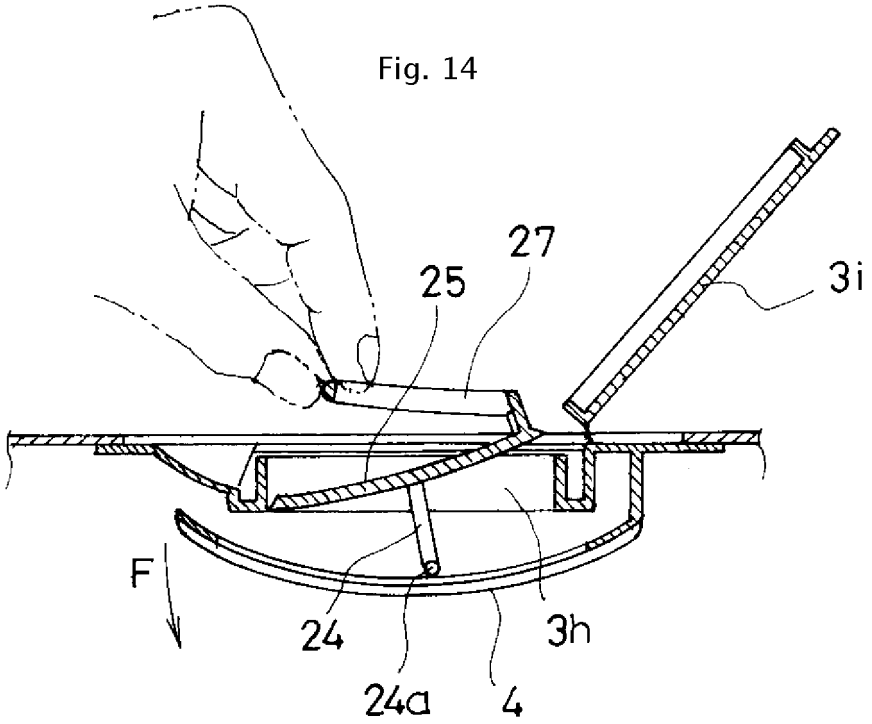


Fig. 15

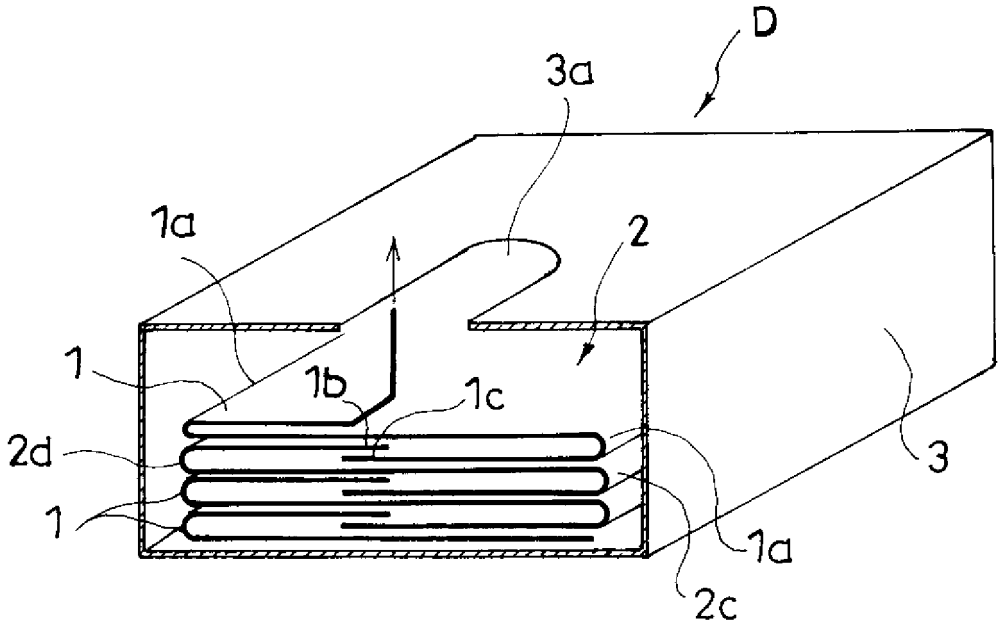


Fig. 16

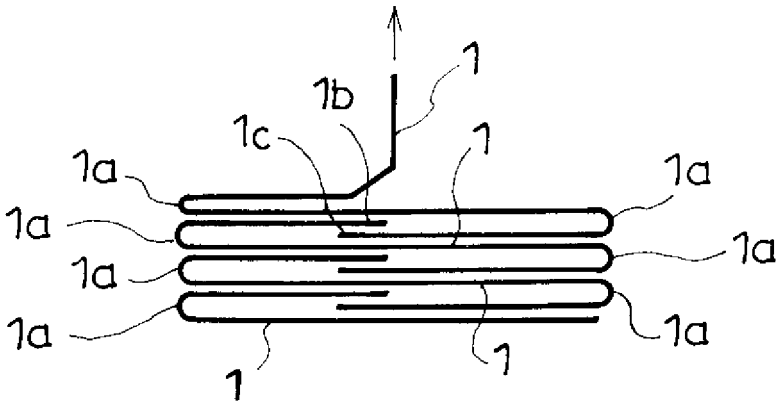


Fig. 17

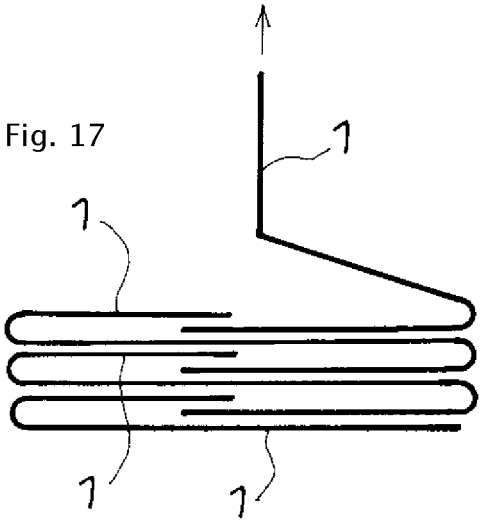


Fig 18

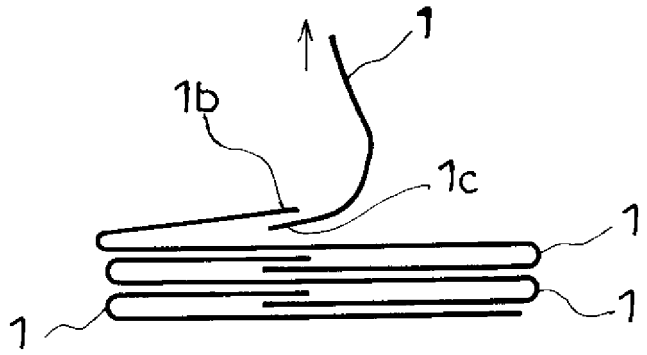


fig. 19

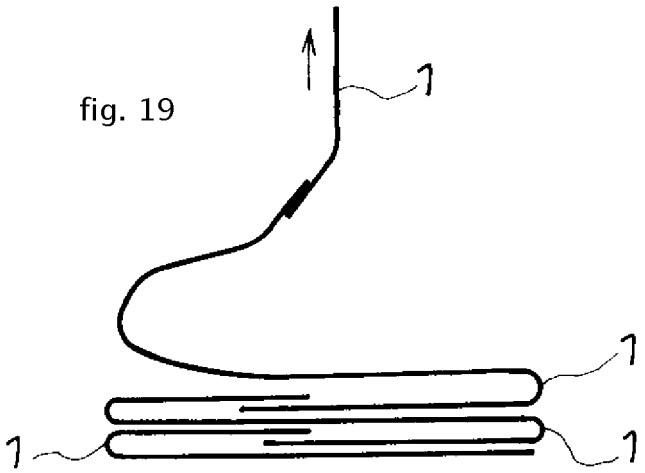


Fig. 20

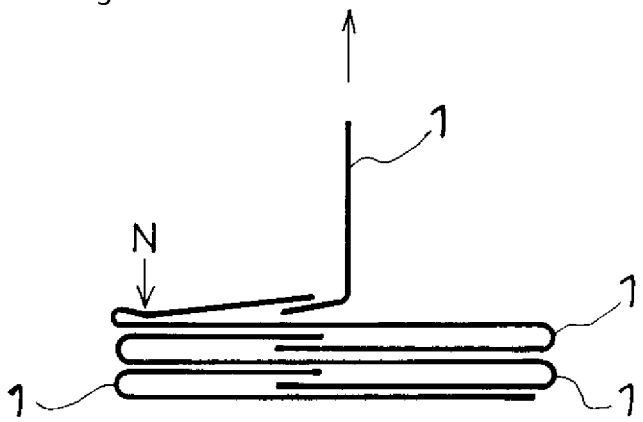


Fig. 21

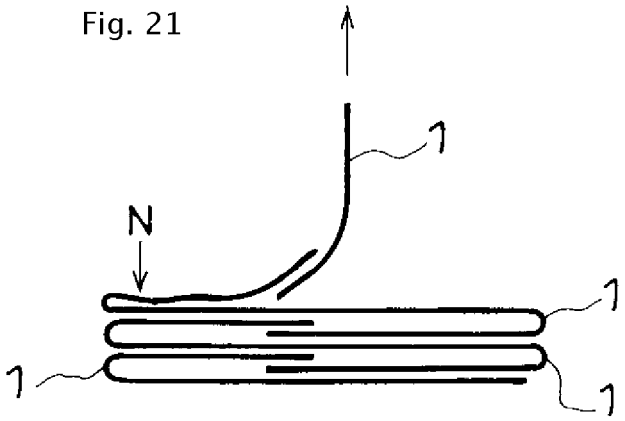


Fig. 22

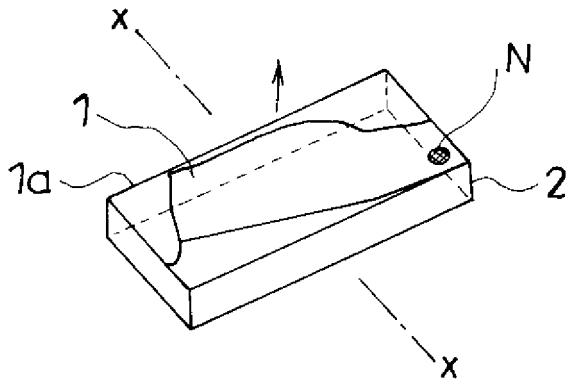


Fig. 23

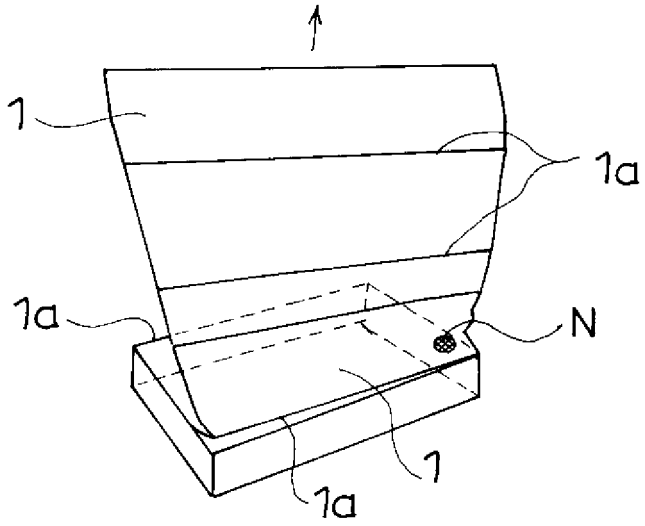


fig. 24

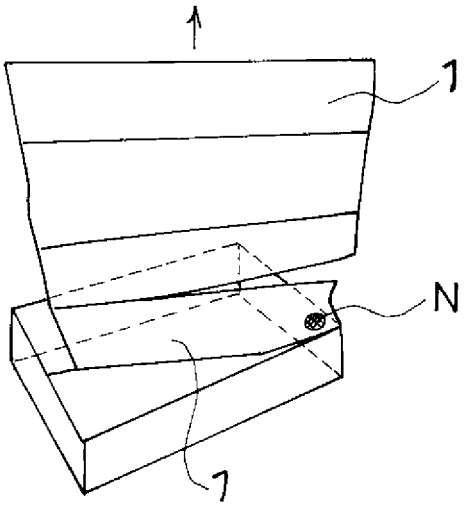
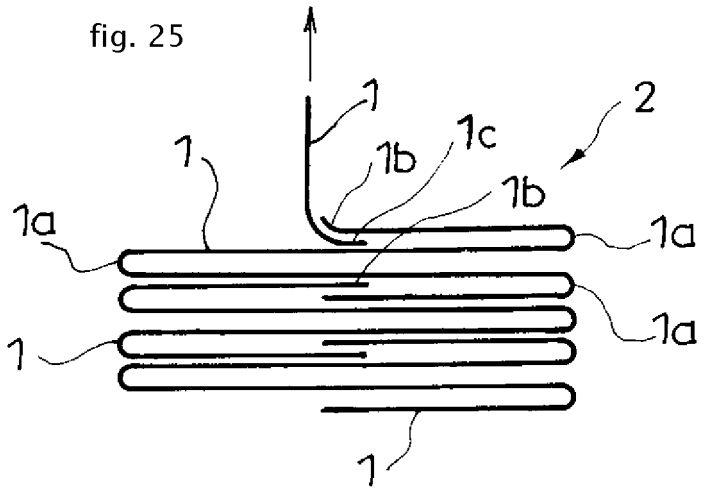


fig. 25



INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2014/056249

A. CLASSIFICATION OF SUBJECT MATTER
B65D83/08(2006.01)i, *A47K10/42*(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, A47K10/42

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 1996-2014
Kokai Jitsuyo Shinan Koho 1971-2014 Toroku Jitsuyo Shinan Koho 1994-2014

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	GB 1085560 A (CANADIAN INTERNATIONAL PAPER CO.), 15 May 1965 (15.05.1965), fig. 2, 5 & DE 1554562 A	1-2 3-7
A	US 3606082 A (AMERICAN CAN CO.), 20 September 1971 (20.09.1971), fig. 6 to 10 (Family: none)	1-7

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

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

Date of the actual completion of the international search	Date of mailing of the international search report
27 May, 2014 (27.05.14)	10 June, 2014 (10.06.14)
Name and mailing address of the ISA/ Japanese Patent Office Facsimile No.	Authorized officer Telephone No.

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

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2014/056249

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 104709/1978(Laid-open No. 20968/1980) (Fujio HATANO), 09 February 1980 (09.02.1980), page 6, line 7 to page 11, line 13; fig. 1 to 3 (Family: none)	1-7
A	Microfilm of the specification and drawings annexed to the request of Japanese Utility Model Application No. 133031/1978(Laid-open No. 49612/1980) (Yoshino Kogyosho Co., Ltd.), 01 April 1980 (01.04.1980), page 2, line 1 to page 3, line 17; fig. 1 to 4 (Family: none)	1-7
A	JP 9-132280 A (Uni-Charm Corp.), 20 May 1997 (20.05.1997), fig. 1 to 3 (Family: none)	1-7

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REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2012206781 A **[0006]**
- JP HL178791 A **[0006]**