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(71) Applicant: **DAIO PAPER CORPORATION**
Shikokuchuo-shi
Ehime 799-0492 (JP)

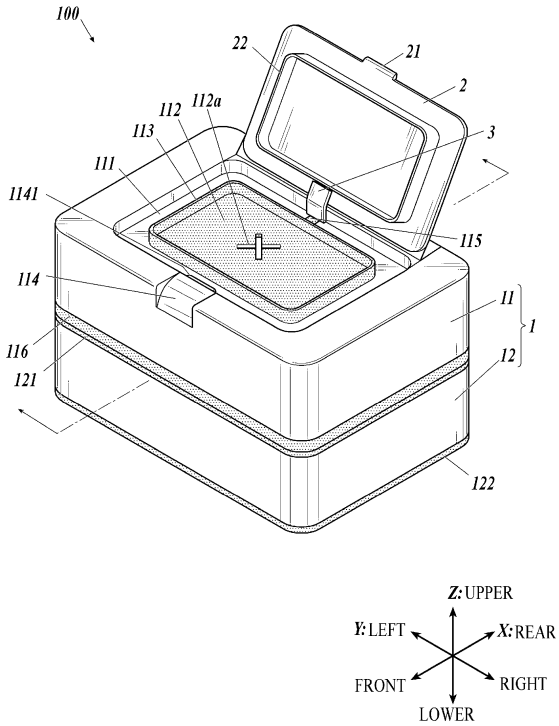
(72) Inventor: **MIURA, Akiteru**
Shikokuchuo-shi, Ehime 7990113 (JP)

(74) Representative: **Held, Stephan**
Meissner Bolte Patentanwälte
Rechtsanwälte Partnerschaft mbB
Widenmayerstraße 47
80538 München (DE)

(54) HOUSEHOLD THIN PAPER STORAGE CONTAINER

(57) A household thin paper storage container (100) facilitates opening of an open/close lid (2) during use of household thin paper, since the open/close lid (2) is automatically flipped up by a biasing means (3) when a user operates a locking means (114) to unlock the open/close lid (2). Particularly, the biasing means (3) is formed not by a thermoplastic elastomer or a thermoplastic resin material but by a thermosetting resin material such as a silicone rubber resin, and thus is unlikely to degrade over time and can maintain the function as a spring for biasing the open/close lid (2) in an opening direction. As a result, this household thin paper storage container (100) can be continuously used for a long period of time.

FIG. 1



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Description

Technical Field

[0001] The present invention relates to a household thin paper storage container.

Background Art

[0002] Conventionally known containers for household thin paper such as wet tissues have an open/close lid that is biased in the opening direction by a biasing member such as a leaf spring and can be latched in a closing state by a predetermined latch. The open/close lid can be opened by a user in a single operation of pushing a button provided on the latch (for example, see patent document 1).

[0003] When household thin paper is used up, a refillable household thin paper storage container stores new household thin paper, and can be used for a long period of time.

Citation List

Patent Literature

[0004] Patent Document 1 JP 5280743 B2

Summary of the Invention

Technical Problem

[0005] However, when the leaf spring (biasing means) of the storage container of above Patent Document 1 is made of a thermoplastic resin, it has a reduced function as a spring due to deterioration over time after being used for a long period of time, and it becomes difficult to open the lid.

[0006] An object of the present invention is to provide a household thin paper storage container having an open/close lid that can be readily opened.

Solution to the Problem

[0007] In order to achieve the object, according to the invention recited in claim 1, there is provided a household thin paper storage container including:

a container body that stores household thin paper inside and has an outlet through which the household thin paper is taken out;
an open/close lid that is pivotably provided to the container body and closes the outlet; and
a biasing means that biases the open/close lid in an opening direction, wherein the container body includes:

a latch that latches the open/close lid in a closing state and that opens the open/close lid in response to being unlatched; and
a fixing portion that fixes the biasing means to the container body,

wherein the biasing means is a member that is formed of a thermosetting resin material, and
wherein the fixing portion is formed as a part of the container body, and the biasing means is fixed to the fixing portion.

[0008] The biasing means that is formed of a thermosetting resin material is unlikely to deteriorate over time and maintains to have the function as a spring that biases the open/close lid in the opening direction. As a result, the household thin paper storage container whose open/close lid can be readily opened can be used continuously for a long period of time.

[0009] According to the invention recited in claim 2, there is provided a household thin paper storage container including:

a container body that stores household thin paper inside and has an outlet through which the household thin paper is taken out;
an open/close lid that is pivotably provided to the container body and closes the outlet; and
a biasing means that biases the open/close lid in an opening direction, wherein the container body includes a latch that latches the open/close lid in a closing state and that opens the open/close lid in response to being unlatched,
wherein the open/close lid includes a fixing portion that fixes the biasing means to the open/close lid,
wherein the biasing means is a member that is formed of a thermosetting resin material, and
wherein the fixing portion is formed as a part of the open/close lid, and the biasing means is fixed to the fixing portion.

[0010] The biasing means of a thermosetting resin material is unlikely to deteriorate over time and maintains to have the function as a spring that biases the open/close lid in the opening direction. As a result, the household thin paper storage container whose open/close lid can be readily opened can be used continuously for a long period of time.

[0011] According to the invention recited in claim 3, in the household thin paper storage container according to claim 1 or 2, the biasing means has a small hole or a notch, and the fixing portion is inserted into the small hole or the notch.

[0012] According to the invention recited in claim 4, in the household thin paper storage container according to claim 1 or 2, the fixing portion covers and holds an end of the biasing means.

[0013] According to the invention recited in claim 5, in the household thin paper storage container according to

any one of claims 1 to 4, a part of the fixing portion is arranged along a peripheral surface of the biasing means.

Advantageous Effects of Invention

[0014] According to the present invention, there is provided a household thin paper storage container whose open/close lid can be readily opened.

Brief Description of the Drawings

[0015]

FIG. 1 is a perspective view of a household thin paper storing container according to a present embodiment.

FIG. 2 is a sectional view of the household thin paper storing container according to the present embodiment, which is a sectional view of FIG. 1 cut through a middle portion in Y direction.

FIG. 3 is a sectional view of the household thin paper storing container when an open/close lid is closed.

FIG. 4 is a sectional view of the household thin paper storing container when an upper container body and a lower container body do not fit to each other.

FIG. 5A is an explanatory enlarged view of a fixing portion and a biasing means of the household thin paper storage container.

FIG. 5B is an explanatory enlarged view of a fixing portion and a biasing means of the household thin paper storage container.

FIG. 6A is an explanatory view related to a modified example of the fixing portion of the household thin paper storage container.

FIG. 6B is an explanatory view related to a modified example of the fixing portion of the household thin paper storage container.

FIG. 7 is a sectional view showing a modified example of the fixing portion of the household thin paper storage container.

FIG. 8 is a sectional view showing a modified example of the fixing portion of the household thin paper storage container.

Description of Embodiments

[0016] Hereinafter, an embodiment of a household thin paper storage container according to the present invention is described in detail with reference to the drawings. Although the embodiments described below include various technically preferable limitations for carrying out the present invention, the scope of the present invention is not limited to the following embodiments or illustrated examples.

[0017] In the following description, an X-axis, Y-axis, Z-axis, front-rear direction, left-right direction, and upper-lower direction are defined as shown in FIG. 1. That is, the side of the household thin paper storage container 100 on which the open/close lid 2 is attached and the side opposite thereto are referred to as "upper" and "lower", respectively. The side where a container body 1 and the open/close lid 2 are connected and the side opposite thereto are referred to as "rear" and "front", respectively.

[0018] The right-hand side and the left-hand side when one is looking at the front surface of the container from the front side are referred to as "right" and "left", respectively. The axis along the front-rear direction is referred to as the X axis, the axis along the left-right direction is referred to as the Y axis, and the axis along the upper-lower direction is referred to as the Z axis.

Configuration of Embodiment

Overall Configuration

[0019] As shown in FIG. 1 to FIG. 4, for example, the household thin paper storage container 100 includes a container body 1 that has an outlet 112a through which the inside household thin paper is taken out, an open/close lid 2 that is connected to the container body 1 so as to cover the outlet 112a and is freely opened and closed, and a biasing means 3 that biases the open/close lid 2 in its opening direction. The container body 1 has a housing space S to store the household thin paper inside.

[0020] The container body 1 and the open/close lid 2 can be integrally formed by injection molding (double molding).

Household Thin Paper

[0021] The household thin paper P is, for example, so-called pop-up type sheets in which small wet sheets, wet tissues, or the like are folded and stacked in alternating directions such that, when one of the wet sheets, wet tissues, or the like is pulled out, the next one is also pulled out. Another example of the household thin paper P is a roll sheet that is a long wet sheet, wet tissue, or the like that is wound into a roll and has perforations at regular intervals in the length direction so as to be cut along the perforations and used.

Container Body

[0022] As shown in FIG. 1, the container body 1 as a whole is formed in a substantially rectangular parallelepiped shape that is longer in the Y direction than in the X and Z directions. The container body 1 is vertically divided into two parts almost in the middle in the Z direction, one being an upper container body 11 constituting the upper side of the container body 1 and the other being a lower container body 12 constituting the lower side of the container body 1. The upper container body 11 and the lower container body 12 are connected to each other on

the rear side of the container body 1.

[0023] The upper container body 11 and the lower container body 12 can be integrally formed by injection molding (double molding).

[0024] The dimensions of the container body 1 as a whole are preferably 60 mm to 150 mm, more preferably 80 mm to 100 mm in the X direction, preferably 80 mm to 200 mm, more preferably 145 mm to 165 mm in the Y direction, and preferably 30 mm to 100 mm, more preferably 50 mm to 70 mm in the Z direction. The thickness of each surface is preferably 0.5 mm to 3 mm, more preferably 1 mm to 2 mm.

[0025] With such dimensions and thickness, it is possible to achieve high molding efficiency and strength that is enough to cause no problem in actual use.

[0026] As shown in FIG. 4, the inside housing space S of the container body 1 can be exposed to the outside when the upper container body 11 pivots upward around a pivot point on the rear side where the upper container body 11 and the lower container body 12 are connected to each other.

[0027] As shown in FIG. 2 to FIG. 4, when a connecting portion between the upper container body 11 and the lower container body 12 on the rear side of the container body 1 is formed so as to be thinner than the other portions of the container body 1, the rear surface of the container body can be easily bent at the connecting portion. This makes it easy to pivot the upper container body 11 with respect to the lower container body 12 around the connecting portion as the pivot point.

[0028] Alternatively, though productivity is reduced, the upper container body 11 and the lower container body 12 can be formed separately and connected pivotably using a hinge or the like.

[0029] The container body 1 is divided into the upper container body 11 and the lower container body 12 almost in the middle position in the Z direction in the drawings, but is more preferably divided at above the middle position in the Z direction. This reduces the possibility that an end seal portion(s) of the package is accidentally pinched when the container is closed, thereby making it easier to refill the household thin paper P to be stored in the container body 1 while it is covered with a predetermined package.

Upper Container Body

[0030] As shown in FIG. 1 to FIG. 4, the upper container body 11 is formed in a substantially rectangular parallelepiped shape having an opening lower surface and has a recessed portion 111 having a sunken recessed shape on the upper part of the upper container body 11.

[0031] An outlet 112a for taking out the household thin paper P in the housing space S is in a take-out portion 112 in the middle of the recessed portion 111. The outlet 112a is surrounded by a body-side sealing loop 113. In other words, the recessed portion 111 surrounded by the body-side sealing loop 113 is formed as the take-out portion 112, and the take outlet 112a is formed in the middle of the take-out portion 112.

[0032] Furthermore, a fixing portion 115 is provided between the body-side sealing loop 113 and the open/close lid 2, at a portion inside the recessed portion 111 but outside the body-side sealing loop 113. A biasing means 3 described later is arranged at the fixing portion 115. One end of the biasing means 3 is arranged so as to be embedded in the recessed portion 111.

[0033] Furthermore, a latch 114 for opening and closing the open/close lid 2 is formed at the front side of the upper surface.

[0034] Around the opening lower surface, there is formed an upper fitting portion 116 that fits to a lower fitting portion 121 of the lower container body 12 described later.

Outlet

[0035] The outlet 112 is a hole that is formed almost in the middle of the upper surface of the upper container body and connects to the housing space S.

[0036] The outlet 112a is formed by making two intersecting cuts in FIG. 1, but the present invention is not limited thereto, and the number of cuts may be more than two. For example, three cuts connecting respective vertices of a right triangle and the center of gravity of the right triangle may be made.

[0037] The periphery of the outlet 112a is formed of a material having elasticity described later so as to apply appropriate resistance to the household thin paper P. As a result, when a sheet of the household thin paper P in the housing space S is pulled out, the next sheet of the household thin paper P is held by the outlet 112a. Furthermore, when the household thin paper P is a roll sheet, the outlet 112a can cut the household thin paper P at its perforations for cutting.

Body-Side Sealing Loop

[0038] As shown in FIG. 1, the body-side sealing loop 113 is a loop-shaped projection protruding in the upper direction and surrounding the outlet 112a. As shown in FIG. 3 and FIG. 4, the outer peripheral surface of the body-side sealing loop 113 is formed so as to fit to the inner peripheral surface of the open/close-lid-side sealing loop 22 that is formed on the open/close lid 2 as described later.

Latch

[0039] As shown in FIG. 1, the latch 114 is formed in a shape of a button and has a body-side hook 1141. The body-side hook 1141 engages with the open/close-lid-side hook 21 formed on the open/close lid 2 described later to latch the open/close lid 2 in a closed state. When a user pushes the latch 114, the body-side hook 1141 and the open/close-lid-side hook 21 are disengaged, and

the open/close lid 2 is opened.

Fixing Portion

[0040] As shown in FIG. 1 and FIG. 5A, the fixing portion 115 is formed substantially flush with the upper surface of the recessed portion 111, and is formed so as to hold the biasing means 3 described later.

Upper Fitting Portion

[0041] As shown in FIG. 1 to FIG. 4, the upper fitting portion 116 is formed around the opening lower surface of the upper container body 11 except for the rear side of the opening where the upper container body 11 and the lower container body 12 are connected to each other. As shown in FIG. 2 to FIG. 4, only the outer peripheral side of the lower edge of the upper fitting portion 116 protrudes to form an upper protrusion 1161. The inner peripheral surface of the upper protrusion 1161 is formed so as to fit to the outer peripheral surface of the lower protrusion 1211 of the lower fitting portion 121 formed in the lower container body 12 described later.

[0042] The upper fitting portion 116 is formed such that the upper protrusion 1161 has a dimension in the upper-lower direction of preferably 0.5 mm to 5 mm, more preferably 1 mm to 3 mm.

Material of Upper Container Body

[0043] The upper container body 11 has the take-out portion 112, the body-side sealing loop 113, and the fixing portion 115 on the upper surface that are formed of a material having elasticity (hereinafter, referred to as an "elastic material") such as a thermoplastic elastomer of a styrene-butadiene type, polyester type, polyethylene type, or urethane type. Hardness of the elastic material is preferably 20 to 90. The hardness is measured in accordance with JIS K 6253 (type A durometer).

[0044] In the upper container body 11, the upper fitting portion 116 is also formed of a similar elastic material.

[0045] The other portion(s) of the upper container body 11 are formed of a polyolefin resin material such as polyethylene or polypropylene.

[0046] They are integrally formed by injection molding (double molding).

[0047] When the hardness is less than the above, the elastic material is too soft and difficult to be molded, which results in poor molding efficiency. When the hardness is more than the above, the hard portion around the outlet 112a increases the resistance too much and makes it difficult to take out the sheet one by one and to put fingers inside the container for pulling out the sheet.

[0048] Therefore, the hardness of the elastic material is preferably within the above range.

Lower Container Body

[0049] As shown in FIG. 1 to FIG. 4, the lower container body 12 is formed in a substantially rectangular parallelepiped shape having an opening upper surface. Around the opening upper surface is formed a lower fitting portion 121 that fits to the upper fitting portion 116 of the upper container body 11. A lower nonslip portion 122 is formed at the lower surface.

Lower Fitting Portion

[0050] As shown in FIG. 1 to FIG. 4, the lower fitting portion 121 is formed around the upper opening of the lower container body 12 except for the rear side of the opening where the lower container body 12 and the upper container body 11 are connected to each other. As shown in FIG. 2 to FIG. 4, only the inner peripheral side of the upper edge of the lower fitting portion 121 protrudes to form a lower protrusion 1211. The outer peripheral surface of the lower protrusion 1211 is formed so as to fit to the inner peripheral surface of the upper protrusion 1161 of the upper fitting portion 116 formed in the upper container body 11.

[0051] The lower fitting portion 121 is formed such that the lower protrusion 1211 has a dimension in the upper-lower direction of preferably 0.5 mm to 5 mm, more preferably 1 mm to 3 mm.

[0052] Alternatively, only the inner peripheral side of the upper protrusion 1161 of the upper fitting portion 116 and only the outer peripheral side of the lower protrusion 1211 of the lower fitting portion 121 may be each formed to protrude, such that the outer peripheral surface of the upper protrusion 1161 fits to the inner peripheral surface of the lower protrusion 1211.

[0053] Alternatively, the middle portion between the inner and outer peripheral sides of the upper protrusion and both of the inner and outer peripheral sides of the lower protrusion may be each formed so as to protrude, such that the upper protrusion fits to a recessed portion between the protruding sides of the lower protrusion. Conversely, both of the inner and outer peripheral sides of the upper protrusion and the middle portion between the inner and outer peripheral sides of the lower protrusion may be each formed to protrude, such that the lower protrusion fits to a recessed portion between the protruding sides of the upper protrusions.

Lower Nonslip Portion

[0054] The placed household thin paper storage container 100 is less likely to slip because of the lower nonslip portion 122 that is formed by providing a portion made of an elastic material on the lower surface of the lower container body 12 integrally with other portion(s).

Material of Lower Container Body

[0055] The lower container body 12 has the lower fitting portion 121 and the lower nonslip portion 122 that are formed of an elastic material similar to that used in the upper container body 11. The other portion(s) of the lower container body 12 is formed of a polyolefin resin material such as polyethylene or polypropylene.

[0056] They are integrally formed by injection molding (double molding).

Open/Close Lid

[0057] As shown in FIG. 1 to FIG. 4, the open/close lid 2 is a flat and substantially rectangular member that is pivotably connected to the rear side of the recessed portion 111 of the upper container body 11, and has an open/close-lid-side hook 21 on the front side and an open/close-lid-side sealing loop 22 on the lower surface side.

[0058] As shown in FIG. 1 to FIG. 4, the shape of the open/close lid 2 in a plan view in the closed state is formed to be substantially the same as that of the recessed portion 111 of the upper container body 11, so that the open/close lid 2 can fit to the recessed portion 111 when closed.

[0059] As shown in FIG. 2, a connecting portion between the open/close lid 2 and the upper container body 11 is formed so as to be thinner than the other portions. As a result, the connecting portion can be easily bent, and it is easy to pivot the open/close lid 2 around the connecting portion as a pivot point.

Open/Close-Lid-Side Hook

[0060] As shown in FIG. 1 to FIG. 4, the open/close-lid-side hook 21 is a hook protruding from the open/close lid 2 toward the front. The open/close-lid-side hook 21 engages with the body-side hook 1141 formed on the latch 114 of the upper container body 11 and latches the open/close lid in the closed state. When a user pushes the latch 114, the body-side hook 1141 and the open/close-lid-side hook 21 are disengaged, and the open/close lid 2 is opened because of the biasing means 3 described later.

Open/Close-Lid-Side Sealing Loop

[0061] As shown in FIG. 1, the open/close-lid-side sealing loop 22 is a loop-shaped projection protruding in the lower direction, and formed in the middle of the lower surface of the open/close lid 2 in the closed state. As shown in FIG. 3 and FIG. 4, the inner peripheral surface of the open/close-lid-side sealing loop 22 is formed so as to fit to the outer peripheral surface of the body-side sealing loop 113 formed on the upper container body 11.

Material of Open/Close Lid

[0062] The open/close lid 2 is formed of a polyolefin resin material such as polyethylene or polypropylene.

[0063] The open/close lid 2 and the container body 1 are integrally formed by injection molding (double molding).

Biasing Means

[0064] The biasing means 3 biases the open/close lid 2 in the opening direction such that, when a user pushes the latch 114 and disengages the body-side hook 1141 and the open/close-lid-side hook 21, the open/close lid 2 is opened by pivoting on the rear connecting portion between the open/close lid 2 and the upper container body 11 as a pivot shaft.

[0065] The biasing means 3 is a leaf spring member formed of a thermosetting resin material such as an elastic silicone resin (silicon rubber).

[0066] As shown in FIG. 5A, a small hole 3a is formed at one end of the biasing means 3, and the fixing portion 115 is formed so as to be inserted into the small hole 3a.

[0067] Specifically, when the open/close lid 2 and the container body 1 are integrally formed by injection molding (double molding), an elastic material to be the fixing portion 115 is injected into the small hole 3a of the biasing means 3 formed of a thermosetting resin material in advance, and the biasing means 3 is fixed to the molded fixing portion 115 and embedded in the recessed portion 111.

[0068] That is, the fixing portion 115 is formed by injection molding such that the biasing means 3 is fixed to the fixing portion 115. In other words, the process of manufacturing the household thin paper storage container 100 includes a step of fixing the biasing means 3 formed of the thermosetting resin material in advance to the fixing portion 115 when the fixing portion 115 is formed by injection-molding with the elastic material.

[0069] When the fixing portion 115 is formed as a part of the container main body 1 formed by injection molding, the biasing means 3 fixed to the fixing portion 115 cannot be removed from the container main body 1 (fixing portion 115).

[0070] In this way, the household thin paper storage container 100 can be manufactured by forming the container body 1, the open/close lid 2, and the biasing means 3 by pseudo-three-color molding.

[0071] When the biasing means 3 is fixed to the fixing portion 115 formed by injection molding, the household thin paper storage container 100 can be manufactured with high productivity.

[0072] As shown in FIG. 5B, even when the biasing means 3 has a notch 3b at one end, the biasing means 3 can be similarly fixed to the fixed portion 115 formed by injection molding.

[0073] The biasing means 3 is formed so as to be in a band shape having a width of preferably 5 mm to 30 mm,

more preferably 8 mm to 15 mm, and a thickness of preferably 0.5 mm to 3 mm, more preferably 1 mm to 2 mm.

[0074] When the biasing means 3 is formed so as to have such dimensions, it is possible to push up the open/close lid 2 without difficulty and to bent the biasing means 3 easily in the recessed portion 111 when the open/close lid 2 is closed.

[0075] As shown in FIG. 3, the biasing means 3 is bent at the base of the open/close lid 2 when the open/close lid 2 is closed. When a user pushes the latch 114 and disengages the body-side hook 1141 and the open/close-lid-side hook 21, the open/close lid 2 is opened to be in a state shown in FIG. 2 because of a repulsive force generated when the bent biasing means 3 returns to its original state.

[0076] When a user pushes the open/close lid from the upper side, the biasing means 3 is bent, and the open/close lid 2 is closed to be in a state shown in FIG. 3.

Effect of the Embodiment

[0077] According to the household thin paper storage container 100 of the present embodiment, when a user operates the latch 114 and disengages the opening/close lid 2, the open/close lid 2 jumps up automatically because of the biasing means 3. Therefore, it is easy to open the open/close lid when using the household thin paper.

[0078] In particular, the biasing means 3 is unlikely to deteriorate over time because it is formed of a thermosetting resin material such as a silicone rubber resin instead of a thermoplastic elastomer or a thermoplastic resin material. Therefore, the biasing means 3 continues to function as a spring that biases the open/close lid 2 in the opening direction. As a result, the household thin paper storage container 100 can be used continuously for a long period of time.

[0079] While the container body 1 and the open/close lid 2 are integrally formed by injection molding (two-color molding), the biasing means 3 is fixed to the fixing portion 115 in manufacturing the household thin paper storage container 100. Productivity is not reduced even when the biasing means 3 formed of a thermosetting resin material in advance is used, because the container body 1, the open/close lid 2, and the biasing means 3 can be formed by pseudo-three-color molding in the manufacturing.

[0080] The take-out portion 112 having the outlet 112a is formed of the elastic material so as to apply appropriate resistance to the household thin paper P that is pulled out from the take-out hole 112a. As a result, when a sheet of the household thin paper P in the housing space S is pulled out, the next sheet of the household thin paper P can be suitably held by the take-out portion 112. Furthermore, when the household thin paper P is a roll sheet, the household thin paper P can be suitably cut at its perforations for cutting.

[0081] The container body 1 is constituted by the upper container body 11 and the lower container body 12 that are connected to each other at the rear surface, accordingly, the container body 1 can be opened at its middle portion, and the household thin paper P stored in the interior housing space S can be refilled.

[0082] Therefore, it is possible to refill the household thin paper P while the container for housing household thin paper 100 is not lifted from but left on the table or the like.

[0083] The upper container body 11 and the lower container body 12 are connected to each other at the rear surface and relatively pivot on the connecting portion as a pivot point. In this way, the housing space S can be opened and closed. Therefore, after refilling and the like, the upper container body 11 and the lower container body 12 can easily fit to each other so that the container body is closed without aligning their positions each time. As a result, it is possible to reduce efforts at the time of refilling the inside household thin paper P.

[0084] When the container body 1 is closed, the upper fitting portion 116 formed of an elastic material in the upper container body 11 and the lower fitting portion 121 formed of an elastic material in the lower container body 12 fit to each other, and the airtightness of the container body 1 can be improved. This effect can be particularly enhanced when both the upper fitting portion 116 and the lower fitting portion 121 are made of an elastic material.

[0085] Because the lower nonslip portion 122 made of an elastic material is formed at the lower surface of the container body 1, the container body 1 can be placed more stably on the table or the like.

[0086] The present invention is not limited to the above-described embodiments.

[0087] For example, as shown in FIG. 6A, an elastic material to be the fixing portion 115 may be injected so as to wrap the lower end of the biasing means 3 formed of the thermosetting resin material, such that the molded fixing portion 115 holds the biasing means 3.

[0088] Alternatively, as shown in FIG. 6B, a strip 115a that is a part of the fixing portion 115 and covers and holds the lower end of the biasing means 3 may be arranged along the peripheral surface of the biasing means 3. The strip 115a that forms a part of the fixing portion 115 can be formed together with the fixing portion 115 by injection molding of an elastic material.

[0089] In the illustrated example, a coil-spring-shaped strip 115a spirally follows the peripheral surface of the biasing means 3.

[0090] In this way, by the fixing portion 115 having a portion that partly follows the peripheral surface of the biasing means 3, the repulsive force of the biasing means 3 can be adjusted.

[0091] In the examples described in the above embodiments, the fixing portion 115 is formed of the elastic material integrally with the take-out portion 112 and the body-side sealing loop 113, but the present invention is limited to them. For example, as shown in FIG. 7, the fixing portion 115 may be formed of a polyolefin-based resin material such as polyethylene or polypropylene, in-

tegrally with the open/close lid 2 or the like.

[0092] In the examples described in the above embodiments, the container body 1 has the fixing portion 115 that fixes the biasing means 3 to the household thin paper storage container 100, but the present invention is limited to them. For example, as shown in FIG. 8, the open/close lid 2 may have the fixing portion 115 that fixes the biasing means 3 to the household thin paper storage container 100.

[0093] That is, when a fixing portion 115 is formed on a part of the open/close lid 2 formed by injection molding, the biasing means 3 is fixed to the fixing portion 115 so as not to be removed from the open/close lid 2 (fixing portion 115).

[0094] In this way, the household thin paper storage container 100 can be manufactured with the container body 1, the open/close lid 2, and the biasing means 3 formed by pseudo-three-color molding such that the biasing means 3 is fixed to the open/close lid 2. When the biasing means 3 is fixed to the injection-molded fixing portion 115 together with the open/close lid 2, the household thin paper storage container 100 can be manufactured with high productivity.

[0095] Furthermore, in the above embodiments, the container body 1 and the open/close lid 2 are integrally formed by injection molding (two-color molding), but the present invention is not limited thereto. The container body 1 and the open/close lid 2 can be formed separately and then connected rotatably using a hinge or the like, though the productivity is lowered.

[0096] In the above embodiments, the container body 1 and the open/close lid 2 that are integrally formed by injection molding (two-color molding) are formed of a polyolefin resin material such as polyethylene or polypropylene, but the present invention is not limited thereto. The container body 1 and the open/close lid 2 that are integrally formed by injection molding (two-color molding) may be partly or as a whole formed of the elastic material.

[0097] The present invention is not limited to be applied to the above-described embodiment, and can be appropriately changed as long as it does not depart from the spirit of the present invention.

Industrial Applicability

[0098] The present invention is configured as described above and can be used as a household thin paper storage container in which the open/close lid can be readily opened.

List of Reference Signs

[0099]

1	Container Body
111	Recessed Portion
112	Take-Out Portion
112a	Outlet
113	Body-Side Sealing Loop
114	Latch
115	Fixing Portion
115a	Strip
2	Open/Close Lid
3	Biasing Means
3a	Small Hole
3b	Notch
100	Household Thin Paper Storage Container
P	Household Thin Paper

Claims

1. A household thin paper storage container comprising:

a container body that stores household thin paper inside and has an outlet through which the household thin paper can be taken out;
an open/close lid that is pivotably provided to the container body and closes the outlet; and
a biasing means that biases the open/close lid in an opening direction, wherein the container body includes:

a latch that latches the open/close lid in a closing state and that opens the open/close lid in response to being unlatched; and
a fixing portion that fixes the biasing means to the container body,

wherein the biasing means is a member that is formed of a thermosetting resin material, and
wherein the fixing portion is formed as a part of the container body, and
the biasing means is fixed to the fixing portion.

2. A household thin paper storage container comprising:

a container body that stores household thin paper inside and has an outlet through which the household thin paper can be taken out;
an open/close lid that is pivotably provided to the container body and
closes the outlet; and
a biasing means that biases the open/close lid in an opening direction, wherein the container body includes a latch that latches the open/close lid in a closing state and that opens the open/close lid in response to being unlatched,
wherein the open/close lid includes a fixing portion that fixes the biasing means to the open/close lid,
wherein the biasing means is a member that is formed of a thermosetting resin material, and
wherein the fixing portion is formed as a part of

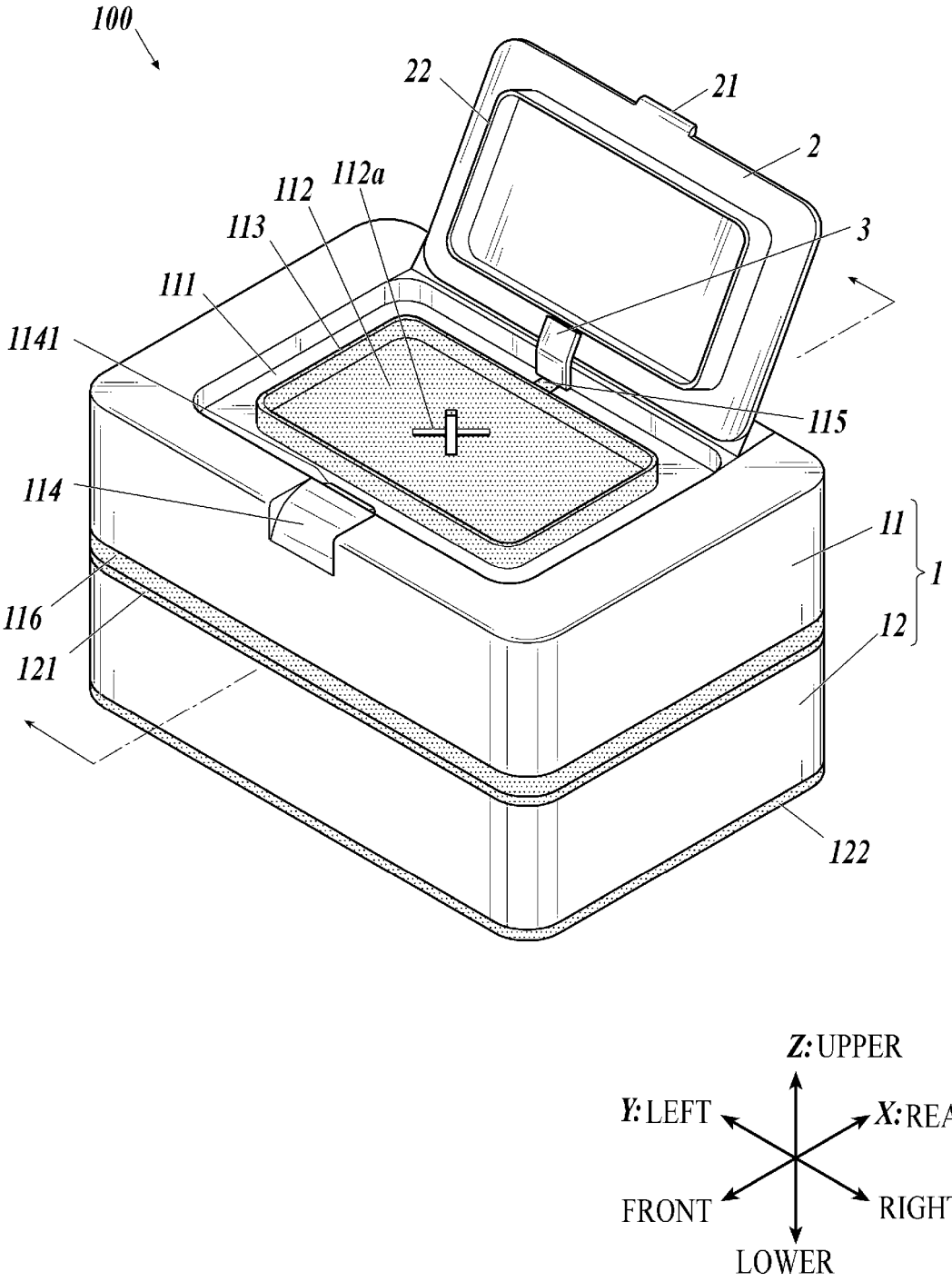
the open/close lid, and
the biasing means is fixed to the fixing portion.

3. The household thin paper storage container according to claim 1 or 2, wherein the biasing means has a small hole or a notch, and
wherein the fixing portion is inserted into the small hole or the notch.

4. The household thin paper storage container according to claim 1 or 2, wherein the fixing portion covers and holds an end of the biasing means.

5. The household thin paper storage container according to any one of claims 1 to 4,
wherein a part of the fixing portion is arranged along a peripheral surface of the biasing means.

FIG. 1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22
21
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112
112a
113
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111
1141
115
114
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1
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12
121
122
Z: UPPER
Y: LEFT
X: REAR
FRONT
RIGHT
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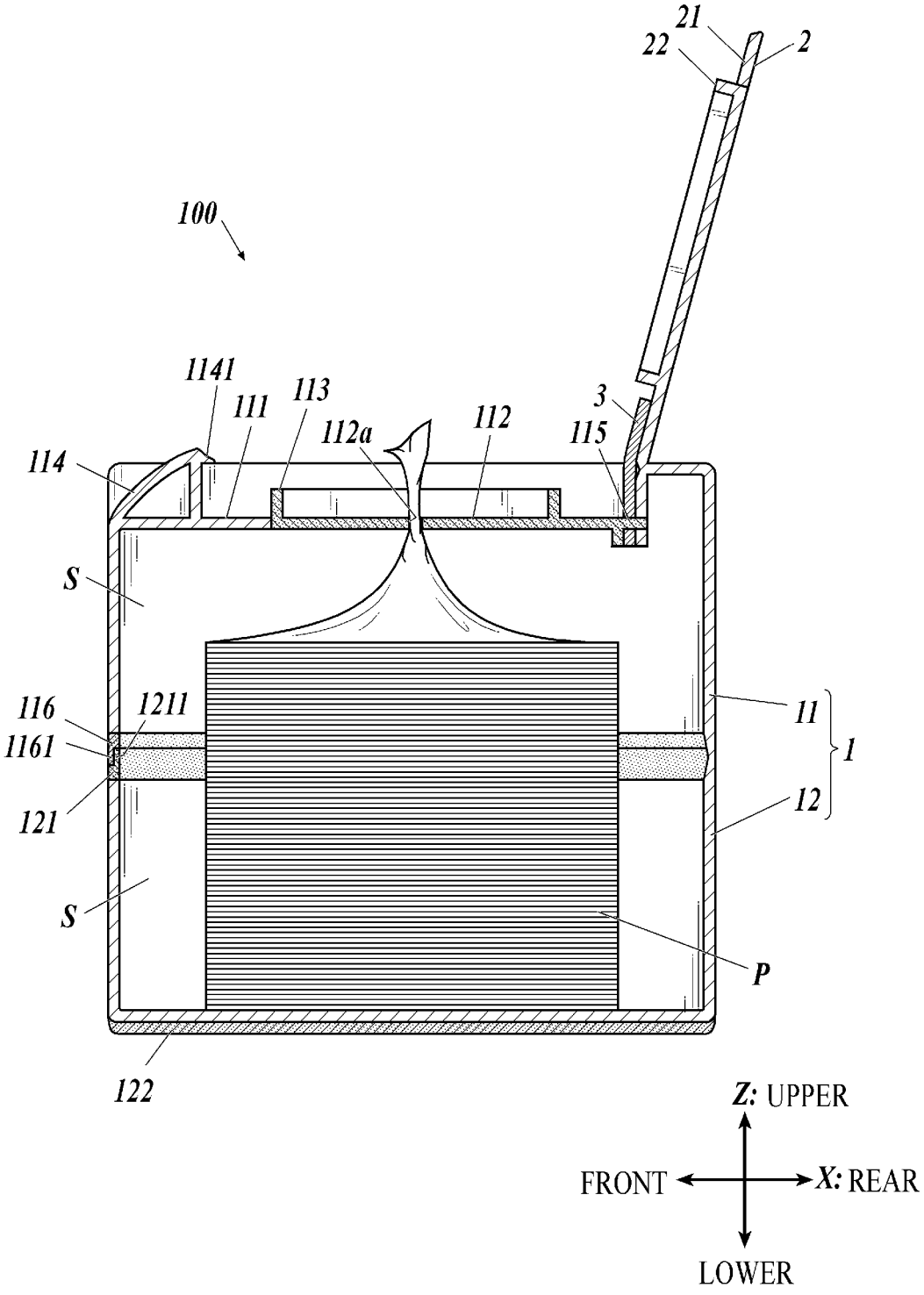
FIG. 2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Z: UPPER
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X: REAR
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FIG. 3

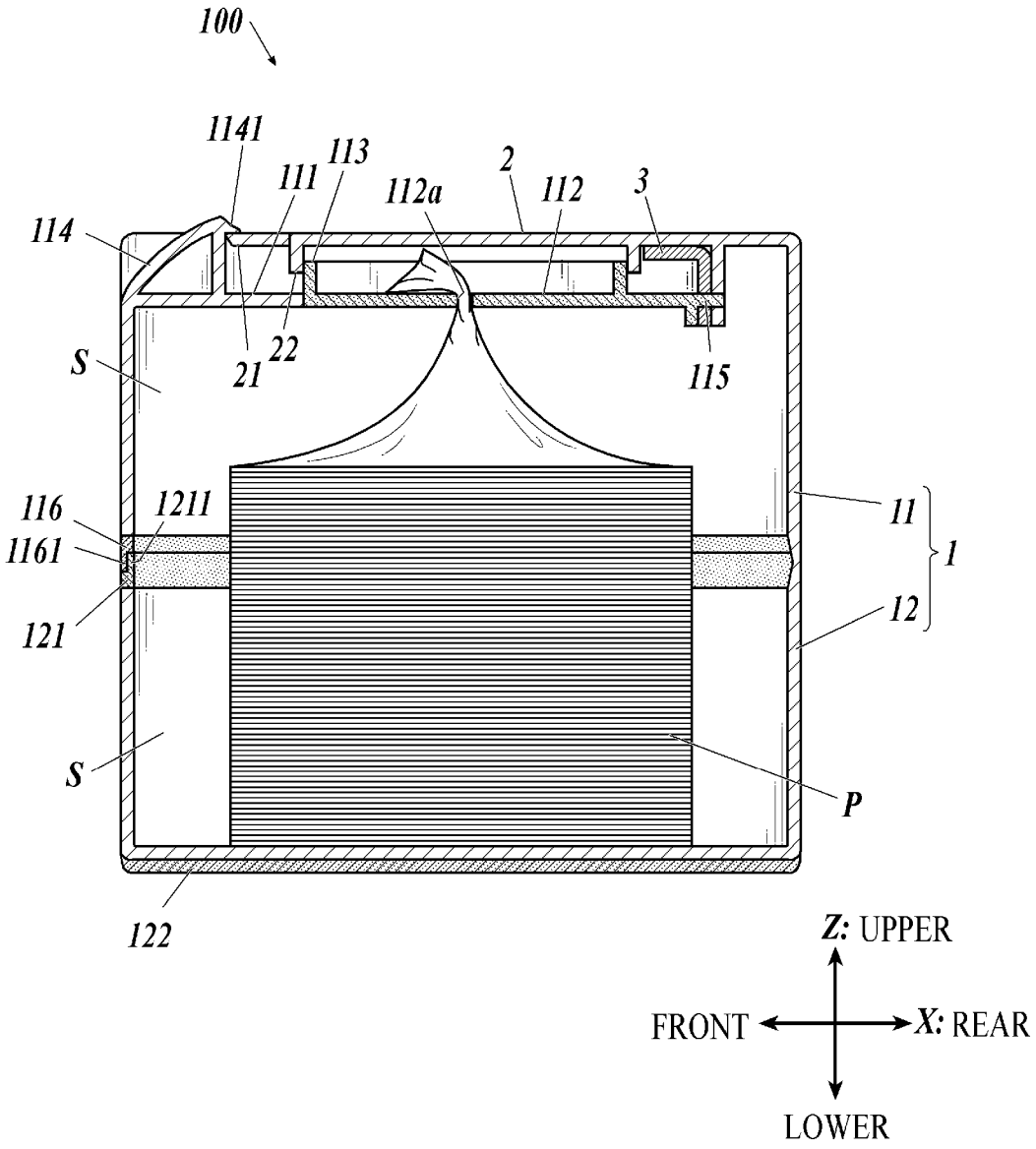
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FIG. 4

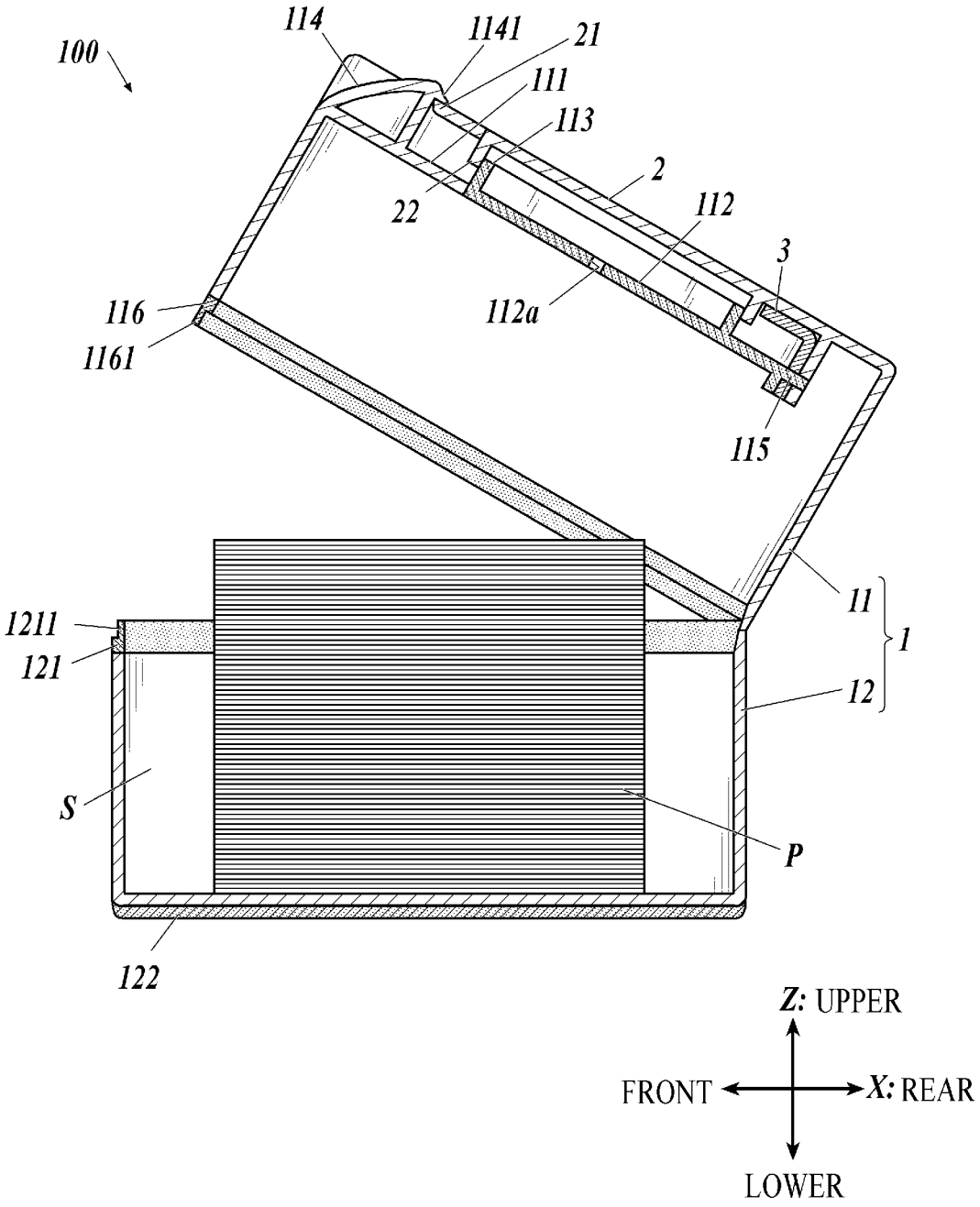
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FIG. 5A

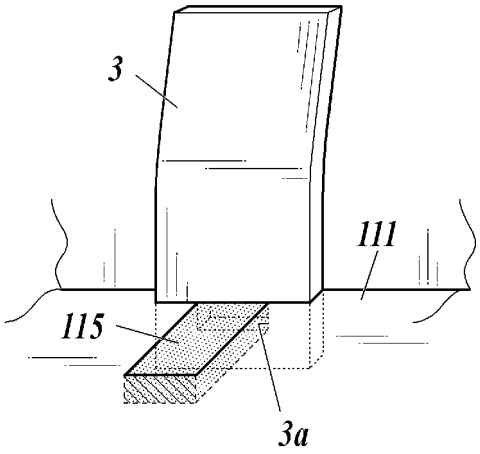

FIG. 5B

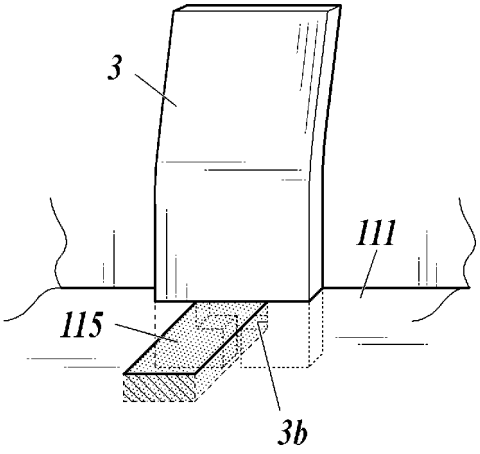

FIG. 6A

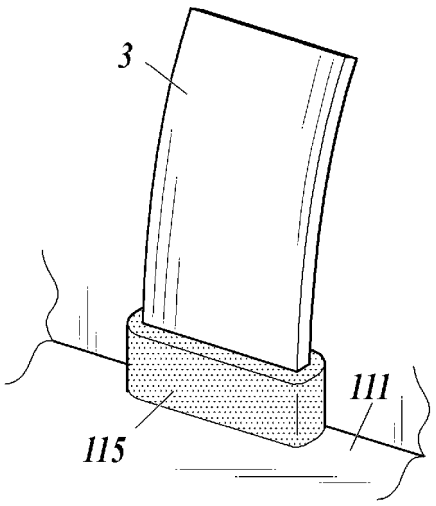

FIG. 6B

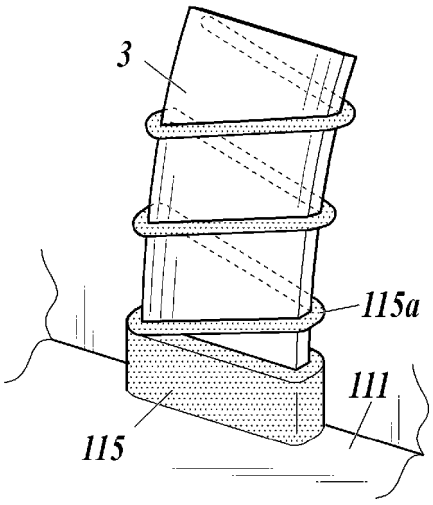

FIG. 7

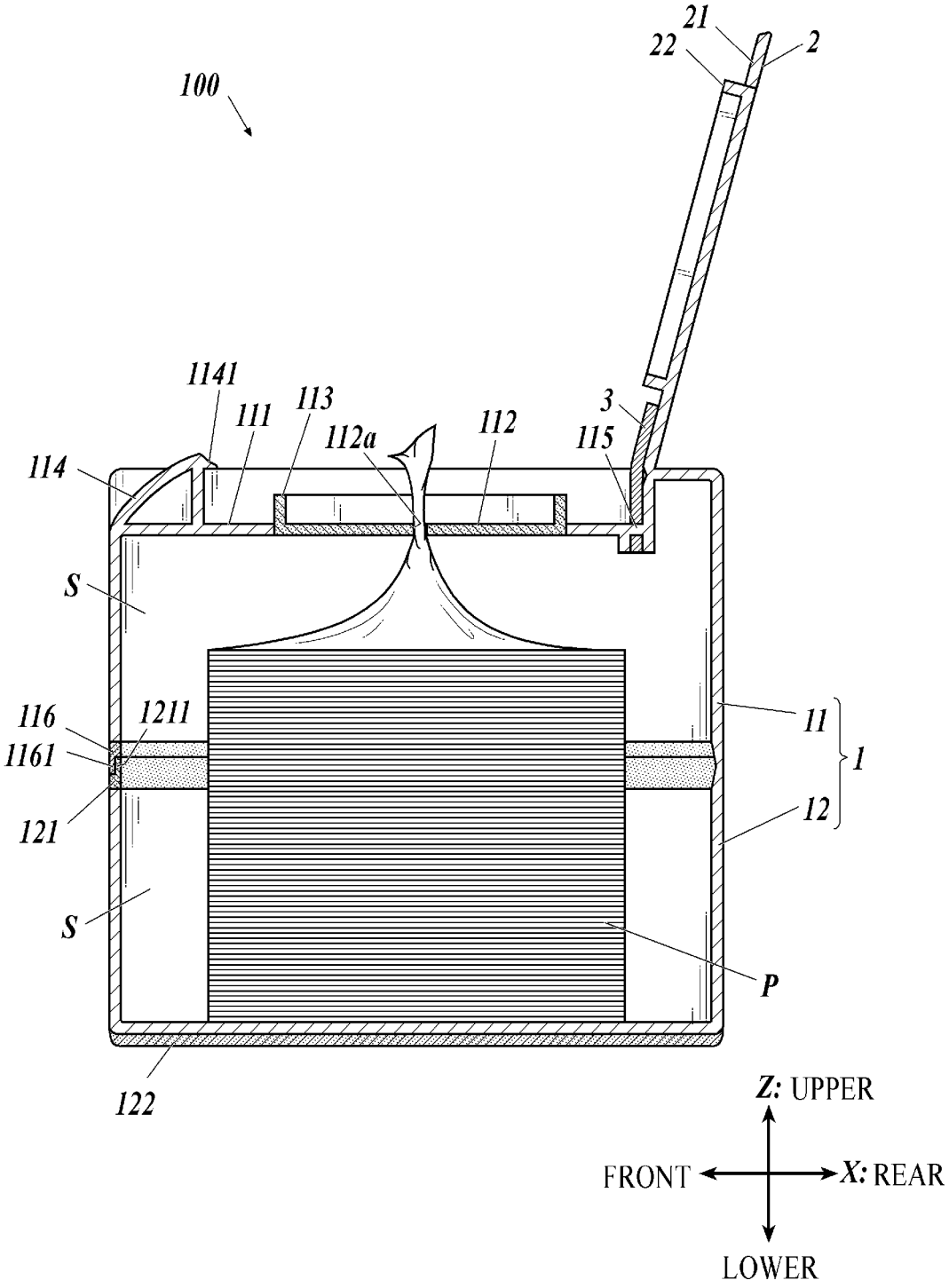
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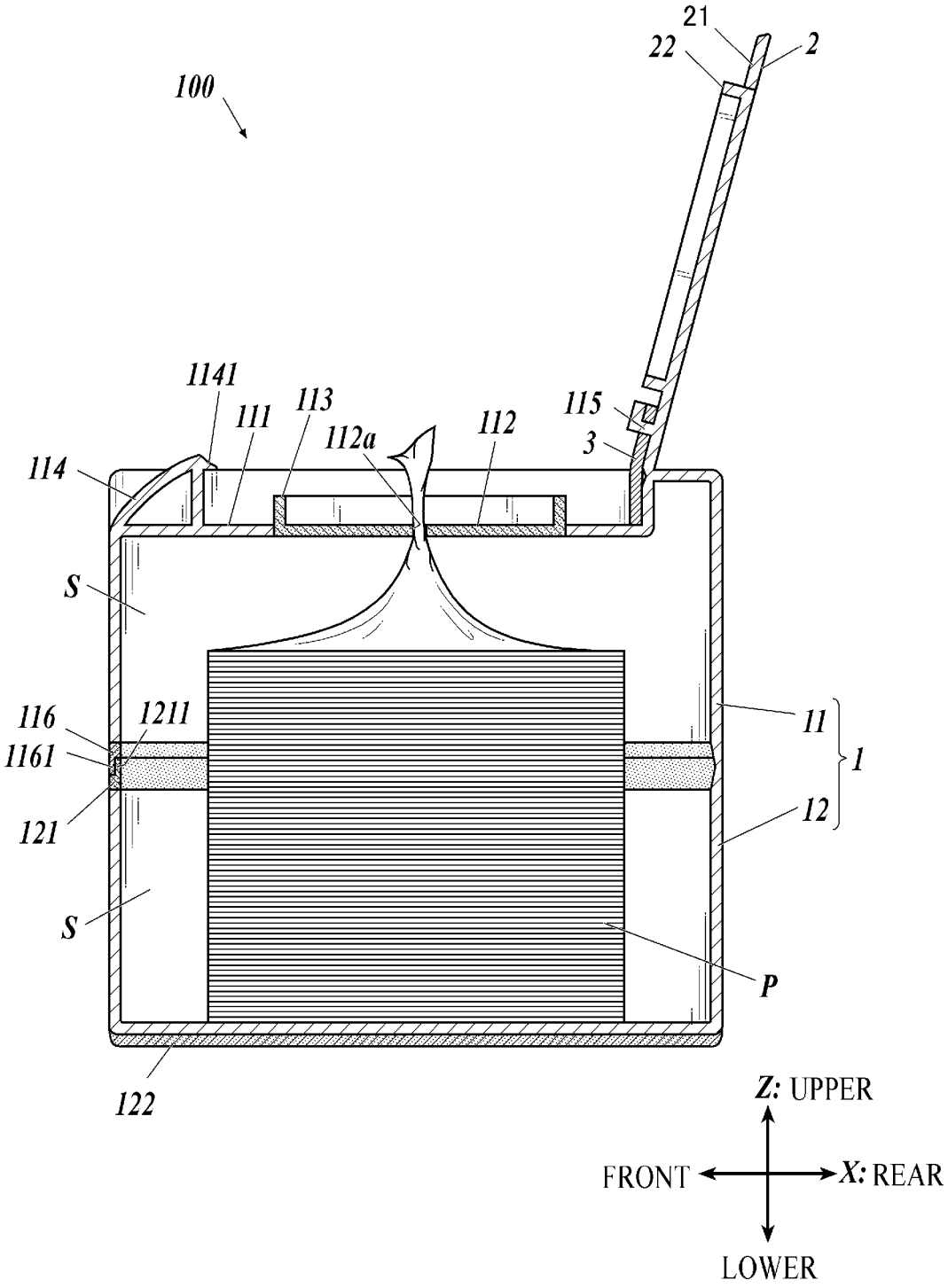
FIG. 8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Z: UPPER
FRONT
X: REAR
LOWER

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2019/043600

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl. B65D83/08(2006.01)i, B65D43/16(2006.01)i, B65D43/22(2006.01)i
FI: B65D83/08A, B65D43/16200, B65D43/22100

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)
Int.Cl. B65D83/08, B65D43/16, B65D43/22

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

Published examined utility model applications of Japan	1922-1996
Published unexamined utility model applications of Japan	1971-2020
Registered utility model specifications of Japan	1996-2020
Published registered utility model applications of Japan	1994-2020

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2010-1046 A (TOPPAN PRINTING CO., LTD.) 07 January 2010, paragraphs [0036]-[0050], [0059]-[0062], fig. 18, 19	1-5
Y	JP 11-193044 A (PIGEON CORPORANTION) 21 July 1999, paragraphs [0031], [0043], fig. 1	1-5
A	JP 2015-13681 A (KAWASAKI KAKO KK) 22 January 2015, paragraph [0017]	1-5
A	US 2012/0048858 A1 (PETERS, T. J.) 01 March 2012, paragraphs [0026], [0027], [0039], fig. 10	1-5

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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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
14.01.2020	28.01.2020

Name and mailing address of the ISA/	Authorized officer
Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Telephone No.

Form PCT/ISA/210 (second sheet) (January 2015)

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/JP2019/043600

JP 2010-1046 A	07 January 2010	(Family: none)	
JP 11-193044 A	21 July 1999	(Family: none)	
JP 2015-13681 A	22 January 2015	(Family: none)	
US 2012/0048858 A1	01 March 2012	KR 10-2013-0110155 A entire text, fig. 10	

Form PCT/ISA/210 (patent family annex) (January 2015)

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 5280743 B **[0004]**