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(71) Applicant: **Daio Paper Corporation**
Shikokuchuo-shi, Ehime 799-0492 (JP)

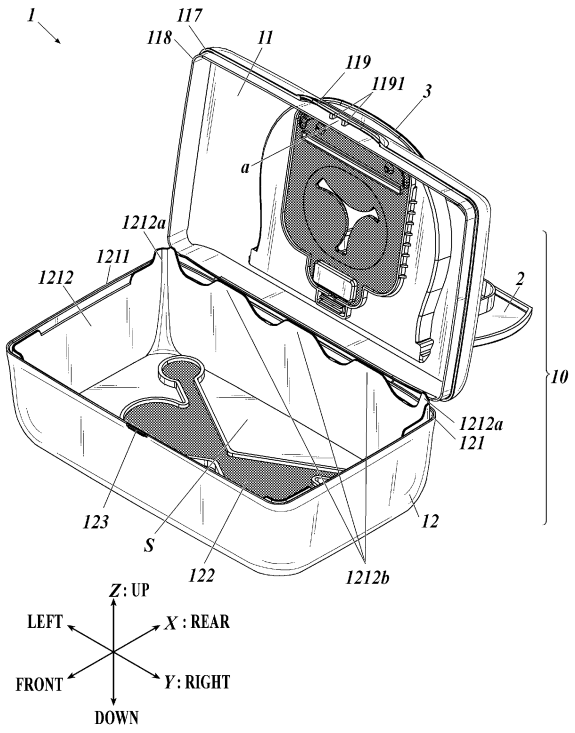
(72) Inventor: **MIURA, Akiteru**
Shikokuchuo-shi, Ehime 799-0113 (JP)

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

(54) HOUSEHOLD THIN-PAPER STORING CONTAINER

(57) This household thin-paper storing container 1 is provided with a container body 10 having a storing space S for accommodating thereinside household thin paper P, wherein the container body 10 is provided with a container body upper portion 11, a container body lower portion 12, and a connection part 13 for connecting the rear surface of the container body upper portion 11 and the rear surface of the container body lower portion 12. By turning the container body upper portion 11 about the connection part 13 which is acting as the fulcrum, the storing space S of the container body lower portion 12 is closed or exposed. The container body upper portion 11 is provided with a grip part 119 projecting from the front surface and having a gap between the grip part and the front surface, and a plurality of locking portions 1191 provided separately at portions on the left and right of the center portion, in the left-right direction, of the inner surface of the grip part 113. The container body lower portion 12 is provided with an engaging projection 123 projecting frontward from the front surface, and is configured, when closed, such that the plurality of locking portions 1191 and the engaging projection 123 are engaged with each other to maintain the closed state.

FIG. 4



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Description

TECHNICAL FIELD

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

BACKGROUND ART

[0002] A storing container for household thin paper such as wet wipes is known to store household thin paper inside. Such storing container is known to include a container main body including a take out hole to take out the household thin paper and an open/close lid which is connected rotatably to the container main body, which can open and close and which closes the take out hole.

[0003] Further, the container main body can be divided into an upper container main body and a lower container main body. Such known container includes a structure in which the upper container main body and the lower container main body are separated when the household thin paper is refilled (for example, Patent Literature 1).

CITATION LIST

Patent Literature

[0004] Patent Literature 1: JP 6510696

SUMMARY OF INVENTION

Technical Problem

[0005] In such household thin paper storing container in which the container main body is divided into an upper container main body and a lower container main body, it is desired that the household thin paper can be refilled more easily.

[0006] An object of the present invention is to provide a household thin paper storing container in which the household thin paper stored inside can be refilled more easily.

Solution to Problem

[0007] In order to solve the above problems, according to aspect 1 of the present invention, a household thin paper storing container includes: a container main body that includes a storage space in which household thin paper is stored inside, wherein, the container main body includes, an upper container main body that forms an upper portion of the container main body, a lower container main body that forms a lower portion of the container main body, and a connector which connects a rear surface of the upper container main body with a rear surface of the lower container main body, the upper container main body is rotated with the connector as a fulcrum and the storage space of the lower container main body is closed or exposed, the upper container main body includes a handle that projects from a front surface and in which a space is provided between the front surface, and a plurality of latches that are provided in positions of an inner surface of the handle separated to the left and the right from the center portion in a left-right direction, the lower container main body includes an engaging protrusion projecting in a front direction from the front surface, and when the storage space is closed, the plurality of latches and the engaging protrusion are engaged to maintain a closed state.

[0008] According to aspect 2 of the present invention, in the household thin paper storing container according to aspect 1, the handle overlaps with the engaging protrusion in a front-rear direction when the storage space is closed.

[0009] According to aspect 3 of the present invention, in the household thin paper storing container according to aspect 1 or 2, a length of the engaging protrusion in a left-right direction is longer than the length of the plurality of latches in the left-right direction added to the interval between the latches and the plurality of latches are engaged to the one engaging protrusion.

[0010] According to aspect 4 of the present invention, in the household thin paper storing container according to any one of aspects 1 to 3, the upper container main body includes a shape projecting in an arch shape from the front surface in a bottom view.

[0011] According to aspect 5 of the present invention, in the household thin paper storing container according to aspect 4, the handle is provided as one with other portions composing the upper container main body.

[0012] According to aspect 6 of the present invention, in the household thin paper storing container according to any one of aspects 1 to 5, wherein the upper container main body, the lower container main body, and the connector are provided as one.

Advantageous Effects of Invention

[0013] According to the present invention, it is possible to provide a household thin paper storing container in which the household thin paper stored inside can be refilled more easily.

BRIEF DESCRIPTION OF DRAWINGS

[0014]

FIG. 1 is a perspective view of a household thin paper storing container according to an embodiment. The shaded portion shows a portion formed of an elastic material. This point is the same in the other figures.

FIG. 2 is a perspective view showing a state in which an open/close lid is open in the household thin paper storing container according to the embodiment.

FIG. 3 is a rear perspective view of the household thin paper storing container according to the embod-

iment.

FIG. 4 is a perspective view showing a state in which an upper container main body is open in the household thin paper storing container according to the embodiment.

FIG. 5 is a front view showing a state in which the upper container main body is open in the household thin paper storing container according to the embodiment.

FIG. 6 is a bottom view of a household thin paper storing container according to an embodiment.

FIG. 7 is a cross-section view along the line VII-VII shown in FIG. 1.

FIG. 8 is an enlarged diagram enlarging a surrounding of a handle portion in the cross-section view shown in FIG. 7.

DESCRIPTION OF EMBODIMENTS

[0015] A specific embodiment of a household thin paper storing container 1 according to an embodiment of the present invention is described with reference to FIG. 1 to FIG. 8. However, the technical scope of the present invention is not limited to the illustrated examples.

[0016] In the following, as described in the drawings, an X-axis, a Y-axis, and a Z-axis and a front-rear direction, a left-right direction, and an up-down direction are defined and described. That is, the side of the household thin paper storing container in which an open/close lid is provided is "up", the opposite side is "down", the side in which a container main body and the open/close lid are connected is "rear", the opposite side is "front", the right hand side viewed from the front side is "right", the left hand side is "left", the axis along the front-rear direction is the X-axis, the axis along the left-right direction is the Y-axis, and the axis along the up-down direction is the Z-axis. When the upper container main body rotates with relation to the lower container main body, the direction to which the upper container main body faces changes. Hereinbelow, as shown in FIG. 1, the direction is defined and described with reference to the state in which the upper container main body and the lower container main body are combined and a storage space S is closed.

[Configuration of Embodiment]

(Entire Configuration)

[0017] As shown in FIG. 1 to FIG. 8, the household thin paper storing container 1 includes a container main body 10 including a take out hole 113a for taking out a household thin paper P stored inside, an open/close lid 2 which is connected to the container main body 10 to be opened and closed freely so as to cover the take out hole 113a, and a button 3 which is provided in the container main body 10 and which can be used to open and close the open/close lid 2. The storage space S is formed to store the household thin paper P inside the household thin paper storing container 1.

(Household Thin Paper)

[0018] For example, as the household thin paper P, a small wet sheet or wet wipe is folded and the sheets are overlapped alternately and layered. The layers are formed so that when one wet sheet or wet wipe is pulled out, the next wet sheet or wet wipe is pulled out. That is, a so-called pop-up type sheet is used. Other than the above, for example, a rolled sheet can be used. In a rolled sheet, a long wet sheet or wet wipe including perforations at a certain interval in a length direction is rolled, and the sheet is used by cutting along the perforations and separating the sheet.

(Container Main Body)

[0019] As shown in FIG. 1 to FIG. 7, for example, the container main body 10 as a whole is formed in a substantial rectangular parallelepiped shape that is longer in the Y-direction than in the X-direction and the Z-direction. This is divided into two parts which are the upper part and the lower part at a position above the central portion in the Z-direction. The upper side of the container main body 10 is formed to be an upper container main body 11 and the lower side of the container main body 10 is formed to be a lower container main body 12. The upper container main body 11 is connected to the lower container main body 12 by a connector 13 at a rear surface of the container main body 10.

[0020] The upper container main body 11, the lower container main body 12, and the connector 13 are formed as one by a method such as injection molding (two-color molding).

[0021] As shown in FIG. 1 to FIG. 7, the container main body 10 is formed so that in a state in which the upper container main body 11 and the lower container main body 12 are combined and the storage space S inside is closed, the size of the entire container main body 10 is, in the X-direction, preferably 60 mm to 150 mm, more preferably 80 mm to 100 mm, in the Y-direction, preferably 80 mm to 200 mm, more preferably 145 mm to 165 mm, and in the Z-direction, preferably 30 mm to 100 mm, more preferably 50 mm to 70 mm.

[0022] The thickness of each surface is preferably 0.5 mm to 3 mm, more preferably 1 mm to 2 mm.

[0023] With such size and thickness, it is possible to achieve high molding efficiency and strength that does not cause problems in actual use.

(Connector)

[0024] As shown in FIG. 3, the household thin paper storing container 1 is formed so as to rotate at the connector 13 as the fulcrum. The connector 13 is the connector connecting the upper container main body 11 and the lower container main body 12. With this, as shown in

FIG. 4, the storage space S can be in a state exposed to the outside.

[0025] When the storage space S is closed, the user rotates the upper container main body 11 opposite to the above.

[0026] As shown in FIG. 3, the connector 13 is formed to become thinner compared to the other portions of the household thin paper storing container 1. With this, the connector 13 becomes easy to bend, and the upper container main body 11 can be more easily rotated with relation to the lower container main body 12 with the connector 13 as the fulcrum.

[0027] Although the productivity decreases, it is possible to form the upper container main body 11 and the lower container main body 12 as different bodies, and to rotatably connect the above by a hinge or the like.

[0028] By dividing the container main body 10 into two parts which are the upper container main body 11 and the lower container main body 12 at the position above the center portion in the Z-direction, when the stored household thin paper P is stored in the storage space S covered by a predetermined package, it is possible to decrease the possibility of pinching a seal portion at the end of the package when the storage space S is closed. With this, it becomes much easier to refill the household thin paper P. The position where the container main body 10 is divided into two parts which are the upper container main body 11 and the lower container main body 12 can be near the center portion in the Z-direction.

(Upper Container Main Body)

[0029] As shown in FIG. 2 to FIG. 8, the upper container main body 11 is formed to be a substantial rectangular parallelepiped shape with a substantial rectangular opening at the bottom surface. A concave portion 112 in a concave shape downward in the Z-direction is formed near the center of a top surface 111 which forms the upper surface. In the concave portion 112, a take out portion 113 is provided including a take out hole 113a in the center in order to take out a household thin paper P in the storage space S. In the rear edge portion, a storing concave portion 115 is formed to store an urging member 114. In the front edge portion, a button attaching portion 116 is formed to attach the button 3.

[0030] In the lower edge of the lower surface of the upper container main body 11, a ring shaped outer edge 117 and a ring shaped inner edge 118 which is provided to the inner side than the outer edge 117 and which projects downward than the outer edge 117 are formed.

[0031] In the lower edge portion of the front surface of the upper container main body 11, a handle 119 is formed to be held when the storage space S is exposed.

(Material of Upper Container Main Body)

[0032] The upper container main body 11 is formed by a hard material which is a material that is hard. The hard material that can be used include, for example, polyethylene, polypropylene, and the like. The method for measuring the hardness is the same as described for the elastic material.

[0033] Preferably, the portion formed by a later described elastic material and a portion formed by a hard material are formed as one by injection molding (two-color molding).

(Concave Portion)

[0034] As shown in FIG. 2, the concave portion 112 is formed near the center portion of the top surface 111 in a plan view. FIG. 2 illustrates the concave portion 112 that is shaped in a substantial curvy rectangle in a plan view and that reaches the front edge of the upper container main body 11 but the specific shape of the concave portion 112 is not limited to the above.

[0035] Preferably, the depth of the concave portion 112 in the Z-direction is 5 mm to 20 mm viewed from the top surface 111. The size in the plan view is not limited if the take out portion 113 can be formed inside. Preferably, the size is 40 mm to 80 mm in the X-direction and 40 mm to 120 mm in the Y-direction.

(Take Out Portion)

[0036] The take out portion 113 is a portion which is formed near the center portion of the concave portion 112 in a plan view and which is formed of an elastic material. A substantially spherically raised bulge portion 113b is formed in the substantial center of the take out portion 113, and the take out hole 113a is provided in the bulge portion 113b.

[0037] Three projecting pieces 113c are provided on the edge of the take out hole 113a to project toward the center of the take out portion 113 from the edge of the projecting hole 113a on the closer side.

[0038] Preferably, the take out portion 113 is formed in a film shape so that the thickness in the Z-direction is 0.5 mm to 2 mm, for example.

[0039] The elastic material to form the take out portion 113 may be a material including elasticity, for example, silicon rubber or a thermoplastic elastomer such as styrenebutadiene type, polyester type, polyethylene type or urethane type. Preferably, the hardness is from 20 to 90. The hardness is measured by JIS K 6253 (type A durometer).

[0040] If the hardness of the elastic material is lower than the above value, the material is too soft and it becomes difficult to mold. This is not desirable because the molding efficiency reduces.

[0041] If the hardness of the elastic material becomes higher than the above value, the take out portion 113 in which the take out hole 113a is formed to take out the household thin paper P becomes hard and too much resistance is applied. Therefore, it becomes difficult to take out the sheet one by one. Moreover, it becomes difficult

to insert the finger into the storage space S when the sheet is pulled out. In view of the above, the hardness becoming too hard is also not desirable.

(Take Out Hole)

[0042] The take out hole 113a is a hole which is formed in the center of the take out portion 113 in a plan view and which is connected to the storage space S.

[0043] For example, FIG. 2 shows the take out hole 113a with a shape in which each side of a triangle is projecting in an arc shape toward the inner side. The three slits along each line connecting each vertex and the center of gravity form a substantial upside down Y shape intersecting at the center of gravity. Among the three slits, the width of the slit extending in the X-direction is wide compared to the width of the other slits.

[0044] The number of slits can be smaller or larger than the above number. For example, two slits in a cross shape can be formed.

[0045] In the take out portion 113, the periphery of the take out hole 113a is formed by the elastic material and the suitable resistance can be applied to the household thin paper P. Therefore, the take out portion 113 includes the function to hold the next household thin paper P after pulling the household thin paper P stored in the storage space S. When the household thin paper P is a roll sheet, the sheet can be cut at the perforation for cutting provided in the household thin paper P.

(Projecting Piece)

[0046] The projecting piece 113c is provided in a position where the household thin paper P pulled out from the take out hole 113a slides and comes into contact in order to apply suitable resistance on the household thin paper P pulled out from the take out hole 113a.

[0047] Specifically, when the user opens the open/close lid 2 of the household thin paper storing container 1 and takes out the household thin paper P, the user extends his hand from the front side of the household thin paper storing container 1 and pulls out the household thin paper P from the take out hole 113a so that the open/close lid 2 standing on the rear side of the household thin paper storing container 1 does not interfere with the movement of taking out the household thin paper P. With this, the household thin paper P pulled out from the take out hole 113a slides in contact with the projecting piece 113c at the edge on the closer side.

[0048] Here, the projecting piece 113c projecting to the rear from the edge on the closer side slides in contact with the household thin paper P pulled out toward the closer side from the take out hole 113a. With this, the projecting piece 113c can apply suitable resistance to the household thin paper P and this prevents the household thin paper P from being pulled out too much from the take out hole 113a.

[0049] That is, the projecting piece 113c projecting to the rear from the closer side edge includes a function to apply suitable frictional force to the household thin paper P pulled to the closer side from the take out hole 113a in order to prevent the next household thin paper P pulled out after the household thin paper P to be used by being pulled out from being pulled out too much from the take out hole 113a.

[0050] Then, the next household thin paper P pulled out after the household thin paper P to be used is held in the take out hole 113a in a state with one end pulled out at a suitable length.

[0051] One end of the household thin paper P held by the take out hole 113a is supported by the three projecting pieces including the projecting piece 113c on the closer side.

[0052] The take out hole 113a holding the one end of the household thin paper P is provided in the bulge portion 113b of the take out portion 113. Therefore, the tip sides of the projecting pieces 113c are positioned higher than the take out portion 113 which is the base surface of the surrounding of the bulge portion 113b.

[0053] Since the one end of the household thin paper P is held in the take out hole 113a supported in a position higher than the surroundings by the projecting piece 113c, it becomes easy to pinch the household thin paper P.

(Urging Member)

[0054] As shown in FIG. 2, the urging member 114 is a member in a belt shape formed of an elastic material. One end of the urging member 114 is fixed to the rear of the concave portion 112 and the other end is fixed to an insertion portion 23 (later described) of the open/close lid 2. The urging portion urges in the direction to open and stand the open/close lid 2. When the user presses the button 3, the open/close lid 2 is moved so as to rotate at the connecting portion at the rear of the upper container main body 11 as the rotating axis. With this, the open/close lid 2 opens.

[0055] The urging member 114 is formed in a belt shape with a width preferably 2 mm to 30 mm, more preferably 8 mm to 10 mm, and a thickness preferably 0.5 mm to 3 mm, more preferably 1 mm to 2 mm.

[0056] By forming the urging member 114 to be such size, the open/close lid 2 can be pressed up without difficulty when opened, and when the open/close lid 2 is closed, the urging member can be easily folded and stored in the storing concave portion 115.

[0057] The urging member 114 is formed to extend as shown in FIG. 2 in a state in which no force is applied. Therefore, when the open/close lid 2 is closed as shown in FIG. 7 and the urging member 114 is folded, the force to return to the state shown in FIG. 2 is generated. With this, it is possible to urge the open/close lid 2 to rotate backward with relation to the upper container main body 11 at the connector 13 as the rotating axis. The connector 13 is the connector between the rear of the open/close

lid 2 and the upper container main body 11.

(Storing Concave Portion)

[0058] As shown in FIG. 7, the storing concave portion 115 is a concave portion to store the folded portion of the urging member 114 when the open/close lid 2 is closed and the urging member 114 is pressed downward.

[0059] As shown in FIG. 2, the storing concave portion 115 is formed to be a concave shape in a position to the rear of the take out portion 113 in the concave portion 112 and near the front of the urging member 114 so as to be downward in the Z-direction than the concave portion 112.

[0060] The shape of the storing concave portion 115 is not limited, and for example, the shape is a substantial rectangular parallelepiped shape long in the Y-direction compared to the X-direction. The storing concave portion 115 is to include a space to be able to store the folded urging member 114 pressed by the open/close lid 2 when the open/close lid 2 is closed.

(Button Attaching Portion)

[0061] The button attaching portion 116 is formed of a hard material in the front edge of the concave portion 112. The button attaching portion 116 includes a main body side fitter 1161 formed in a ring shape to be a convex shape upward in the Z-direction and a button movable portion 1162 which is formed in a concave shape downward in the Z-direction so as to surround the left/right portion and the front portion of the main body side fitter 1161 in a plan view.

(Main Body Side Fitter)

[0062] For example, the main body side fitter 1161 is formed so that the front side is a curved shape in a plan view and the rear side is in a straight line shape in a plan view. The inner circumference of the main body side fitter 1161 is formed to be slightly larger than the outer circumference of a button side fitter 32 (later described) formed in the button 3. The main body side fitter 1161 is formed so that the button 3 can be attached to the button attaching portion 116 by inserting the button side fitter 32 from the above.

(Button Movable Portion)

[0063] The button movable portion 1162 is formed to be a concave shape downward to surround the left/right portion and the front portion of the main body side fitter 1161. The button movable portion 1162 is formed of the elastic material similar to the take out portion 113. With this, the button movable portion 1162 is formed so that when a front end 31a of the button is inserted in the main body side fitter 1161 and pressed from the above, the button movable portion 1162 elastically deforms so that the button 3 tilts downward.

(Outer Edge/Inner Edge)

[0064] The outer edge 117 is a ring shape as shown in FIG. 4 and FIG. 5, and is formed in the lower edge of the upper container main body 11.

[0065] The inner edge 118 is a ring shape as shown in FIG. 4 and FIG. 5. The inner edge 118 is provided to the inner side than the outer edge 117 in the lower edge of the upper container main body 11 and projects downward than the outer edge 117. The inner edge 118 is formed so that the inner edge 118 enters a later-described concave groove 121 of the lower container main body 12 when the storage space S is closed.

(Handle)

[0066] For example, as described from FIG. 1 to FIG. 8, the handle 119 is formed projecting in an arch shape from the front surface as one with the upper container main body 11 in the center of the front surface of the upper container main body 11 and a space a is formed between the handle 119 and the front surface to be able to hook the finger. Two latches 1191 are provided on the inner surface of the handle portion 119 facing the front surface. When the storage space S is exposed, the handle 119 is held, and the upper container main body 11 is rotated with the connector 13 as the fulcrum.

[0067] As described in FIG. 7 and FIG. 8, the portion where the front surface of the upper container main body 11 intersects with the inner surface of the handle 119 is an R shape, and is formed to be round.

[0068] The shape of the handle 119 may be any shape. The shape of the handle 119 does not have to be a shape projected in an arch shape and is to be a shape which projects from the front surface of the upper container main body 11 and which includes a space a between the front surface.

[0069] The handle 119 overlaps in the front-rear direction with an engaging protrusion 123 (later-described) provided in the lower container main body 12 in the state in which the upper container main body 11 is engaged with the lower container main body 12. According to the above, the engaging protrusion 123 cannot be seen from the front.

(Latch)

[0070] As described in FIG. 4 to FIG. 8, two latches 1191 are provided with a predetermined interval along the left-right direction on the inner surface of the handle 119. The latches 1191 are formed to engage to the engaging protrusion 123 when the storage space S is closed so that the closed state is maintained.

[0071] The interval provided between the two latches 1191 may be determined freely, but is preferably larger than a width of a finger of a typical user. Specifically, the

latches 1191 are formed to be separated 5 mm to 25 mm, more preferably 18 mm to 25 mm.

[0072] The number of latches 1191 is not limited to two, and is to be provided in each position separated to the left and right from the center portion of the inner surface of the handle 119 in the left-right direction. For example, two in the left and two in the right (a total of four) may be provided.

(Lower Container Main Body)

[0073] As shown in FIG. 4, the lower container main body 12 is formed in a substantial rectangular parallelepiped shape with an opening in a substantial rectangular shape in the upper surface. A ring shaped concave groove 121 is formed in an upper edge of the lower container main body 12.

[0074] A slipping preventer 122 is formed in the base of the upper surface of the lower container main body 12 in order to prevent slipping when the household thin paper P stored in the storage space S is pulled out from the take out hole 113a.

[0075] The engaging protrusion 123 is formed as one with the lower container main body 12 near the center of the upper edge of the front surface of the lower container main body 12 so as to project in the front direction.

(Material of Lower Container Main Body)

[0076] The lower container main body 12 is formed of the hard material similar to the material used in the upper container main body 11.

(Concave Groove)

[0077] The concave groove 121 is a ring shape as shown in FIG. 4 and is formed in the upper edge of the lower container main body 12 so that the inner edge 118 of the upper container main body 11 engages when the storage space S is closed. The concave groove 121 includes an outer peripheral wall 1211 and an inner peripheral wall 1212.

(Outer Peripheral Wall and Inner Peripheral Wall)

[0078] The outer peripheral wall 1211 is formed as the outer peripheral wall surface of the lower container main body 12 and the outer peripheral wall 1211 comes into contact with the outer edge 117 of the upper container main body 11 when the storage space S is closed.

[0079] The inner peripheral wall 1212 is formed as the inner peripheral wall surface of the lower container main body 12. As shown in FIG. 4, the inner peripheral wall 1212 is provided with first guides 1212a provided at both ends of the rear surface in the left-right direction, and a plurality of second guides 1212b provided in the left-right direction of the rear surface. The first guide 1212a and the second guide 1212b project upward than the outer peripheral wall 1211.

[0080] The inner edge 118 of the upper container main body 11 slides between the outer peripheral wall 1211 and the inner peripheral wall 1212 so as to maintain airtightness of the storage space S.

(First and Second Guides)

[0081] For example, the first guide 1212a is provided in both of the left and right edges on the rear surface of the lower container main body 12 extending the left surface and the right surface. The height of the first guide 1212a is higher than the height of the outer peripheral wall 1211 and the second guide 1212b in the Z-direction.

[0082] The second guides 1212b are a wave shape, and a plurality of second guides 1212b are provided along the left-right direction in the rear surface of the lower container main body 12. The height of the second guide 1212b is higher than the height of the outer peripheral wall 1211 in the Z-direction but lower than the height of the first guide 1212a in the Z-direction.

(Slipping Preventer)

[0083] The slipping preventer 122 is formed of the elastic material surrounded by the hard material in the base of the lower container main body 12. For example, as shown in FIG. 4, the slipping preventer 122 includes a shape in an arc in two angles formed extending in the Y-direction among the angles formed by two straight lines which connect the opposing vertices of the rectangle and which intersect at the center of gravity.

[0084] The four ends of the above two straight lines are round, and as shown in FIG. 6, the elastic material comes into contact with the placing surface only in the round portion. This functions as a placing portion 1221.

(Engaging Protrusion)

[0085] As shown in FIG. 4 and FIG. 5, the engaging protrusion 123 is a protrusion projecting in the front direction formed as one with the lower container main body 12 in the substantial center of the upper edge of the front surface of the lower container main body 12. The two latches 1191 are engaged when the storage space S is closed.

[0086] The engaging protrusion 123 is formed so that the length in the Y-direction is longer than the sum of the interval between the two latches 1191 and the lengths of the two latches 1191 in the Y-direction.

(Open/Close Lid)

[0087] As shown in FIG. 1 to FIG. 3, the open/close lid 2 is a flat and curved member in a substantial rectangular shape rotatably connected to the rear of the concave portion 112. The open/close lid 2 includes an open/close lid side latch 21 on the front side in the closed state, an

open/close lid side sealing ring 22 on the lower surface side, and an insertion portion 23 in which the urging member 114 is inserted.

[0088] The shape of the open/close lid 2 in a plan view when closed is formed to be substantially the same shape as the concave portion 112 of the upper container main body 11 in a plan view with the exception of the shape of the portion where the button 3 is provided. The open/close lid 2 is formed so that it is possible to be fitted in the concave portion 112 and to be on the same plane as the top surface 111 when the open/close lid 2 is closed.

(Material of Open/Close Lid)

[0089] As shown in FIG. 1 to FIG. 3, the open/close lid 2 is formed entirely of the hard material the same as the material used in the container main body 10.

(Open/Close Lid Side Latch)

[0090] For example, as shown in FIG. 2 and FIG. 3, the open/close lid side latch 21 is a portion of the open/close lid 2 in a claw shape projecting to the front. The open/close lid side latch 21 engages with a button side latch 33 formed in the button 3. With this, the portions are latched when the open/close lid 2 is closed. The open/close lid side latch 21 is formed so that when the user presses the button 3, and the link between the open/close lid side latch 21 and the button side latch 33 is released, the open/close lid 2 is opened by the urging force caused by the urging member 114.

[0091] The shape of the open/close lid side latch 21 may be any shape which engages to the button side latch 33 to be latched when the open/close lid 2 is closed, and in which the link between the open/close lid side latch 21 and the button side latch 33 is released when the user presses the button 3. The shape is not limited to the claw shape as shown in FIG. 2 and FIG. 3.

(Open/Close Lid Side Sealing Ring)

[0092] As shown in FIG. 2, the open/close lid side sealing ring 22 is formed to project in a ring shape downward when the open/close lid 2 is closed. As shown in FIG. 7, the open/close lid side sealing ring 22 is formed in the substantial center of the lower surface side so that the surface on the inner peripheral side comes into contact with the outer peripheral of the take out portion 113 formed in the upper container main body 11.

(Insertion Portion)

[0093] As shown in FIG. 2, the insertion portion 23 is a portion in which the urging member 114 is inserted to be fixed in the rear edge of the open/close lid 2.

(Button)

[0094] The button 3 includes an upper surface 31 which forms the upper surface, a button side fitter 32 which projects downward from the upper surface 31, and a button side latch 33 which engages to the open/close lid side latch 21. The button 3 is formed so that, by inserting the open/close lid side latch 21 in the button side latch 33, the open/close lid 2 is latched in the closed state. The button 3 is formed so that when the user presses the button 3, the latch with the open/close lid side latch 21 is released, and the open/close lid 2 is opened.

[0095] The button 3 is formed of the hard material which is the same as the material used in the container main body 10. The button 3 is formed independently as a different member. Then, the button 3 is fixed by the button attaching portion 116.

[0096] Preferably, the household thin paper storing container 1 is formed entirely as one by injection molding (two color molding) with the exception of the open/close lid 2 and the button 3 as described above.

(Upper Surface)

[0097] As shown in FIG. 1, FIG. 7, and FIG. 8, the upper surface 31 is a portion forming the upper surface of the button 3. For example, the upper surface 31 is formed so that the rear side is a straight line and the front side is a curve in a plan view. The upper surface 31 is formed to be substantially the same shape as the shape near the front edge of the concave portion 112 in a plan view with the exception of near the front end 31a. The front end 31a is formed to project forward from the concave portion 112.

[0098] The size of the upper surface 31 is determined according to the size of the portion which is not covered by the open/close lid 2 in the concave portion 112. Preferably, the size is 10 mm to 30 mm in the longest portion in the X-direction and 30 mm to 100 mm in the longest portion in the Y-direction.

[0099] A space b is formed between the front end 31a of the upper surface 31 and the upper container main body 11, and the front end 31a and a base end 31b are formed to tilt downward in different angles from the upper surface (parallel) of the upper container main body 11.

[0100] Here, an inclined angle of the front end 31a is formed to be larger than the inclined angle of the base end 31b. Specifically, preferably, the inclined angle of the base end 31b is 6 to 8 degrees and the inclined angle of the front end 31a is 8 to 10 degrees.

[0101] The base end 31b of the button is parallel with relation to the upper container main body 11, and only the front end 31a may be tilted downward or the tilt may be the same angle from the base end 31b to the front end 31a.

(Button Side Fitter)

[0102] For example, the button side fitter 32 is formed to project downward from the upper surface 31 in a ring shape with the front side in a curved shape and the rear side in a straight line shape from a base view. The outer circumference is formed to be slightly smaller than the inner circumference of the main body side fitter 1161. The button side fitter 32 is formed to be inserted in the main body side fitter 1161 from above so as to be able to attach the button 3 to the button attaching portion 116.

[0103] The inner circumference may be formed to be the same or slightly larger than the outer circumference of the above described main body side fitter 1161. The button side fitter 32 may be formed to insert the main body side fitter 1161 from below so as to be able to attach the button 3 to the button attaching portion 116.

(Button Side Latch)

[0104] The button side latch 33 is a hole formed in the rear of the button 3. The open/close lid side latch 21 formed in the open/close lid 2 is inserted inside the button side latch 33 and linked. With this, the open/close lid 2 is latched in the closed state. The button side latch 33 is formed so that when the user presses the button 3, the insertion of the open/close lid side latch 21 is released, and due to the urging force caused by the urging member 114, the open/close lid 2 is opened.

[0105] The shape of the button side latch 33 can be any shape as long as the button side latch 33 latches the open/close lid 2 in the closed state and the link between the button side latch 33 and the open/close lid side latch 21 is released when the user presses the button 3. The shape is not limited to a hole as illustrated above, and may be a claw to where the open/close side latch 21 links, for example.

[Effects of Embodiments]

[0106] The main effects obtained from the above embodiment is described.

(Handle)

[0107] According to the present embodiment, in the upper container main body 11 of the household thin paper storing container 1, the handle 119 is provided, and the latch 1191 is provided in the handle 119. Therefore, the user is able to easily release the link between the upper container main body 11 and the lower container main body 12 by hooking the finger in the space a between the front surface of the upper container main body 11 and the handle 119. With this, the storage space S can be exposed.

[0108] Specifically, a plurality of latches 1191 are provided in each position separated to the left and right from the center portion in the left-right direction on the inner surface of the handle 119. Therefore, when the finger is inserted near the center of the handle 119, the latch 1191 does not interfere, and the link between the upper container main body 11 and the lower container main body 12 can be easily released. With this, the storage space S can be easily exposed.

[0109] Two latches 1191 are formed on the inner surface of the handle 119, and the interval between the two latches 1191 is to be wider than the finger width. Therefore, when the upper container main body 11 is rotated, the finger easily enters between the two latches 1191 and the upper container main body 11 is easily rotated. With this, the storage space S can be easily exposed.

[0110] The length of the engaging protrusion 123 in the left-right direction is longer than the length obtained by adding the length of the two latches 1191 in the left-right direction and the distance between the two latches 1191. The two latches 1191 are engaged to the one engaging protrusion 123. Therefore, the strength is enhanced than providing the engaging protrusion 123 separately for each latch 1191. With this, a more stable link with the latch 1191 can be achieved.

[0111] The container main body 10 includes the upper container main body 11 and the lower container main body 12 and the above are connected by a connector 13 at the rear surface. Therefore, while placing the household thin paper storing container 1 on the placing surface, the storage space S can be exposed by rotating the upper container main body 11 with the rear edge as the fulcrum and the household thin paper P can be refilled.

[0112] Therefore, when the household thin paper P is refilled, the container remains to be placed on the placing surface and the operation of refilling can be easily performed.

[0113] When the upper container main body 11 is engaged with the lower container main body 12, the handle 119 overlaps with the engaging projection 123 provided in the lower container main body 12 in a front-rear direction. With this, the engaging protrusion 123 cannot be viewed from the front, and this makes the look good.

[0114] The inner circumference side of the handle 119 is formed to be a curved surface by R processing. Compared to when the inner circumference side is a sharp angle, the handle 119 can be spread to the outer side easily, and the link between the latch 1191 and the engaging protrusion 123 can be easily released. With this, the storage space S can be easily exposed.

[0115] The upper container main body 11, the lower container main body 12, and the connector 13 are formed as one by an injection molding method (two-color molding). Therefore, the method is excellent from the view point of efficiency of manufacturing the household thin paper storing container 1.

(Take Out Hole)

[0116] The next household thin paper P pulled out from the take out hole 113a is held in the take out hole 113a

in a state with one end pulled out in a suitable length. Therefore, the household thin paper P held in the take out hole 113a does not interfere when the open/close lid 2 is closed.

[0117] Since the household thin paper P held in the take out hole 113a is not pinched by the open/close lid 2, trouble such as the wet household thin paper P (wet wipes, etc.) being pinched by the open/close lid 2 and extending outside of the container main body 10, and then drying does not occur.

[0118] According to the household thin paper storing container 1 provided with the take out hole 113a, the household thin paper P can be suitably pulled out and used. Following the household thin paper P that is pulled out and used, one end of the household thin paper P pulled out next can be held in the take out hole 113a without interfering with the closing of the open/close lid 2.

[0119] Then, since the household thin paper P with a suitable length pulled out is held in the take out hole 113a, the household thin paper P stored in the storage space S can be suitably pulled out and used repeatedly.

[0120] Only the width of the slit extending in the X-direction among the three slits of the take out hole 113a is wider compared to the width of the other slits. Therefore, the location where the one end of the household thin paper P held in the take out hole 113a is supported by the two projecting pieces 113c other than the one in the closer side is dispersed. With this, the one end of the household thin paper P can be supported more stably in the take out hole 113a.

[0121] The other two slits extending to the closer side have widths that are relatively narrow. Therefore, it is possible to prevent one end entering the slit when the household thin paper P is taken out.

(Button, etc.)

[0122] According to the household thin paper storing container 1 of the present embodiment, the button 3 is attached to the main body side fitter 1161 surrounded by the button movable portion 1162 projecting downward. With this, when the user presses the upper surface 31 of the button 3 from above when the open/close lid 2 is closed, regardless of the pressed position, the button movable portion 1162 is lowered downward and the button 3 sinks downward.

[0123] Here, since the open/close lid side latch 21 of the open/close lid 2 is inserted in the button side latch 33 of the button 3, when the button 3 sinks downward, the open/close lid 2 is also pushed downward. However, the open/close lid 2 is urged upward by the urging member 114, and such urging force becomes stronger as the open/close lid 2 sinks more downward.

[0124] Therefore, when the button 3 is pressed to a certain degree, the open/close lid 2 also sinks, and the urging force that urges the open/close lid 2 upward becomes stronger. The open/close lid 2 and the button 3 are engaged only by the open/close lid side latch 21 and the button side latch 33. Therefore, if the urging force to the open/close lid 2 becomes strong, the link is released and the open/close lid 2 is opened.

[0125] Therefore, according to the present embodiment, the open/close lid 2 can be easily opened by pressing any portion of the upper surface of the button 3.

[0126] The upper container main body 11 includes the button attaching portion 116 including the main body side fitter 1161. Therefore, the button 3 can be fixed easily and stably.

[0127] In the button 3, the inclination angle of the front end 31a of the upper surface 31 is formed to be larger than the inclination angle of the base end 31b. Therefore, it is difficult to insert the finger in the space b between the button 3 and the upper container main body 11. Consequently, when the household thin paper P is refilled, it is possible to prevent mistakenly holding the button 3 instead of the handle 119 and trying to rotate it.

(Urging Member)

[0128] According to the household thin paper storing container 1 of the present embodiment, the open/close lid 2 can be urged in the opening direction by only providing the urging member 114 formed by the elastic material in the upper container main body 11.

[0129] On the other hand, for example, if a spring shaped urging member is provided standing upward, and this is connected to the open/close lid 2, the bending and extending are repeated each time the open/close lid 2 is opened and closed. As a result, such spring portion easily deteriorates, and the urging force to the open/close lid 2 tends to weaken quickly. When the urging force to the open/close lid 2 weakens to a certain degree, it is not possible to open the open/close lid 2 by only one movement.

[0130] According to the present embodiment, the urging member 114 formed of the elastic material is pressed by the open/close lid 2 and the urging force to the open/close lid 2 is generated. Therefore, the deformed amount of the portion formed of the elastic material is small and hardly deteriorates. Therefore, it becomes difficult for the urging force on the open/close lid 2 to weaken.

[0131] Since the storing concave portion 115 is provided in the concave portion 112, it is possible to prevent the pressure on the portion of the urging member 114 in contact with the concave portion 112 to become too large. Therefore, it is possible to reduce the possibility that the urging member 114 breaks.

[0132] The urging member 114 is formed on the rear side of the container main body 10, close to the fulcrum of the rotation of the open/close lid 2. Therefore, the urging force on the open/close lid 2 is strengthened and it becomes easy to open.

(Close of Container)

[0133] When the storage space S is closed, the inner edge 118 of the upper container main body 11 is fitted in the concave groove 121 of the lower container main body 12. Therefore, even if pressure is applied to the household thin paper storing container 1 in the X-direction and the Y-direction, the storage space S is not easily exposed, the close of the storage space S is maintained, and the sealing is good.

[0134] When the storage space S is closed, the inner edge 118 of the upper container main body 11 hits the first guide 1212a and the second guide 1212b provided in the lower container main body 12, and is guided to the concave groove 121. Therefore, the storage space S can be closed more reliably.

[0135] Since the height of the two first guides 1212a are higher than the height of the second guides 1212b in the Z-direction, when the storage space S is closed, even if the upper container main body 11 is slightly twisted with relation to the lower container main body 12, the higher first guide 1212a functions as a guide and makes a correction. Therefore, the storage space S can be closed more reliably.

[0136] Further, the two first guides 1212a are provided in both of the left and right ends of the rear surface by extending the left surface and the right surface. With this, the above-described effect is further enhanced.

[0137] The second guide 1212b is provided in a wave form. Therefore, compared to providing the second guide 1212b throughout the entire left-right direction, the resistance due to contact can be decreased. Consequently, the open/close movement can be performed more smoothly.

(Other Configurations)

[0138] The slipping preventer 122 is provided on the upper surface of the lower container main body 12. When the household thin paper P is taken out from the take out hole 113a, it is difficult for the household thin paper P in the storage S to move and it is less likely to collapse. Therefore, the household thin paper P can be stably taken out.

[0139] A portion forming the slipping preventer 122 comes into contact with the placing surface and functions as the placing portion 1221. Therefore, when the household thin paper storing container 1 is placed on the placing surface, the stability is enhanced.

[0140] When the open/close lid 2 is closed, the open/close lid side sealing ring 22 comes into contact with the outer circumference of the take out portion 113. Therefore, the sealing properties of the storage space S can be enhanced.

[Modification]

[0141] The modification of the above embodiment is described below.

(Handle)

[0142] The handle 119 may be formed as one with another portion of the upper container main body 11, or may be a separate portion attached later.

(Engaging Protrusion)

[0143] The engaging protrusion 123 does not have to be one and two may be provided so as to correspond to each of the two latches 1191.

(Guide)

[0144] The guide may only include the first guide 1212a or may only include the second guide 1212b.

[0145] The first guide 1212a does not have to be provided by extending the left surface or the right surface.

[0146] The second guide 1212b does not have to be a wave shape and may be provided with the same height throughout the left-right direction.

(Button)

[0147] The button 3 is to be provided in the upper container main body 11 to be able to move up and down by the button movable portion 1162. The button 3 does not have to be attached by the button attaching portion 116. For example, the button movable portion 1162A can be made of the elastic material and be provided throughout the entire lower side of the button 3. Then, the button 3 can be directly attached to the button movable portion 1162A by adhesion, etc.

(Connector)

[0148] The connector 13 described above is described to be formed only in one position near the center of the household thin paper storing container 1 in the left-right direction. However, the configuration of the connector 13 is not limited to the above.

[0149] For example, the connector may be the connectors 13A, 13A formed in the left and right of the household thin paper storing container 1A. In this case, when the storage space SA is exposed, it becomes difficult for the connector 13A to twist and the stability is enhanced. Moreover, the motion to close the storage space SA again becomes easy to perform.

[0150] Alternatively, a connector 13B which covers the entire rear surface side of the household thin paper storing container 1B can be used. In this case, when the storage space S is closed, the entire rear surface side of the portion in contact between the upper container main body 11 and the lower container main body 12 of the household thin paper storing container 1B is covered. Therefore, the sealing properties of the storage space S

can be further enhanced.

[0151] In addition, the configuration of the details of the household thin paper storing container 1 may be suitably changed without leaving the scope of the present invention.

Industrial Applicability

[0152] The present invention can be used in a household thin paper storing container in which the household thin paper inside can be easily refilled.

Reference Signs List

[0153]

1	household thin paper storing container
10	container main body
11	upper container main body
111	top surface
112	concave portion
113	take out portion
113a	take out hole
113b	bulging portion
113c	projecting piece
114	urging member
115	storing concave portion
116	button attaching portion
1161	main body side fitter
1162	button movable portion
117	outer edge
118	inner edge
119	handle
1191	latch
12	lower container main body
121	concave groove
1211	outer peripheral wall
1212	inner peripheral wall
1212a	first guide
1212b	second guide
122	slipping preventer
1221	placing portion
123	engaging protrusion
13	connector
2	open/close lid
21	open/close lid side latch
22	open/close lid side sealing ring
23	insertion portion
3	button
31	upper surface
31a	front end
31b	base end
32	button side fitter
33	button side latch
a, b	space
P	household thin paper
S	storage space

Claims

1. A household thin paper storing container comprising:
a container main body that includes a storage space in which household thin paper is stored inside,

wherein, the container main body includes,

an upper container main body that forms an upper portion of the container main body, a lower container main body that forms a lower portion of the container main body, and a connector which connects a rear surface of the upper container main body with a rear surface of the lower container main body,

the upper container main body is rotated with the connector as a fulcrum and the storage space of the lower container main body is closed or exposed,
the upper container main body includes a handle that projects from a front surface and in which a space is provided between the front surface, and a plurality of latches that are provided in positions of an inner surface of the handle separated to the left and the right from the center portion in a left-right direction,
the lower container main body includes an engaging protrusion projecting in a front direction from the front surface, and
when the storage space is closed, the plurality of latches and the engaging protrusion are engaged to maintain a closed state.

2. The household thin paper storing container according to claim 1, wherein, the handle overlaps with the engaging protrusion in a front-rear direction when the storage space is closed.

3. The household thin paper storing container according to claim 1 or 2, wherein, a length of the engaging protrusion in a left-right direction is longer than the length of the plurality of latches in the left-right direction added to the interval between the latches and the plurality of latches are engaged to the one engaging protrusion.

4. The household thin paper storing container according to any one of claims 1 to 3, wherein, the upper container main body includes a shape projecting in an arch shape from the front surface in a bottom view.

5. The household thin paper storing container according to claim 4, wherein the handle is provided as one with other portions composing the upper container main body.

6. The household thin paper storing container accord-

ing to any one of claims 1 to 5, wherein the upper container main body, the lower container main body, and the connector are provided as one.

FIG. 1

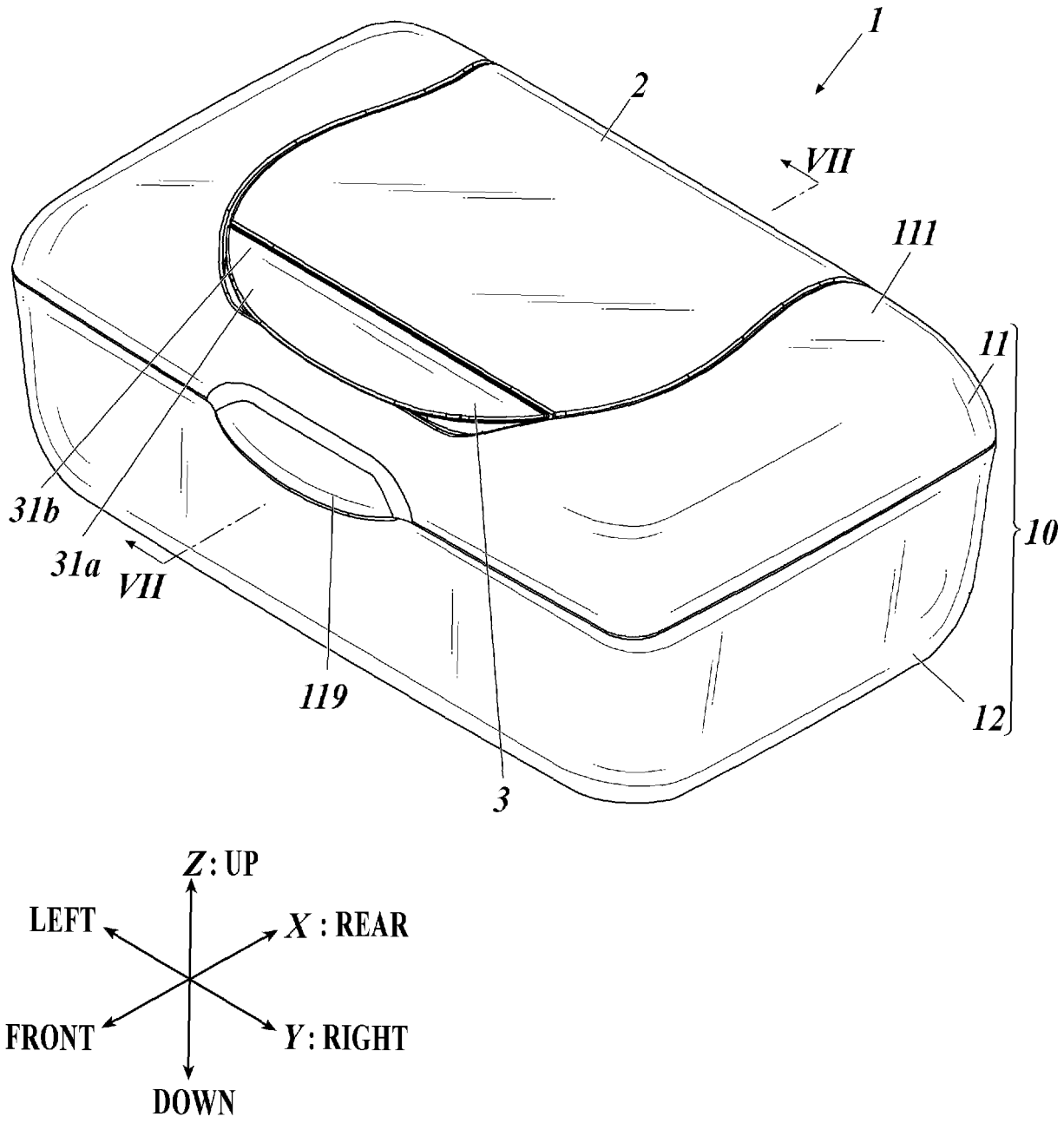

1
2
VII
111
11
10
31b
31a
VII
119
3
12
Z : UP
LEFT
X : REAR
FRONT
Y : RIGHT
DOWN

FIG. 2

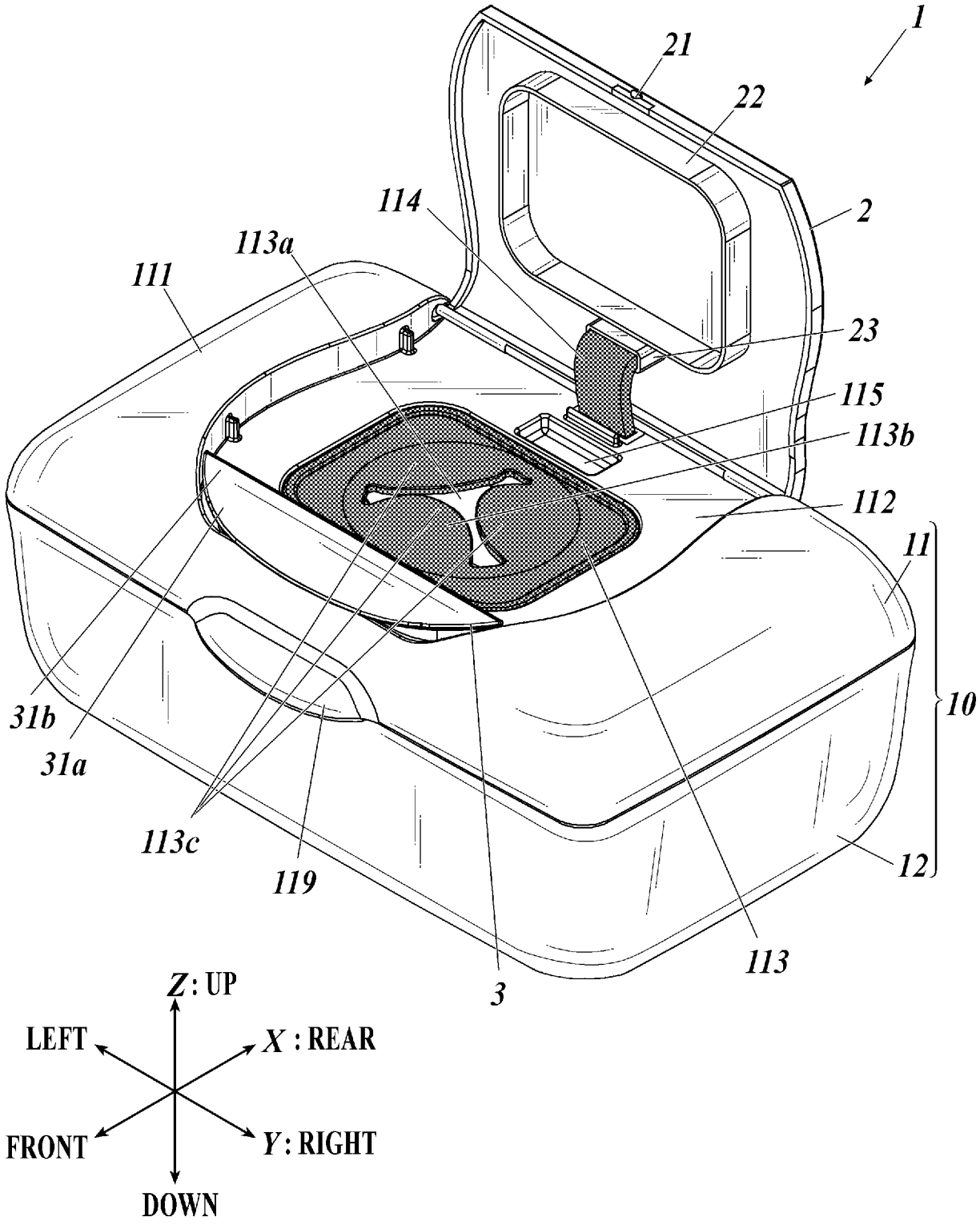

1
21
22
2
114
113a
111
23
115
113b
112
11
10
31b
31a
113c
119
12
113
3
Z : UP
LEFT
X : REAR
FRONT
Y : RIGHT
DOWN

FIG. 3

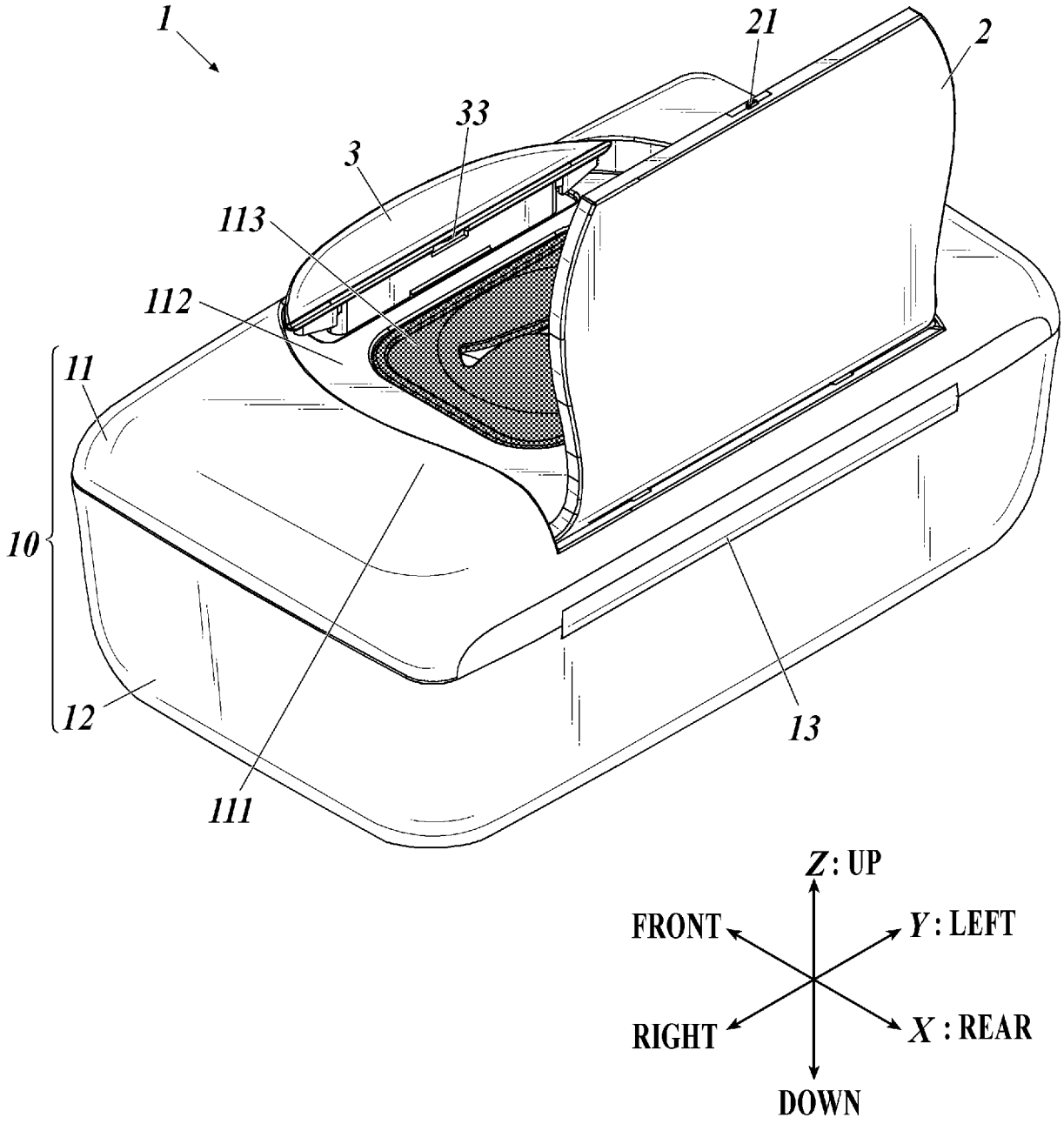

1
21
2
33
3
113
112
11
10
12
111
13
Z : UP
FRONT
Y : LEFT
RIGHT
X : REAR
DOWN

FIG. 4

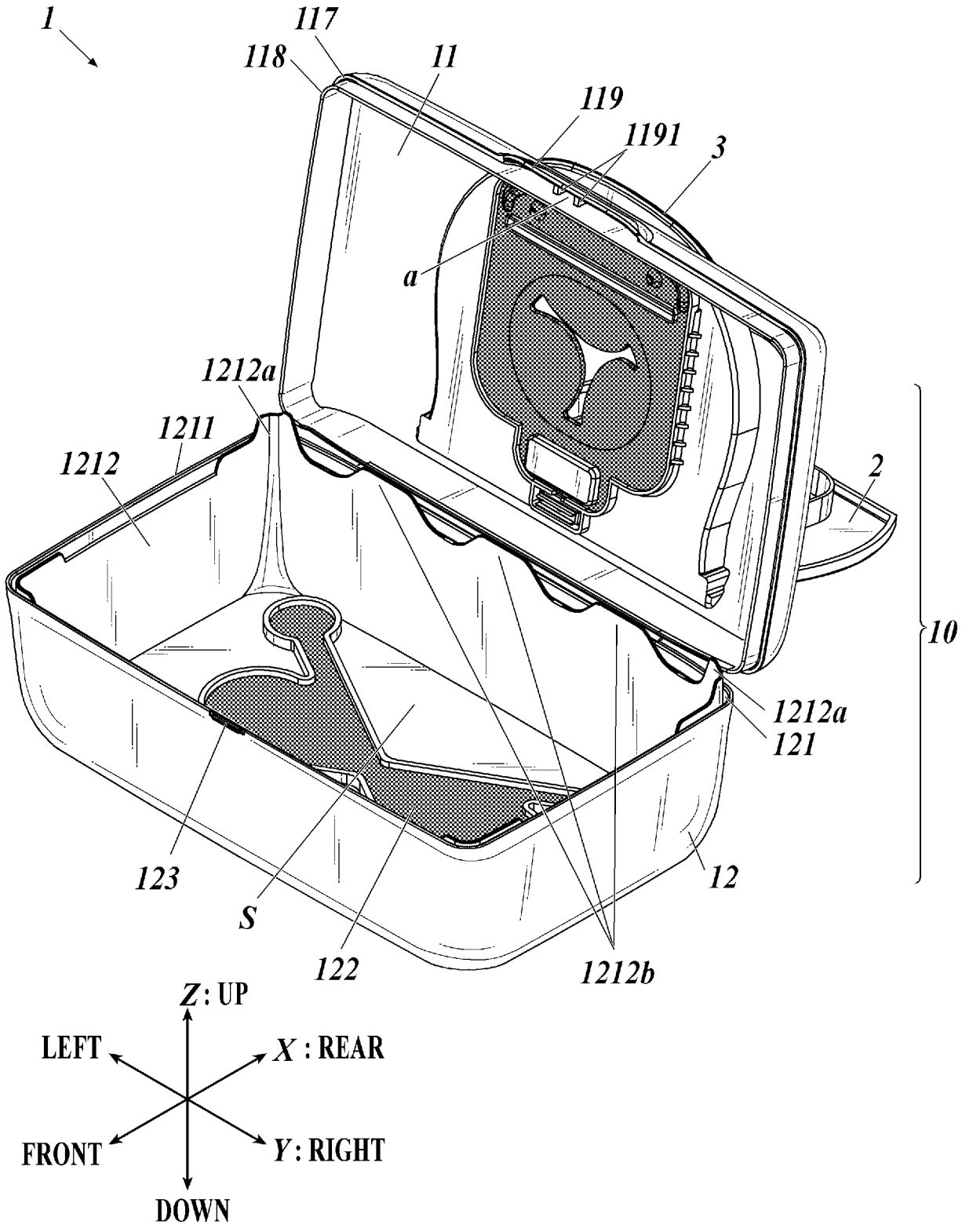

1
117
118
11
119
1191
3
a
1212a
1211
1212
2
10
1212a
121
123
S
122
12
1212b
Z : UP
LEFT
X : REAR
FRONT
Y : RIGHT
DOWN

FIG. 5

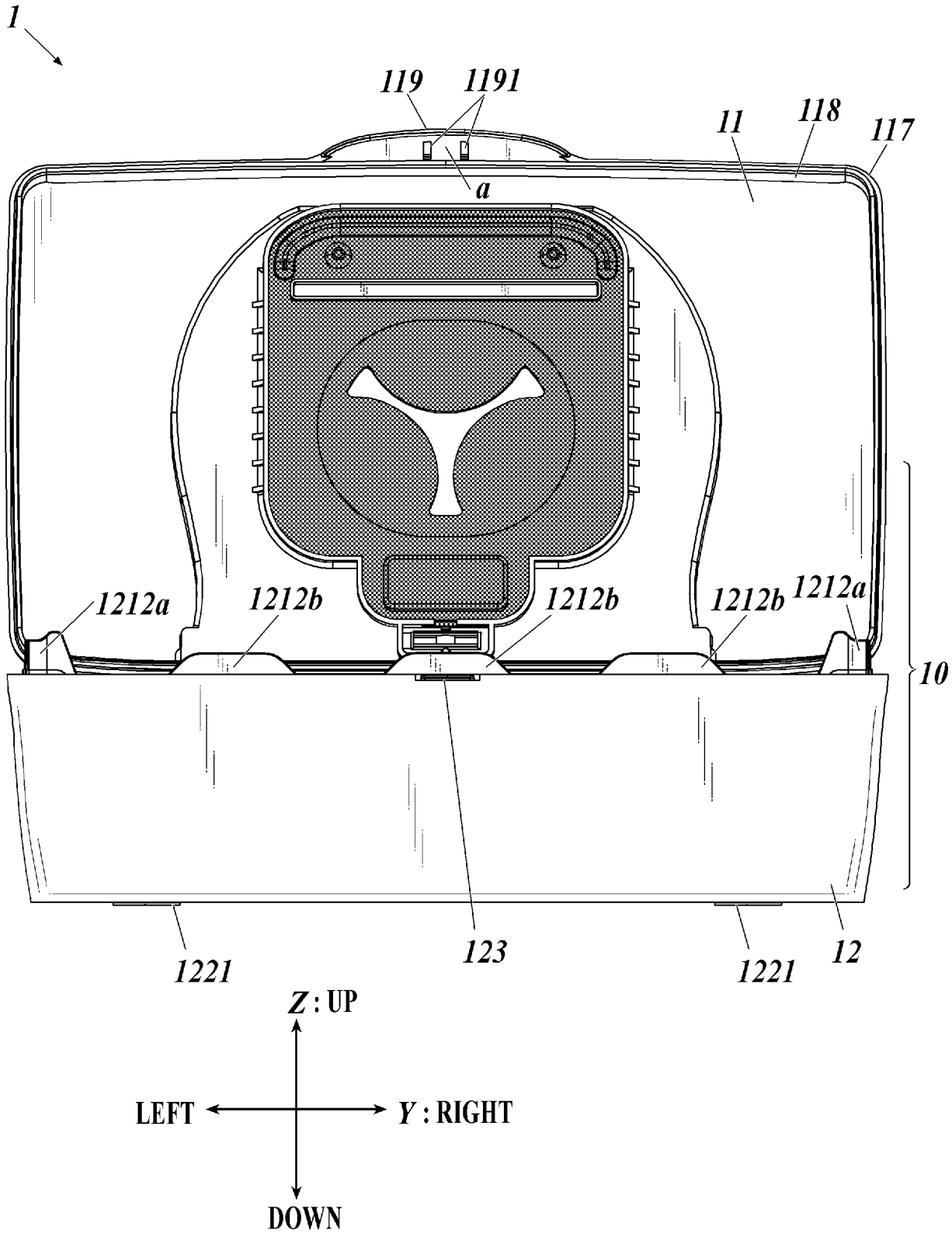
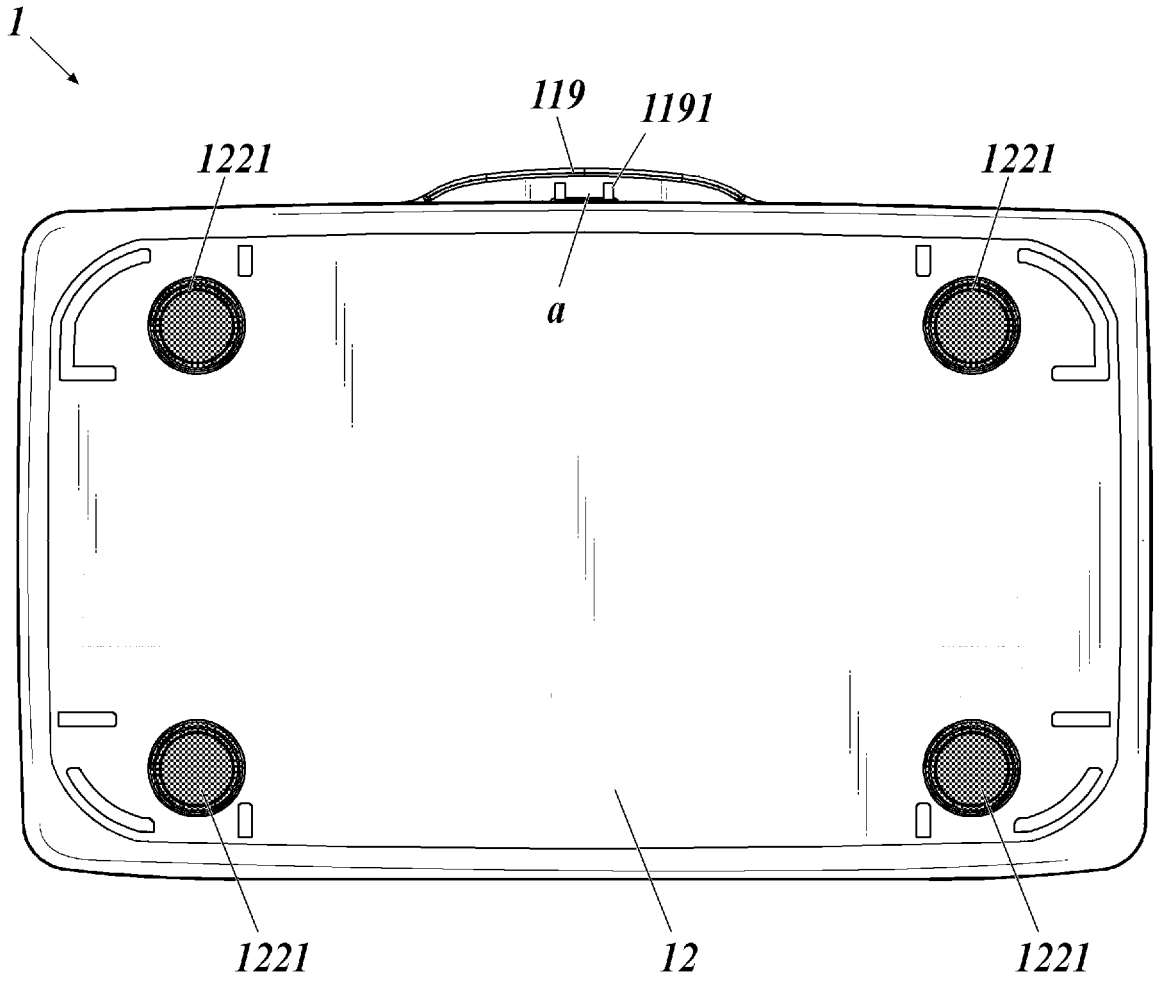

1
119
1191
11
118
117
a
1212a
1212b
1212b
1212b
1212a
10
1221
123
1221
12
Z : UP
LEFT
Y : RIGHT
DOWN

FIG. 6



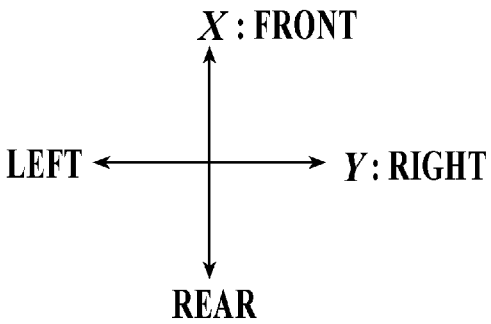


FIG. 7

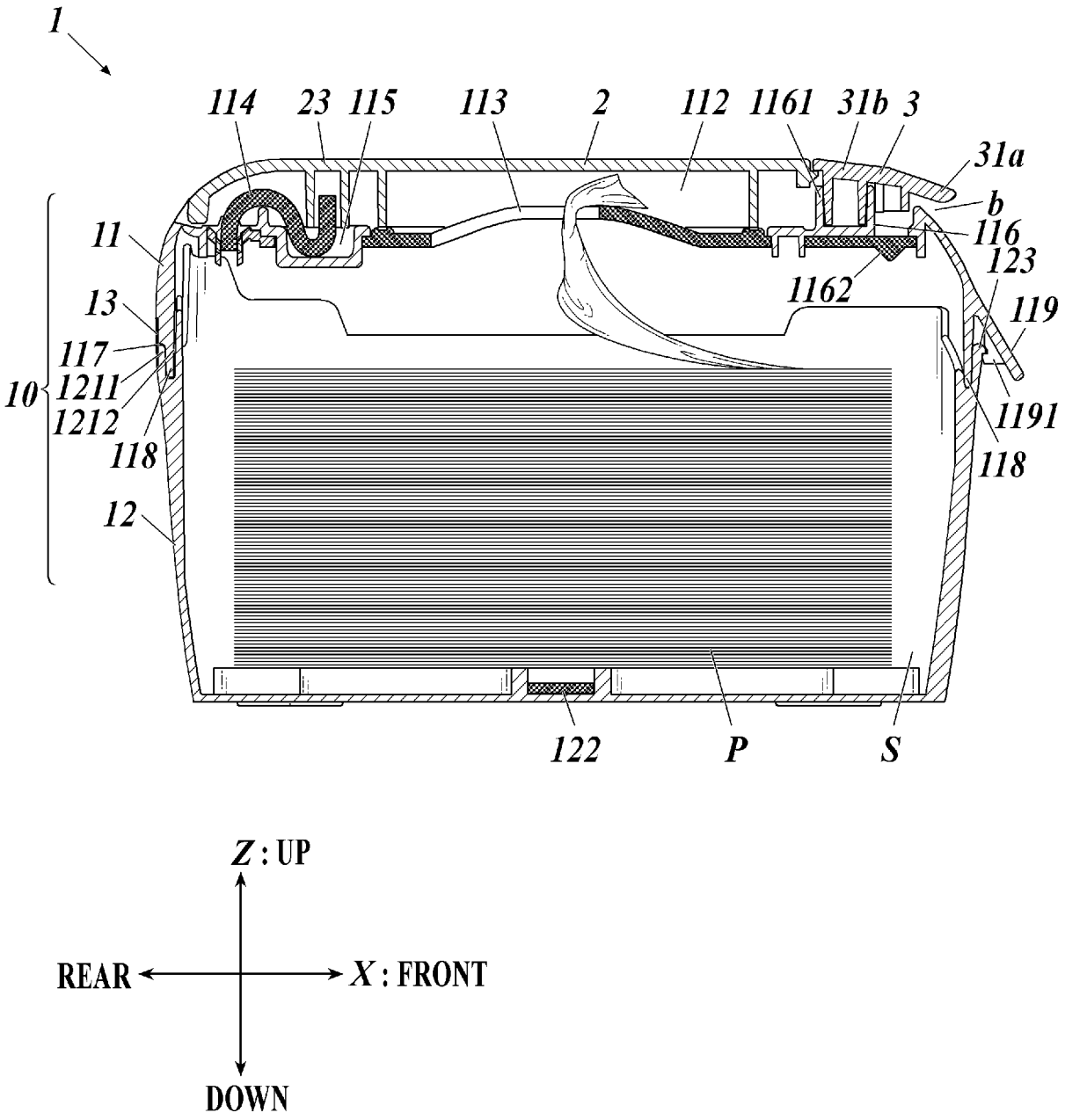
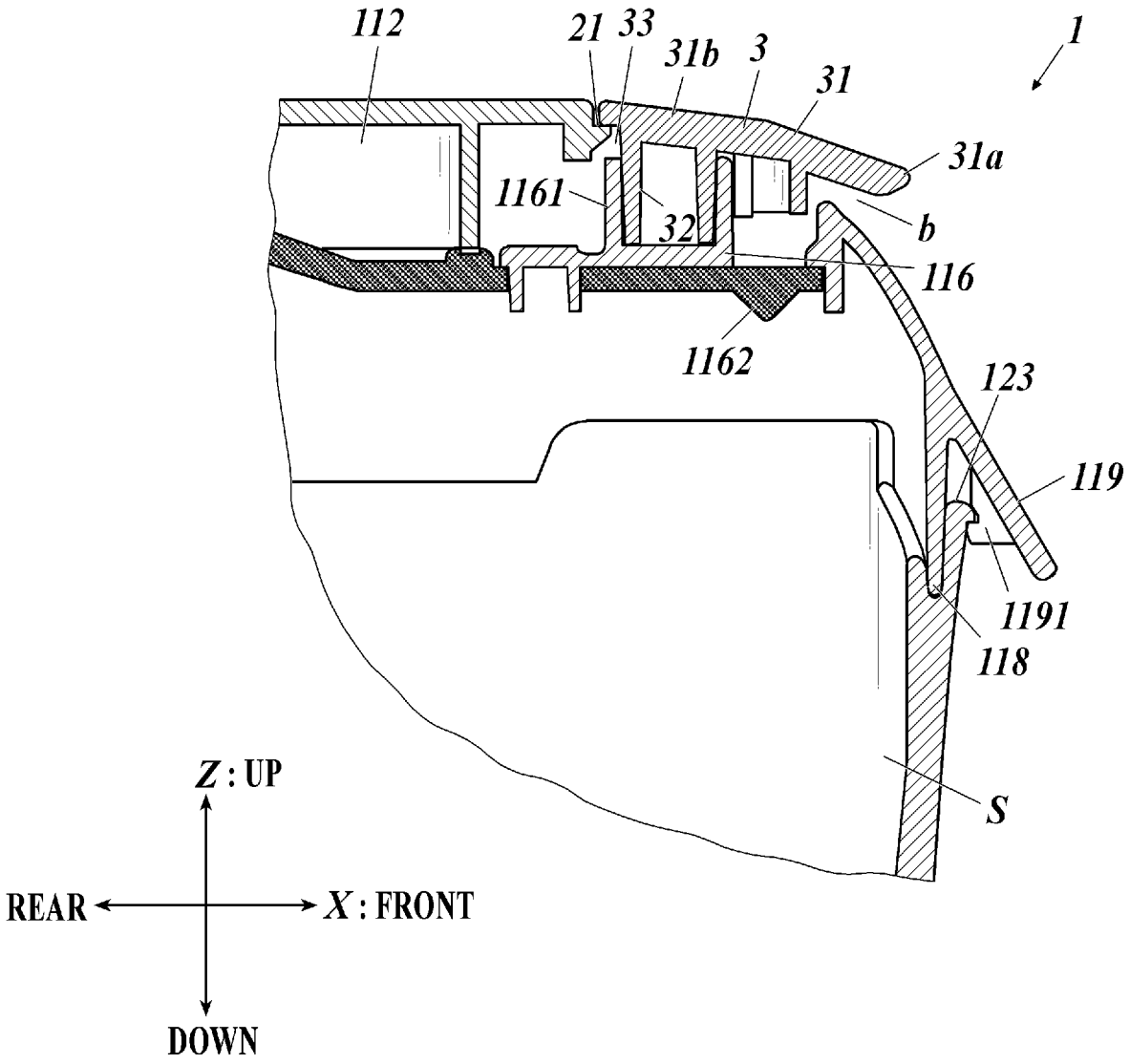

1
114
23
115
113
2
112
1161
31b
3
31a
b
116
123
119
1162
11
13
117
10
1211
1212
118
12
1191
118
122
P
S
Z : UP
REAR
X : FRONT
DOWN

FIG. 8


112
21
33
31b
3
31
1
31a
1161
32
b
116
1162
123
119
1191
118
S
Z : UP
REAR
X : FRONT
DOWN

INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2020/020653

A. CLASSIFICATION OF SUBJECT MATTER
Int.Cl. B65D83/08(2006.01)i, B65D43/16(2006.01)i, A47K10/20(2006.01)i, A47K10/42(2006.01)i, A47K7/00(2006.01)i
FI: B65D83/08A, B65D43/16300, A47K7/00H, A47K10/20A, A47K10/42B
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, A47K10/20, A47K10/42, A47K7/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2020
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 2010-76822 A (DAIO PAPER CORPORATION) 08.04.2010 (2010-04-08), paragraphs [0023], [0034], [0037], [0039], fig. 7	1-6
Y	JP 2014-134327 A (TOSHIBA CORPORATION) 24.07.2014 (2014-07-24), paragraph [0012], fig. 7, 8	1-6
Y	JP 3110102 U (MITSUWA KOGYO KK) 16.06.2005 (2005-06-16), paragraph [0017], fig. 2	1-6
Y	JP 2010-1046 A (TOPPAN PRINTING CO., LTD.) 07.01.2010 (2010-01-07), fig. 2	4-6
Y	JP 2016-69028 A (DAIO PAPER CORPORATION) 09.05.2016 (2016-05-09), fig. 4	4-6

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

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
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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
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
03.07.2020	21.07.2020
Name and mailing address of the ISA/ Japan Patent Office 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer Telephone No.

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