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(54) **WIPE DISPENSER**

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(57) **ABSTRACT**

(21) Appl. No.: **14/898,389**

Disclosed is a wipe dispenser having a bag-shaped wipe accommodation body in which a wipe stacked body is accommodated and a holding frame body used to hold the wipe accommodation body in an upright position. The wipe accommodation body is formed into a substantially cuboid shape, has a wipe taking-out hole, which is used to take out a sheet of wipe separated from the wipe stacked body, at a front surface thereof, and has a cover body used to open and close the wipe taking-out hole. The holding frame body has a seat plate on which a bottom surface of the wipe accommodation body is placed and a back plate vertically arranged on the seat plate, and the wipe accommodation body is fixed to at least one of the seat plate and the back plate.

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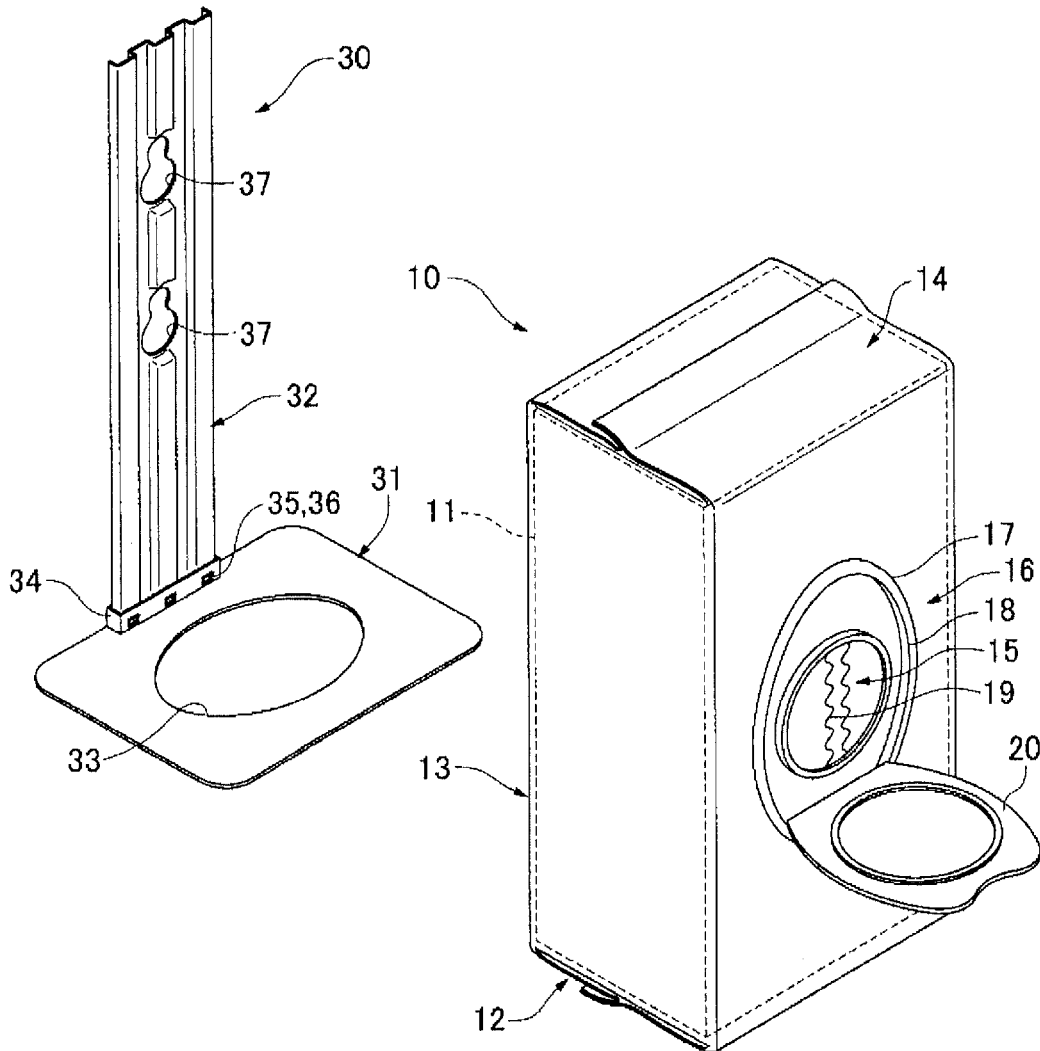


FIG. 1

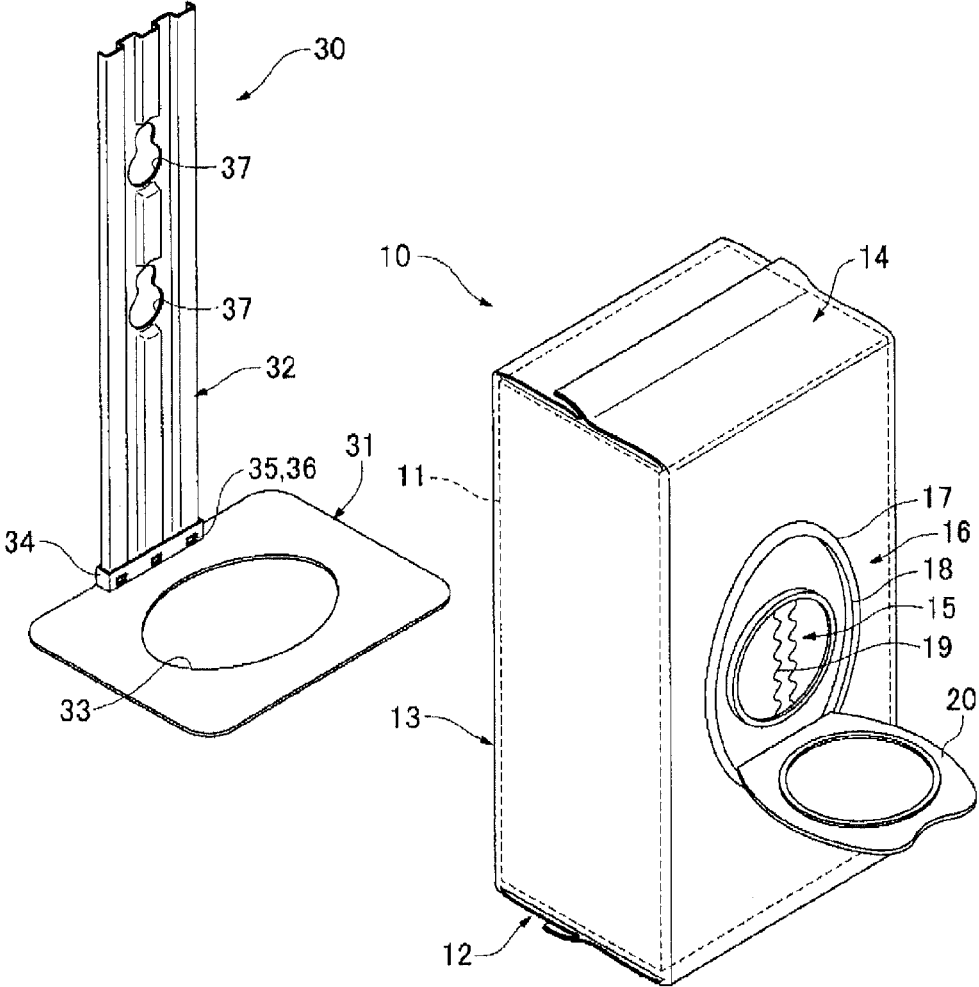


FIG. 2

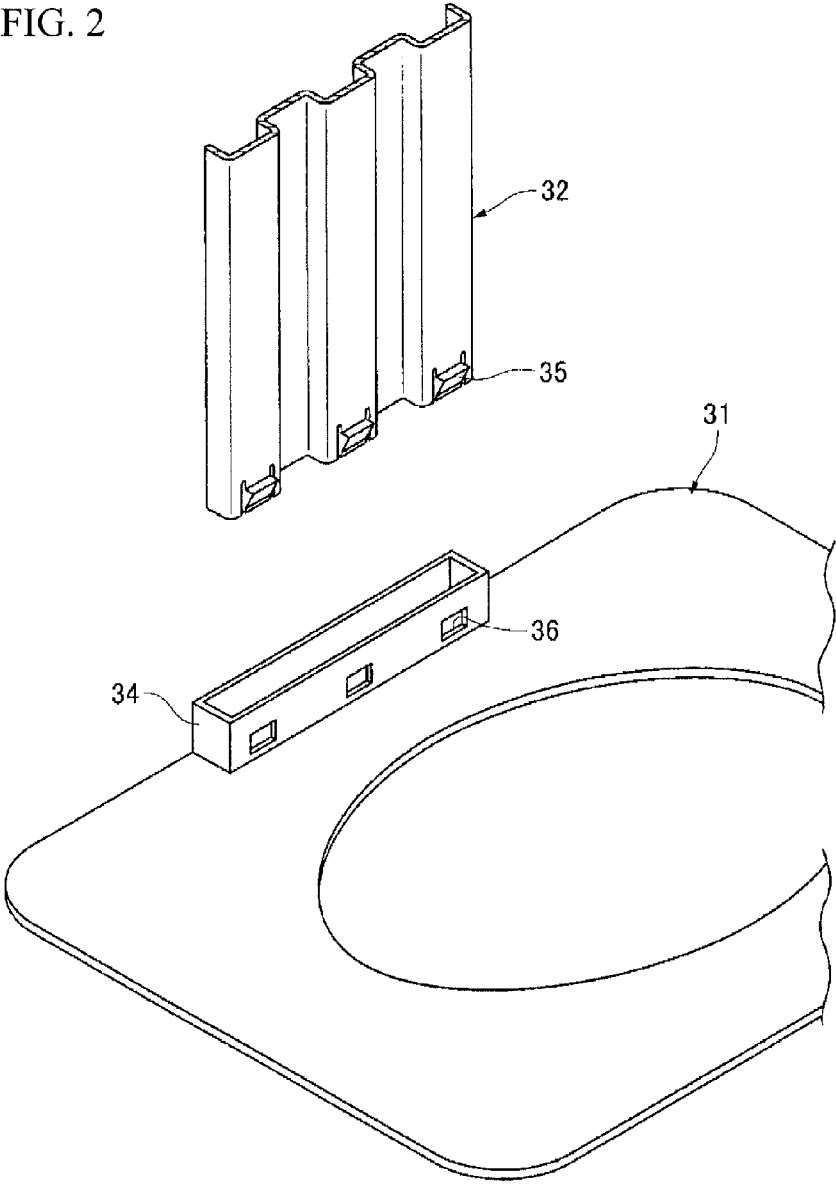


FIG. 3

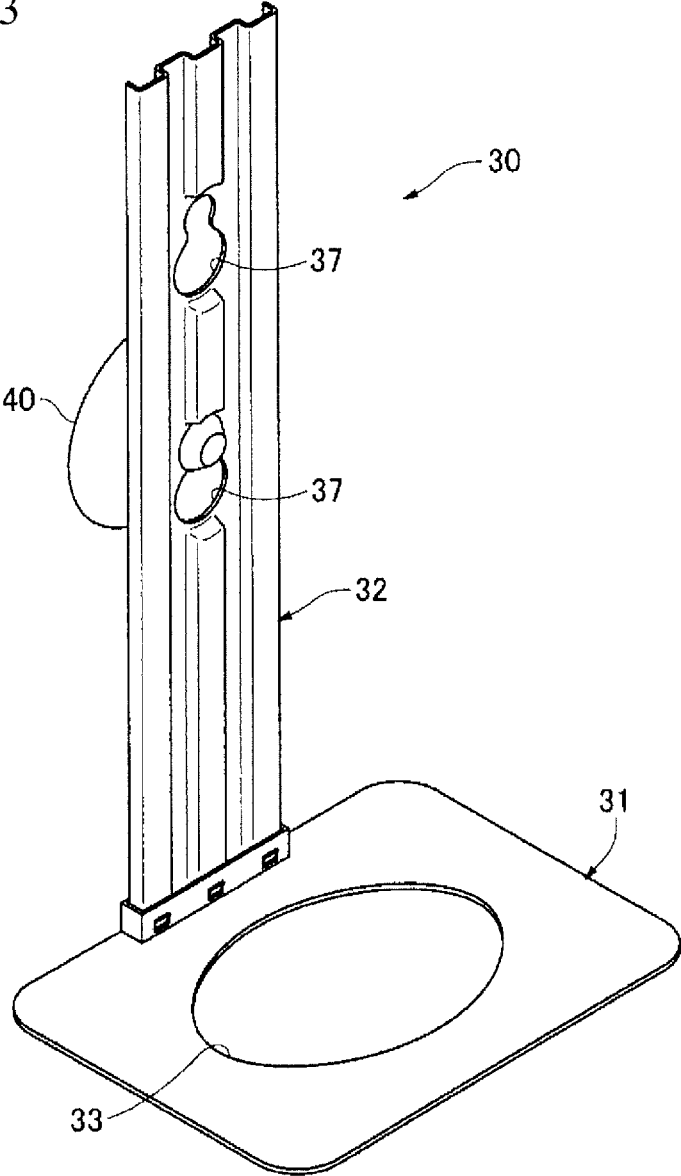


FIG. 5

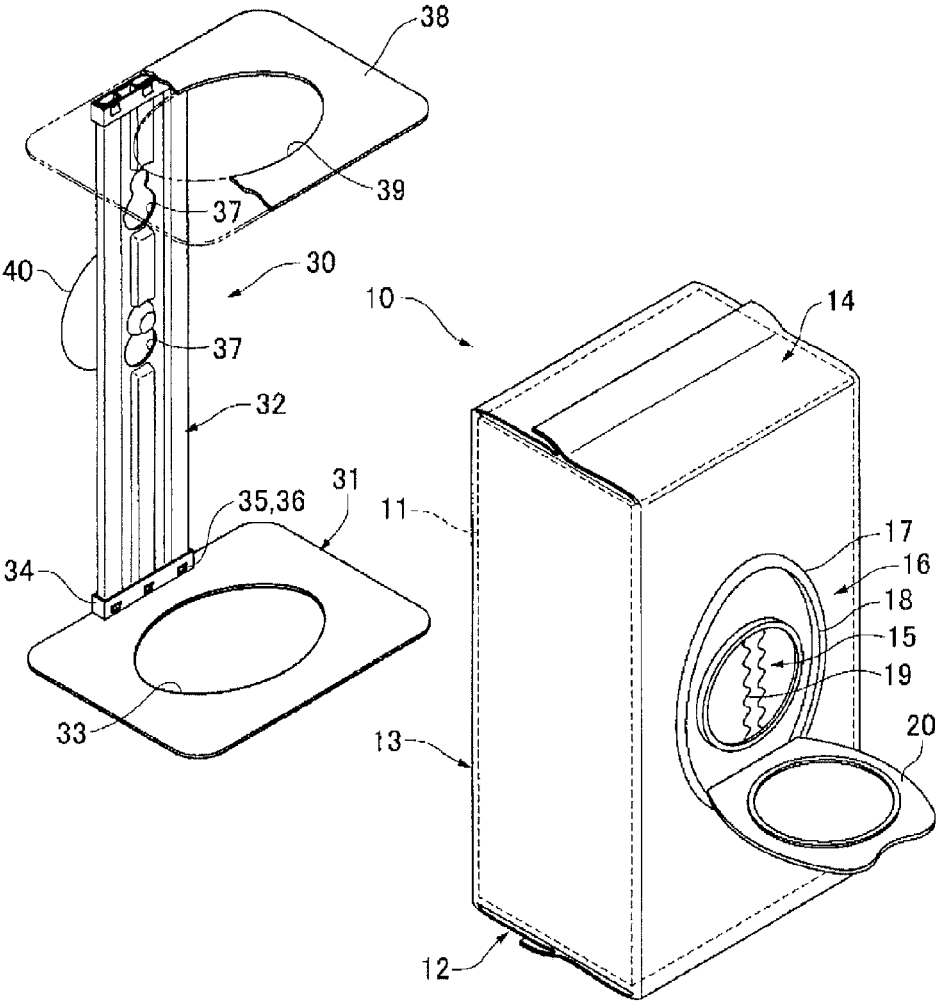


FIG. 6

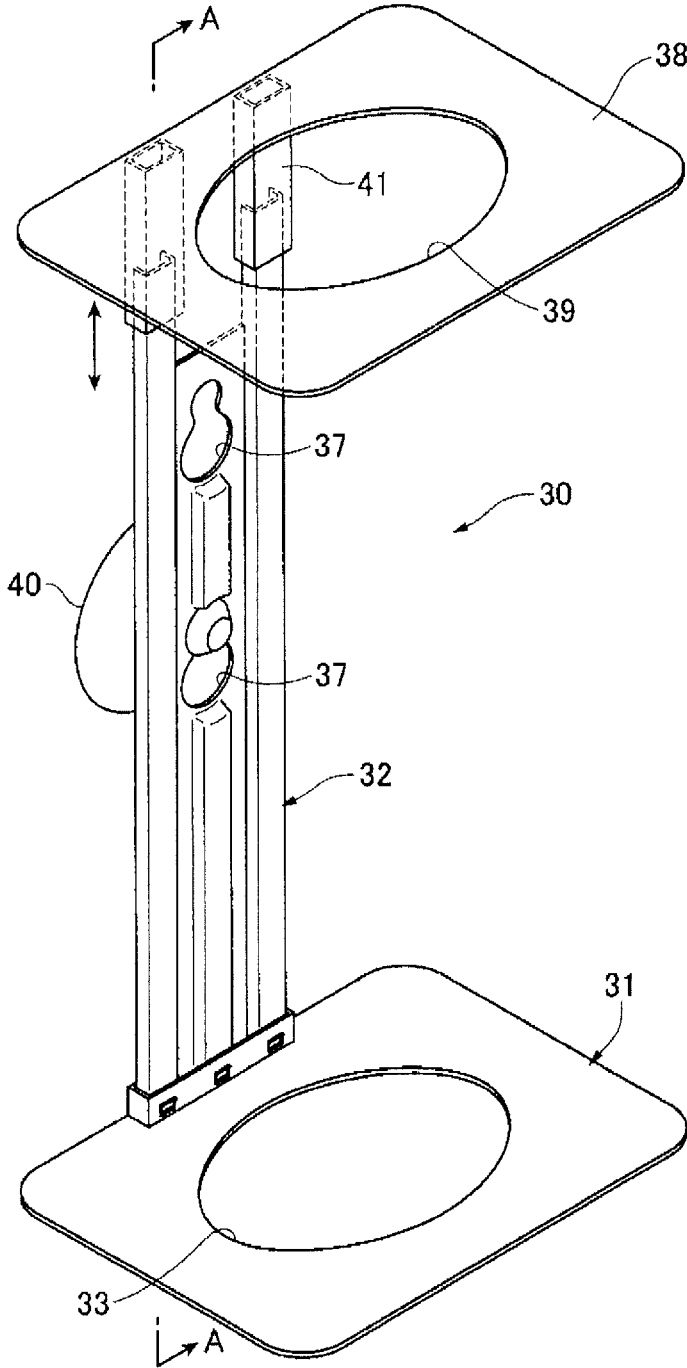


FIG. 7

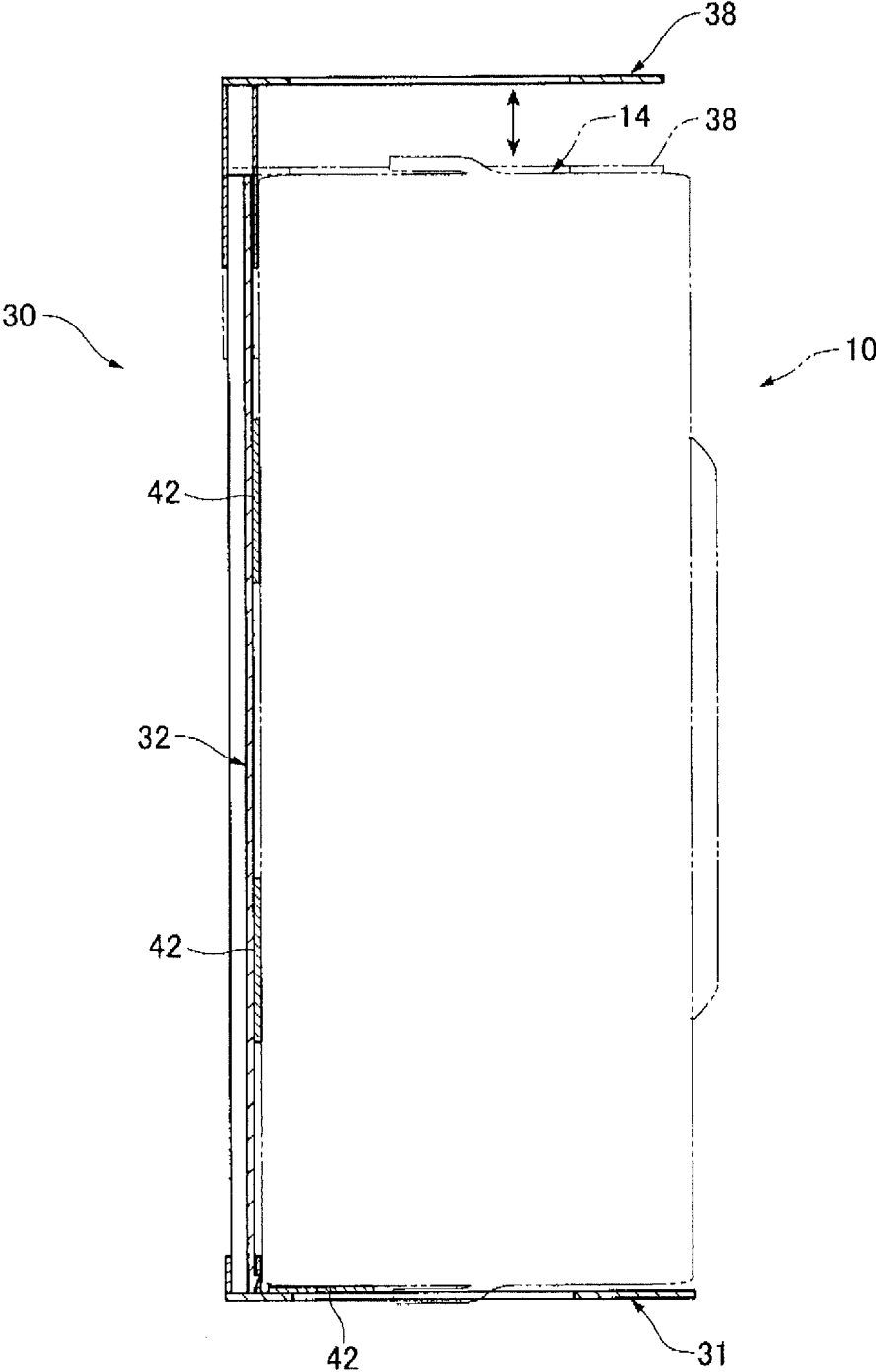


FIG. 8

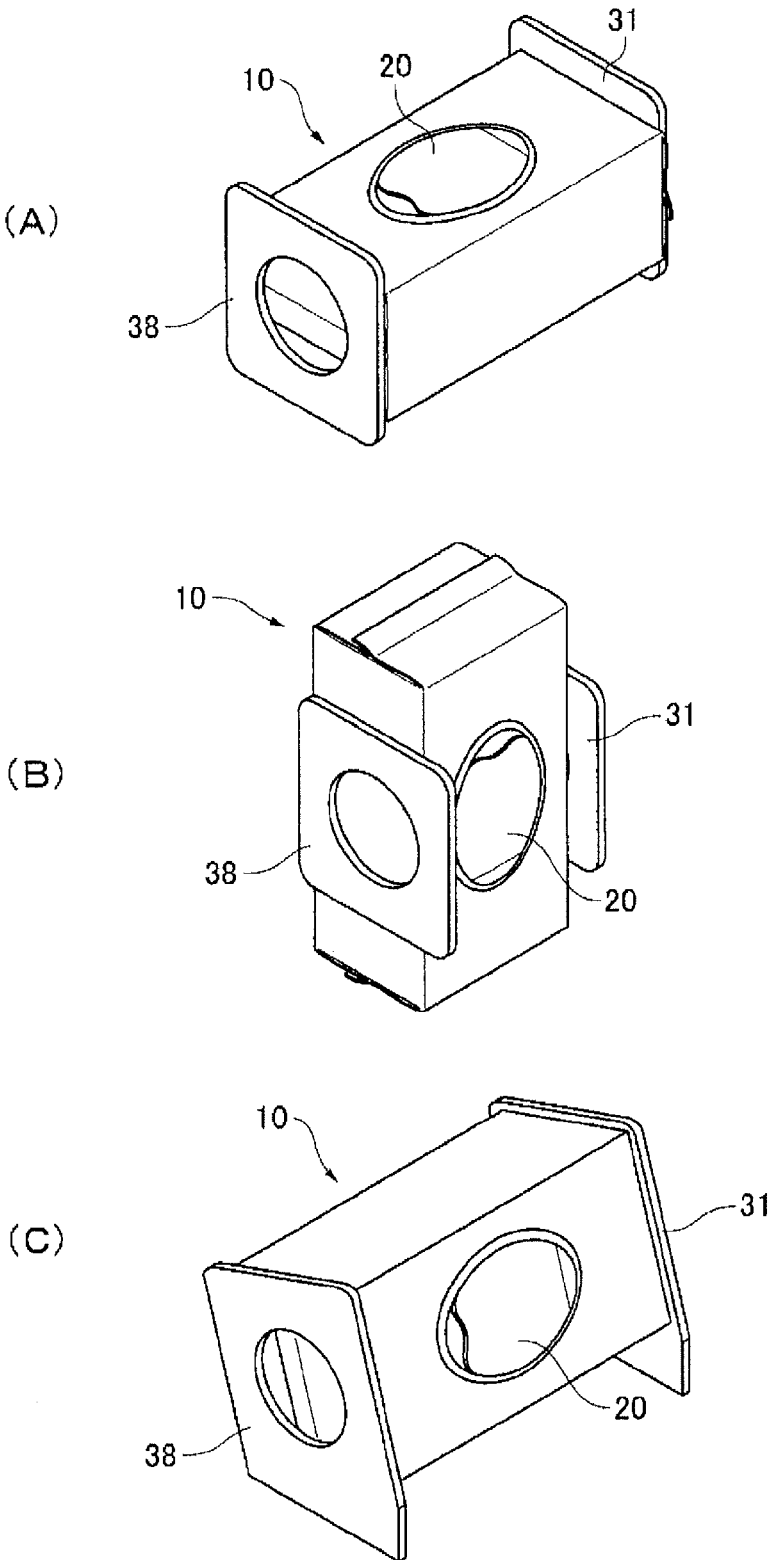
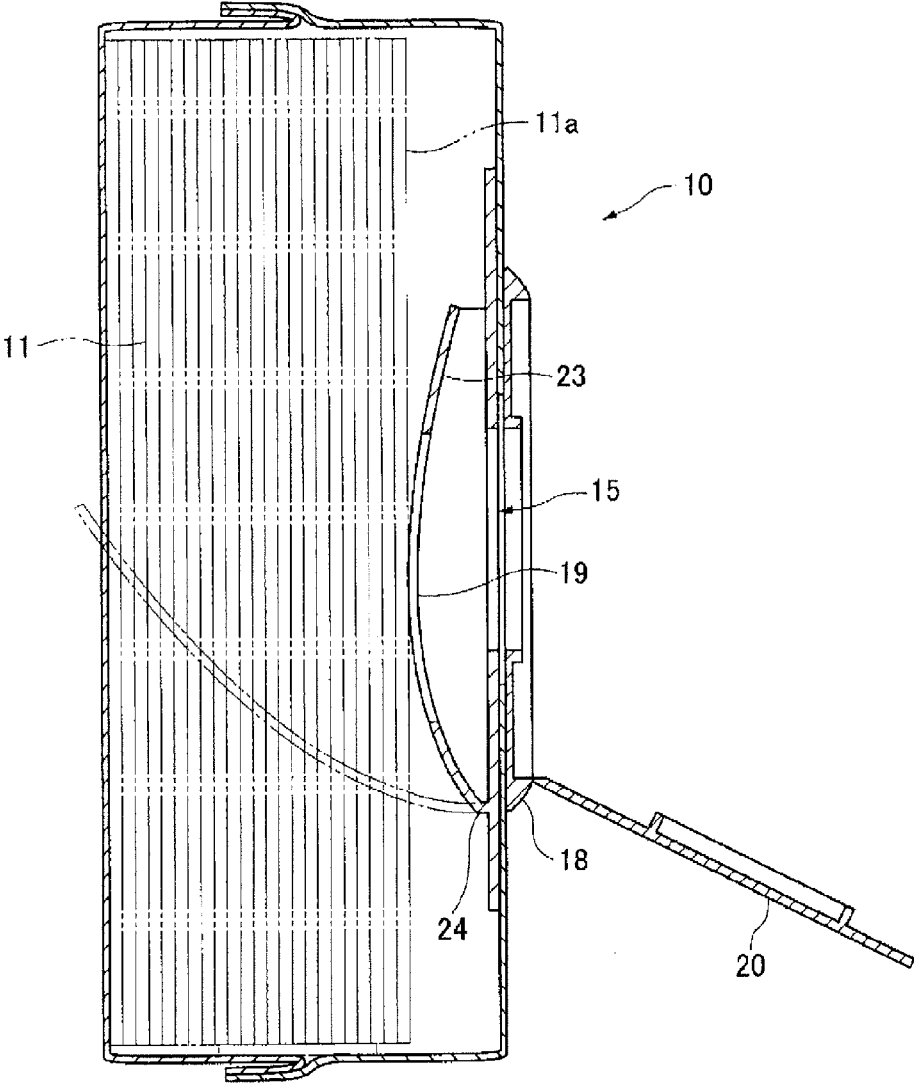


FIG. 9



WIPE DISPENSER

TECHNICAL FIELD

[0001] The present invention relates to a wipe dispenser. Note that a “wipe” in the present invention represents a wiping material and particularly indicates a flexible fibrous sheet impregnated with chemical composition and having the function of wiping off unnecessary matter from the front surface of a solid object. Examples of the wipe include a wet wipe, a body wash, a makeup remover, and a toilet seat cleaner.

BACKGROUND ART

[0002] Wiping products such as wet wipes and wet sheets in which fibrous sheets are impregnated with moisture, alcohol, or other chemical agents have been used for various purposes including bed bath and cleaning. There are some types of wipe dispensers in which such wipes impregnated with liquid are accommodated. As such, a so-called bottle-type wipe dispenser in which a train of long wipes connected to each other via perforations is accommodated in a cylindrical plastic bottle and a so-called bag-type wipe dispenser in which a wipe stacked body having a multiplicity of stacked wipes is accommodated in a bag made of a plastic film have been known (for example, PTL 1 and 2).

CITATION LIST

Patent Literature

[0003] [PTL 1] Japanese Patent Application Laid-open No. 2010-116200

[0004] [PTL 2] Japanese Patent Application Laid-open No. H9-156676

SUMMARY OF INVENTION

Technical Problem

[0005] In using a bottle-type wipe dispenser, when a tip wipe connected to the following wipe is pulled out from a bottle, only the uppermost wipe is separated at a perforation by resistance applied to the wipe and taken out as a sheet of wipe. However, such a bottle-type wipe dispenser requires a considerable amount of force to pull out wipes one by one. In addition, it is required to firmly hold the bottle with both hands when the wipes are pulled out. Because of this, elderly persons have difficulty handling a bottle-type wipe dispenser.

[0006] On the other hand, since a bag-type wipe dispenser, in which separate wipes are stacked and accommodated in a bag body made of a plastic film, is disposed laterally on a desktop in use, the dispenser is not only unfavorable aesthetically but also incapable of responding to the demands of a number of users who prefer vertical wipe dispensers.

[0007] An object of the present invention is to provide a wipe dispenser in which a so-called bag-type wipe accommodation body can be stably vertically arranged in use and that can remarkably broaden its using mode such that the wipe dispenser is hooked on a wall or a column other than being placed on a desktop.

Solution to Problem

[0008] In order to achieve the above object, the present invention provides a wipe dispenser having a bag-shaped wipe accommodation body in which a wipe stacked body is

accommodated and a holding frame body used to hold the wipe accommodation body in an upright position, wherein the wipe accommodation body is formed into a substantially cuboid shape, has a wipe taking-out hole, which is used to take out a sheet of wipe separated from the wipe stacked body, at a front surface thereof, and has a cover body used to open and close the wipe taking-out hole, the holding frame body has a seat plate on which a bottom surface of the wipe accommodation body is placed and a back plate vertically arranged on the seat plate, and the wipe accommodation body is fixed to at least one of the seat plate and the back plate.

[0009] Note that the back plate may have a suction cup attachment hole used to attach a suction cup to the back plate such that an adsorption surface of the suction cup is directed to a backside of the back plate and a sandwiching plate, which is brought into contact with the wipe accommodation body so as to sandwich the wipe accommodation body between the sandwiching plate and the seat plate, may be provided at an end of the back plate on a side opposite to a side where the seat plate is provided.

[0010] Further, the seat plate may have a hole or a dent helpful to fix the bottom surface of the wipe accommodation body, and the sandwiching plate may be slidable in a direction in which an interval between the sandwiching plate and the seat plate changes. In addition, the seat plate and the back plate may be separately formed, the seat plate may have a back plate reception frame in which an end of the back plate is fitted, and a disengagement prevention mechanism may be provided to restrict disengagement of the end of the back plate, which is fitted in the back plate reception frame, from the back plate reception frame.

[0011] Moreover, in one of the preferred modes of the present invention, the wipe accommodation body has an orifice used to apply resistance to the wipe taken out from the wipe accommodation body, an urging force is applied from a side of the wipe taking-out hole to an orifice member having the orifice in a direction in which the orifice member is pressed against a front surface of the wipe stacked body, and the orifice member is pressed against the front surface of the wipe stacked body by the urging force in accordance with reduction in bulk of the wipe stacked body as the wipe is pulled out via the taking-out hole.

BRIEF DESCRIPTION OF DRAWING

[0012] FIG. 1 is a perspective view separately showing the wipe accommodation body and the holding frame body of a wipe dispenser according to a first embodiment of the present invention.

[0013] FIG. 2 is a partially-exploded perspective view of the holding frame body according to the first embodiment of the present invention.

[0014] FIG. 3 is an external perspective view showing a state in which a suction cup is attached to the holding frame body according to the first embodiment of the present invention.

[0015] FIG. 4 is an external perspective view showing the use state of the wipe dispenser according to the first embodiment of the present invention.

[0016] FIG. 5 is a perspective view separately showing the wipe accommodation body and the holding frame body of the wipe dispenser according to a second embodiment of the present invention.

[0017] FIG. 6 is an external perspective view of the holding frame body according to a third embodiment of the present invention.

[0018] FIG. 7 is a cross-sectional view of the configuration of the wipe dispenser according to the third embodiment of the present invention.

[0019] FIG. 8 is a set of cross-sectional configuration views showing other modes of the present invention.

[0020] FIG. 9 is a cross-sectional view of the configuration of the wipe accommodation body according to a fourth embodiment of the present invention.

DESCRIPTION OF EMBODIMENTS

[0021] A description will be given of the embodiments of the present invention with reference to the drawings.

[0022] FIGS. 1 to 4 show a wipe dispenser according to a first embodiment of the present invention.

[0023] As shown in FIG. 1, the wipe dispenser is constituted by a bag-shaped wipe accommodation body 10 in which a wipe stacked body 11 is accommodated and a holding frame body 30 used to hold the wipe accommodation body 10 in its upright position. The holding frame body 30 has a seat plate 31 on which a bottom surface 12 of the wipe accommodation body 10 is placed and a back plate 32 vertically arranged on the seat plate 31 so as to be along a back surface 13 of the wipe accommodation body 10. In the figure, symbol 14 denotes the upper surface of the wipe accommodation body 10.

[0024] The wipe accommodation body 10 is formed into a substantially cuboid shape and has a wipe taking-out hole 15, which is used to take out a sheet of wipe separated from the wipe stacked body 11, at the central position of a front surface 16 of the wipe accommodation body 10. Note that the front surface 16 can be defined as a surface having the wipe taking-out hole 15 among four surfaces other than the bottom surface 12 and the upper surface 14 of the wipe accommodation body 10.

[0025] The wipe accommodation body 10 is formed into a bag shape made of a flexible plastic film having airtightness and air-tightly sealed by heat sealing at its portions other than an opening portion 17 of the front surface 16. The wipe accommodation body 10 may have a single-layer structure or a multi-layer structure.

[0026] At the opening portion 17 of the wipe accommodation body 10, a taking-out hole member 18 made of a plastic material having rigidity is closely adhered. Further, the wipe taking-out hole 15 is formed inside the taking-out hole member 18, and an orifice 19 used to apply resistance to a wipe pulled out from the wipe accommodation body 10 is arranged inside the wipe taking-out hole 15. Note that the orifice 19 may have any mode in the present invention.

[0027] The taking-out hole member 18 has a freely opening/closing cover body 20 that freely opens/closes the wipe taking-out hole 15 from an outside. When the cover body 20 is closed, the inside of the wipe accommodation body 10 is almost blocked from outside air to prevent the wipe stacked body 11 from being dried.

[0028] The wipe stacked body 11 accommodated inside the wipe accommodation body 10 is formed in such a way that a plurality of wipes is successively folded and overlapped with each other. Alternatively, the wipe stacked body 11 may be one in which separate sheet wipes are folded based on a so-called Z-folding mode and adjacent wipes are overlapped with each other at their ends.

[0029] The material of a wipe is base cloth impregnated with chemical composition, the base cloth being molded using a paper, woven cloth, or non-woven cloth made of, for example, synthetic fibers or natural fibers. Examples of the chemical composition include alcohols, water, and their mixtures, but the chemical composition may be blended with a perfume, an antibacterial agent, a deodorizing agent, a surfactant, an antiseptic, a pigment, a defoaming agent, an antioxidant, a clarifier, or a solubilizing agent. Further, base cloth or chemical composition made of other materials may be used.

[0030] When the uppermost wipe of the wipe stacked body 11 is pulled, the wipe following the uppermost wipe also moves since the adjacent wipes are overlapped with each other. Then, when passing through the orifice 19, only the uppermost wipe is separated from the following wipe due to resistance applied to the uppermost wipe and taken out as a sheet of wipe.

[0031] Note that the wipe accommodation body 10 of the present invention may be a so-called refillable type in which the wipe stacked body 11 can be refilled when being entirely consumed or may be a so-called fixed type in which the wipe stacked body 11 cannot be refilled.

[0032] The seat plate 31 of the holding frame body 30 is formed into a plate shape by, for example, a plastic material having rigidity. The seat plate 31 has a hole 33 helpful to fix the bottom surface 12 of the wipe accommodation body 10. The hole may be replaced by a dent. It is possible to fix the wipe accommodation body 10 to the seat plate 31 in such a way that the bottom surface 12 of the wipe accommodation body 10 is slightly crushed and partially pressed into the hole 33 of the seat plate 31. However, the bottom surface 12 of the wipe accommodation body 10 may be firmly fixed to the seat plate 31 by an adhesive. Alternatively, the wipe accommodation body 10 can be firmly fixed to the seat plate 31 by an adhesive tape placed on the upper surface of the seat plate 31.

[0033] In the holding frame body 30 of this embodiment, the seat plate 31 and the back plate 32 are separately formed. Further, as shown in FIG. 2 in an enlarged view, a back plate reception frame 34, in which the lower end of the back plate 32 is fitted, is provided on the seat plate 31, and disengagement prevention mechanisms 35 and 36 that restrict the disengagement of the lower end of the back plate 32, which is fitted in the back plate reception frame 34, from the back plate reception frame 34 are provided on the sides of the back plate 32 and the back plate reception frame 34, respectively.

[0034] The disengagement prevention mechanisms 35 and 36 of this embodiment include projections 35 formed to laterally project from the lower end of the back plate 32 and engagement holes 36 formed on the side of the back plate reception frame 34 such that the projections 35 are fitted in the engagement holes 36. The side of the projections 35 is formed to elastically deform when passing through the back plate reception frame 34 at its assembling, and the projections 35 are fitted in the engagement holes 36 after the side of the projections 35 passes through the back plate reception frame 34.

[0035] Note that the disengagement prevention mechanisms 35 and 36 may include other mechanisms. In addition, the material of the back plate 32 may include a wave type as its cross-sectional shape is exemplified in FIG. 2 or may include any type such as a flat plate. Moreover, the seat plate 31 and the back plate 32 may be integrally formed by a plastic material.

[0036] As shown in FIG. 1, suction cup attachment holes 37 used to attach a suction cup are formed at the substantially central portion and the portion above the central portion of the back plate 32. FIG. 3 shows a state in which a suction cup 40 is attached to one of the suction cup attachment holes 37. The adsorption surface of the suction cup 40 is directed to the back side of the back plate 32 when the suction cup 40 is attached to one of the suction cup attachment holes 37, and the holding frame body 30 can be fixed to a wall or a column positioned at its back via the suction cup 40.

[0037] Note that only one of the suction cup attachment holes 37 may be provided. However, when the plurality of suction cup attachment holes 37 is provided as in this embodiment, one of the plurality of suction cup attachment holes 37 can be selected according to user's convenience and used in a preferable state. In addition, when the suction cup 40 is attached to each of the two suction cup attachment holes 37 and fixed to a wall by adsorption, the wipe accommodation body 10 can be used in its extremely stable state.

[0038] FIG. 4 shows a use state in which the wipe accommodation body 10 is attached to the holding frame body 30. In this state, the wipe accommodation body 10 is fixed to at least one of the seat plate 31 and the back plate 32. The wipe accommodation body 10 and the back plate 32 may be fixed to each other by bonding, a double-sided adhesive tape, or other means. FIG. 7 shows a state in which the wipe accommodation body 10 is fixed to the back plate 32 of the holding frame body 30 by an adhesive tape.

[0039] As a result, while being fixed to the holding frame body 30 in its vertical direction, the bag-shaped wipe accommodation body 10 that is extremely unstable in its upright position by nature can be stably used in the upright position, for example, when the seat plate 31 is placed on a desktop surface. Further, the wipe accommodation body 10 can be fixed to any wall surface or column by the suction cup 40. The wipe dispenser of this embodiment that can be vertically arranged in use as described above can widely respond to user demands.

[0040] Note that FIG. 4 shows a state in which the back surface 13 of the wipe accommodation body 10 is arranged along the back plate 32 of the holding frame body 30. However, the wipe accommodation body 10 may be fixed to the holding frame body 30 in a state in which one of side surfaces 21 of the wipe accommodation body 10 is arranged along the back plate 32 of the holding frame body 30. Even in this arrangement, the wipe accommodation body 10 can be vertically arranged in use. The same applies to the following embodiments.

[0041] FIG. 5 shows a wipe dispenser according to a second embodiment of the present invention. In this embodiment, a sandwiching plate 38 brought into contact with the upper surface 14 of the wipe accommodation body 10 from above is provided at the upper end of the back plate 32. The joining structure between the back plate 32 and the sandwiching plate 38 may be the same as that between the back plate 32 and the seat plate 31, but the back plate 32 and the sandwiching plate 38 may be joined together by other means. The other configurations are the same as those of the first embodiment.

[0042] When being pressed from above with the sandwiching plate 38, the wipe accommodation body 10 is more stabilized in its vertical posture and can be stably used in its vertical arrangement regardless of where the wipe accommodation body 10 is used. The sandwiching plate 38 can be made of the same material as that of the seat plate 31. A hole 39

similar to the hole 33 of the seat plate 31 is formed at the central portion of the sandwiching plate 38, and it is possible to face the upper surface 14 of the wipe accommodation body 10 from above via the hole 39.

[0043] FIG. 6 shows the holding frame body 30 according to a third embodiment of the present invention, and the sandwiching plate 38 is provided to be slidable in the vertical direction along the back plate 32. In order to realize this, a slide engagement member 41 that slidably engages with the vicinity of the upper end of the back plate 32 is integrally connected to the sandwiching plate 38 in this embodiment. The slide engagement member 41 may be any type such as a conventional rail so long as it slidably engages with the back plate 32.

[0044] As described above, the sandwiching plate 38 is configured to be slidable in the vertical direction. Therefore, as schematically shown in FIG. 7, the wipe accommodation body 10 can be more stabilized in the vertical posture when the sandwiching plate 38 is reliably pressed against the upper surface 14 of the wipe accommodation body 10. Besides, a plurality of types of wipe accommodation bodies 10 different in height can be stably held by the same holding frame body 30 in their vertical direction.

[0045] Note that the sliding direction of the sandwiching plate 38 is not limited to the vertical direction. When the back plate 32 is horizontally arranged in use as will be described below, the sandwiching plate 38 slides in a horizontal direction. Provided that the sandwiching plate 38 is slidable in a direction in which the interval between the sandwiching plate 38 and the seat plate 31 changes, the same function and effect as the above can be obtained.

[0046] Note that the holding frame body 30 shown in FIG. 5 or 6 can be placed on, for example, a table with the back plate 32 turned sideways. In this case, the sandwiching plate 38 and the seat plate 31 contact the table at their sides adjacent to their sides contacting the back plate. It is also possible to sandwich the wipe accommodation body 10 between the sandwiching plate 38 and the seat plate 31 with the longitudinal direction of the wipe accommodation body 10 set in the horizontal direction. In this case, the cover body 20 of the wipe accommodation body 10 can be directed to a front side in use or can be directed to an upper side in use as shown in FIG. 8A.

[0047] In addition, it is possible to sandwich the side surfaces of the wipe accommodation body 10 between the sandwiching plate 38 and the seat plate 31 with the longitudinal direction of the wipe accommodation body 10 set in the vertical direction as shown in FIG. 8B.

[0048] Moreover, as shown in FIG. 8C, when the sandwiching plate 38 and the seat plate 31 are formed into a pentagonal shape or any shape, the cover body 20 of the wipe accommodation body 10 can be tilted by any angle from a vertical surface.

[0049] FIG. 9 shows the wipe accommodation body 10 according to a fourth embodiment of the present invention. Note that the wipe accommodation body 10 of this embodiment can be employed in each of the above first to the third embodiments. Here, an urging force is applied from the side of the wipe taking-out hole 15 to an orifice member 23 having the orifice 19 and made of plastic in a direction in which the orifice member 23 is pressed against the front surface of the wipe stacked body 11. The orifice member 23 is pressed against the front surface of the wipe stacked body 11 by the

urging force in accordance with reduction in the bulk of the wipe stacked body 11 as a wipe is pulled out via the taking-out hole 15.

[0050] The orifice member 23 is integrally formed with the taking-out hole member 18 and supported by the taking-out hole member 18 in its cantilevered state. Further, the urging force of the orifice member 23 is generated by the elasticity of the orifice member 23 itself. The urging force moves the orifice member 23 according to a reduction amount of the bulk of the wipe stacked body 11, and the orifice member 23 is continuously pressed against the front surface of the wipe stacked body 11 even if the bulk of the wipe stacked body 11 reduces. Therefore, the wipe stacked body 11 does not deform inside the wipe accommodation body 10.

[0051] In addition, the orifice member 23 is tilted with respect to the pulling-out direction of a wipe in a state in which the bulk of the wipe stacked body 11 reduces. Therefore, strong frictional resistance is applied from the orifice 19 to the wipe passing through the orifice 19, whereby the wipe on the cutting edge can be separated from the wipe stacked body 11 at an appropriate position and reliably taken out.

[0052] Note that in this embodiment, the orifice member 23 may be held in a mode other than the cantilevered state or may be held by a member other than the taking-out hole member 18. In addition, the urging force may be applied by a member other than the orifice member 23.

[0053] Moreover, the present invention is not limited to the above embodiments but includes all the modes of the ideas of the inventions described in the claims.

1. A wipe dispenser having a bag-shaped wipe accommodation body in which a wipe stacked body is accommodated and a holding frame body used to hold the wipe accommodation body in an upright position, wherein

the wipe accommodation body is formed into a substantially cuboid shape, has a wipe taking-out hole, which is used to take out a sheet of wipe separated from the wipe stacked body, at a front surface thereof, and has a cover body used to open and close the wipe taking-out hole, the holding frame body has a seat plate on which a bottom surface of the wipe accommodation body is placed and a back plate vertically arranged on the seat plate, and the wipe accommodation body is fixed to at least one of the seat plate and the back plate.

2. The wipe dispenser according to claim 1, wherein the back plate has a suction cup attachment hole used to attach a suction cup to the back plate such that an adsorption surface of the suction cup is directed to a backside of the back plate.

3. The wipe dispenser according to claim 2, wherein a sandwiching plate, which is brought into contact with the wipe accommodation body so as to sandwich the wipe accommodation body between the sandwiching plate and the seat plate, is provided at an end of the back plate on a side opposite to a side where the seat plate is provided.

4. The wipe dispenser according to claim 3, wherein the seat plate has a hole or a dent helpful to fix the bottom surface of the wipe accommodation body.

5. The wipe dispenser according to claim 4, wherein the sandwiching plate is slidable in a direction in which an interval between the sandwiching plate and the seat plate changes.

6. The wipe dispenser according to claim 1, wherein the seat plate and the back plate are separately formed, the seat plate has a back plate reception frame in which an end of the back plate is fitted, and a disengagement prevention mechanism is provided to restrict disengagement of the end of the back plate, which is fitted in the back plate reception frame, from the back plate reception frame.

7. The wipe dispenser according to claim 1, wherein an orifice used to apply resistance to the wipe taken out from the wipe accommodation body is provided, an urging force is applied from a side of the wipe taking-out hole to an orifice member having the orifice in a direction in which the orifice member is pressed against a front surface of the wipe stacked body, and the orifice member is pressed against the front surface of the wipe stacked body by the urging force in accordance with reduction in bulk of the wipe stacked body as the wipe is pulled out via the taking-out hole.

8. A wipe dispenser comprising:

an accommodation body that stores a wipe stacked body and comprises an opening portion, the wipe stacked body comprising a plurality of wipes that is capable of separating;

an outlet member that comprises an outlet port used to take out a wipe of the wipes pulled out from the opening portion;

a holding frame body that comprises a seat plate and a back plate, at least one of the seat plate and the back plate being capable of fixing the accommodation body; and

a resistance member connected to the outlet member and is capable of biasing the wipe stacked body.

9. The wipe dispenser according to claim 8, wherein the resistance member is integrally formed with the outlet member.

10. The wipe dispenser according to claim 8, wherein the resistance member comprises an orifice member used to apply resistance to the wipe.

11. The wipe dispenser according to claim 8, wherein the resistance member made of plastic.

12. A resistance application method to bias at least one of wipes, the method comprising the steps of:

fixing an accommodation body that stores the wipes by a holding frame body, the accommodation body comprising an opening portion; and

biasing at least one of the wipes by a resistance member connected to an outlet member provided with the opening portion.

13. The resistance application method according to claim 12, wherein the resistance member is integrally formed with the outlet member.

14. The resistance application method according to claim 12, further comprising applying resistance to a wipe of the wipes by an orifice member provided with the resistance member.

15. The resistance application method according to claim 12, wherein the resistance member made of plastic.

* * * * *