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- (72) Inventor; and
- (71) Applicant : KEYS, Karen-Lee [AU/AU]; 37 Long Gully Road, Summerholm, Queensland 4341 (AU).
- (74) Agent: BAXTER IP; PO Box Q72, Queen Victoria Building, New South Wales 1230 (AU).

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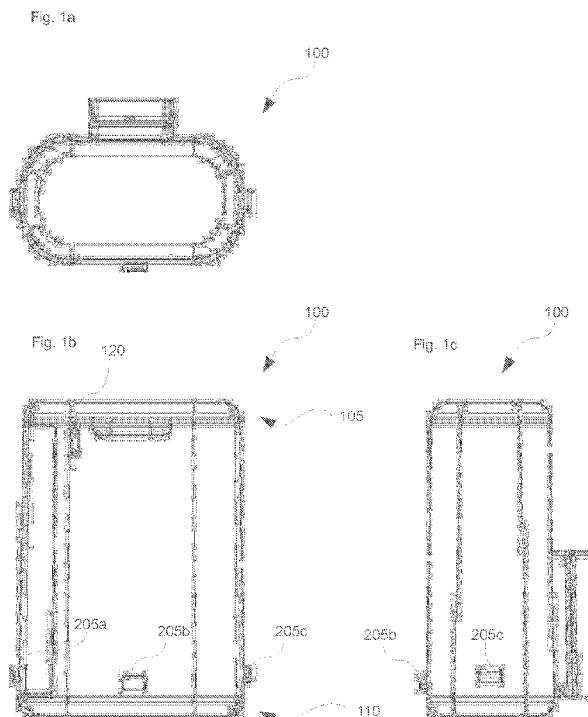


Figure 1

(57) Abstract: A sanitary bin (100) comprising input access means (105) for disposing sanitary items therein and output access means (110) for ejecting the sanitary items therefrom.

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A SANITARY BIN

Field of the Invention

The present invention relates to sanitary product and in particular to a sanitary bin.

- 5 The invention has been developed primarily for personal use applications and will be described hereinafter with reference to this application. However, it will be appreciated that the invention is not limited to this particular field of use.

Background

- 10 Sanitary items are often disposed of in a toilet, thereby causing blockage in sewerage systems and the like. As such, sanitary bins are often provided in toilets, and especially public toilets for collection of sanitary items.

However, existing sanitary bins, especially industrial or publicly deployed sanitary bin require specialized cleaning and emptying procedures, ensuring the disposal of the sanitary items in a
15 hygienic and safe manner.

However, such sanitary bins are generally not applicable for home use, especially on account of their size, and their emptying and cleaning requirements.

The present invention seeks to provide a sanitary bin, which will overcome or substantially ameliorate at least some of the deficiencies of the prior art, or to at least provide an alternative.

- 20 It is to be understood that, if any prior art information is referred to herein, such reference does not constitute an admission that the information forms part of the common general knowledge in the art, in Australia or any other country.

Summary

- 25 According to one aspect, there is provided a sanitary bin comprising input access means for disposing sanitary items therein; and output access means for ejecting the sanitary items therefrom.

- Advantageously, the sanitary bin is adapted for allowing users to dispose of sanitary or other products discreetly that they may not want others to see. The input access means and the output
30 access means provide for a simple manner in which to dispose of sanitary items within the sanitary bin and, once the sanitary bin is full or substantially full, eject the sanitary items in a simple, hygienic and convenient manner using the output access means. The sanitary bin is further advantageous for applications such as for houses in rural areas that use septic tanks or treatment plants ill-suited to digest sanitary items.

Preferably, the output access means is configured to transition from a closed configuration to an open configuration so as to allow the ejection of the sanitary items therefrom in use.

Advantageously, the output access means is adapted for allowing the selective removal of sanitary items from the sanitary bin.

5 Preferably, the output access means is biased towards the closed configuration.

Advantageously, the output access means is adapted to rest in the closed position, transitioning only to the open configuration when the user removes the sanitary items from the sanitary bin.

The closed configuration secures the one or more sanitary items within the sanitary bin and prevents unwanted odors and the like.

10 Preferably, the output access means is located at a lower position of the sanitary bin.

Preferably, the output access means is adapted to transition towards the open configuration under the weight of the sanitary items in use.

Advantageously, the output access means is positioned to allow the sanitary items to fall from the sanitary bin under the effects of gravity when the output access means is in the open

15 configuration, removing the need for the user to handle the sanitary items in an unhygienic manner in use.

Preferably, the output access means comprises locking means for selectively securing the output access means in the closed configuration.

Advantageously, the output access means may be secured so as to prevent the accidental ejection

20 of sanitary items from the sanitary bin in use.

Preferably, the locking means comprises a latch.

Advantageously, the latch, which may be coupled to a button or the like, allows the user to remove operate the output access means in a simple and effective manner in use.

Preferably, the input access means is configured to transition from a closed configuration to an

25 open configuration for receiving sanitary items therein in use.

Preferably, the input access means is biased towards the open configuration.

Advantageously, the input access means rests in the closed configuration, thereby storing the sanitary items therein in a hygienic manner, and furthermore preventing unwanted odors.

Preferably, the sanitary bin further comprises a packet engagement for securing a packet there in

30 in use.

Preferably, the packet engagement is adapted for engaging the packet in an open configuration in use wherein the opening of the packet corresponds in position to the input access means in use.

Advantageously, the packet engagement allows the sanitary items to be collected in a packet within the sanitary item, thereby preventing the contact of the sanitary item and the inner walls

of the sanitary bin in use, and furthermore allowing for the removal of the sanitary items from the sanitary bin in a hygienic manner.

Preferably, the sanitary bin further comprises one or more wall mountings for mounting the sanitary bin to a wall in use.

- 5 Advantageously, the wall mountings allow the sanitary bin to be mounted to a wall in use, thereby granting clear access to the input access means and the output access means.

Preferably, the sanitary bin further comprises one or more sticker indicia demarcating one or more areas on an outer surface of the sanitary bin for receiving respective stickers therein.

- Advantageously, the sanitary bin is configured to encourage user to customize the appearance of the sanitary bin or indicate the user's particular mood in accordance with the type of sticker.

10 Preferably, the input access means comprises a lid.

Preferably, the lid comprises a lip portion adapted for opening the lid in use.

Preferably, the sanitary bin further comprises a body, the lid being hingedly coupled to the body.

Preferably, the input access means comprises a sealing means adapted to provide a seal in use.

- 15 Preferably, the sealing means comprises first and second sealing portions adapted to cooperate to form the seal in use.

Preferably, the first and second sealing portions are configured such that a gap therebetween is substantially of a predetermined shape.

Preferably, the gap is substantially zigzagged.

- 20 Preferably, the sealing means is substantially airtight.

Preferably, the sealing means comprises rubber.

Preferably, the output access means is laterally accessible.

Preferably, the output access means comprises a door.

Preferably, the door comprises a handle.

- 25 Preferably, the door comprises a packet engagement adapted for releasably fastening a packet.

Preferably, the packet engagement comprises at least one hook for releasably fastening the packet.

Preferably, the packet engagement is adapted to position the packet such that items entering the sanitary bin via the input access means are collected by the packet in use.

- 30 Preferably, the output access means comprises a bin.

Preferably, the bin comprises a handle.

Preferably, the bin comprises a packet engagement adapted for releasably fastening a packet.

Preferably, the packet engagement comprises at least one hook for releasably fastening the packet.

Preferably, wherein, in use, the packet engagement is adapted to position the packet such that items to be disposed of into the sanitary bin via the input access means are collected by the packet.

Preferably, the sanitary bin further comprises a toilet roll holder.

5 Preferably, the toilet roll holder is adapted for holding at least one toilet paper roll.

Preferably, the sanitary bin further comprises a body. The toilet roll holder is releasably fastenable to the body.

Preferably, the toilet roll holder slidably, releasably and mechanically interlocks with the body.

10 Preferably, the toilet roll holder comprises a holding portion adapted for holding a toilet paper roll.

Preferably, the toilet roll holder further comprises another holding portion adapted for holding another toilet paper roll

Preferably, the toilet roll holder further comprises a spacer arranged between the holding portions and adapted for spacing the toilet paper rolls from each other.

15 Preferably, the holding portion is selectively releasable for replenishment of toilet paper rolls.

Preferably, the toilet roll holder further comprises a latch adapted for selectively releasing the holding portion

Preferably, further comprises a body, and a mount portion adapted for slidably and releasably mounting the body onto a surface in use.

20 Preferably, the sanitary bin is portable

Preferably, the sanitary bin further comprises a side compartment

Preferably, the sanitary bin further comprises a toilet roll holder able to be fit into the side compartment.

Preferably, the toilet roll holder can be disassembled.

25 Preferably, the toilet roll holder has dimensions smaller than those of the side compartment,

Preferably, the side compartment is laterally accessible.

Preferably, the side compartment comprises a door.

Preferably, the door comprises a latch for selectively locking the door.

Preferably, the latch comprises a button depressible for selectively releasing the door.

30 Preferably, the sanitary bin further comprises a liquid dispenser.

Preferably, the sanitary bin further comprises a shelf.

Preferably, the sanitary bin further comprises a deodoriser.

Preferably, the sanitary bin further comprises sanitary bin comprises more than one colour.

Preferably, the sanitary bin further comprises more than one pattern.

35 Other aspects of the invention are also disclosed.

Brief Description of the Drawings

Notwithstanding any other forms which may fall within the scope of the present invention, preferred embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Fig. 1 shows a sanitary bin comprising input access means for disposing sanitary items therein and output access means for ejecting the sanitary items therefrom in accordance with a preferred embodiment of the present invention;

Fig. 2 shows a cross-sectional view of the sanitary bin of Fig. 1 in accordance with a preferred embodiment of the present invention;

Fig. 3 shows perspective views of the front and rear of the sanitary bin of Fig. 1 wherein the input access means, the output access means and the site compartments are shown in an open configuration in accordance with a preferred embodiment of the present invention;

Fig. 4 shows perspective views of the front and rear of the sanitary bin of Fig. 1 wherein the input access means, the output access means and the site compartments are shown in a closed configuration in accordance with a preferred embodiment of the present invention;

Fig. 5 shows the wall mounting of the sanitary bin of Fig. 1 in further detail in accordance with an embodiment of the present invention;

Figs. 6 to 8 show perspective views of a sanitary bin from different angles in accordance with an embodiment of the present invention; and

Fig. 9 shows a partial perspective view of a sealing means of an input access means of the sanitary bin shown in Figs. 6 to 8 in accordance with an embodiment of the present invention.

Description of Embodiments

It should be noted in the following description that like or the same reference numerals in different embodiments denote the same or similar features.

Fig. 1 shows a sanitary bin 100 comprising input access means 105 for disposing sanitary items therein and output access means 110 for ejecting the sanitary items therefrom. In this manner, the sanitary bin 100 is adapted for allowing users to dispose of sanitary or other products discreetly that they may not want others to see. The input access means 105 and the output access means 110 provide for a simple manner in which to dispose of sanitary items within the sanitary bin 100 and, once the sanitary bin 100 is full or substantially full, eject the sanitary items in a simple, hygienic and convenient manner. The sanitary bin 100 is further advantageous for applications such as for houses in rural areas that use septic tanks or treatment plants ill-suited to digest sanitary items.

The output access means 110 is configured to transition from a closed configuration to an open configuration so as to allow the ejection of the sanitary items therefrom in use. Specifically, referring to Fig. 3, there is shown the sanitary bin 100 wherein the output access means 110 is in the closed configuration. Referring to Fig. 4, there is shown the sanitary bin 100 wherein the output access means 110 is in the open configuration.

As such, the output access means 110 secures the one or more sanitary item within the sanitary bin 100 during use and furthermore prevents any unwanted odors and the like. The output access means 110 may comprise a hinge, such as a live hinge, so as to allow the output access means 110 to transition between the closed and open configurations.

In one embodiment, the output access means is biased towards the closed configuration such that once the one or more sanitary items are ejected from the sanitary bin 100, the output access means 110 resets to the closed position so as to be suited for collecting further sanitary items inserted into the sanitary bin 100.

While the output access means 110 may be provided at any location of the sanitary bin 100, in a preferred embodiment the output access means is located at a lower position of the sanitary bin such that the one or more sanitary items are able to be ejected from the sanitary bin 100 under the effects of gravity. As such, the one or more sanitary items need not be handled in use.

Furthermore, the output access means 110 may be adapted to transition towards the open configuration under the weight of the sanitary items in use. In this manner, the output access means 110 is adapted to eject and sanitary items contained within the sanitary bin 100. If the sanitary bin 100 comprises no sanitary items, the output access means 110 will not open. Conversely, if the sanitary bin one and zero comprises sanitary items, the sanitary items are adapted to bear downwardly upon an upper surface of the flap such that when the output access means 110 is operated by the user to transition to the open configuration, the weight of the sanitary items will cause the output access means 110 to open. Once the sanitary items have fallen from the sanitary bin 100, the upward access means 110 will revert to the closed position under the effects of the rotational spring.

The output access means 110 may comprise locking means (not shown) for selectively securing the output access means 110 in the closed configuration. In this manner, the output access means 110 will be prevented from accidentally transitioning to the open configuration in use under the weight of any sanitary items contained within the sanitary bin 100. As such, once the user deems that the sanitary bin 100 is full or partially full, the user may operate the locking means to open the output access means 110 to eject the sanitary items therefrom. In one embodiment, the sanitary bin 100 may comprise a transparent portion, such as a vertical elongate transparent portion, such that the user is able to view the capacity of the sanitary bin 100.

In one embodiment, the locking means comprises a latch. However, different types of locking means may be employed, depending on the application. In a preferred embodiment, the sanitary bin 100 comprises an output access means 110 button for operating the locking means or latch.

5 Similarly, the input access means 105 is configured to transition from a closed configuration to an open configuration for receiving sanitary items therein in use. In this manner, the user can selectively open the sanitary bin 100 to insert sanitary items into the sanitary bin 100 and thereafter close the sanitary bin 100 so as to stow the sanitary item in a hygienic and odor free manner within the sanitary bin 100.

The input access means 105 may be biased towards the open configuration such that in use the 10 input access means 105 rests in an open configuration allowing the user to insert one or more sanitary item therein in a simple manner. Once the sanitary item have been inserted, the user is then able to close the input access means 105 by pressing on a portion of the input access means 105 to close the input access means 105. In one embodiment, the input access means 105 similarly comprises a locking means for securing the input access means 105 in the closed 15 configuration. The locking means of the input access means 105 may similarly be activated by a button 120 in use for unlocking the input access means 105.

In one embodiment, the input access means 105 comprises a chute, such as a silicon chute adapted for dilating during the insertion of one or more sanitary items to allow the one or more sanitary items to pass their three. In one embodiment, the silicon chute comprises radial slits 20 adapted to allow one or more sanitary items to pass therethrough.

As is shown in Fig. 2, the sanitary bin 100 comprises a packet engagement 205 for securing a packet during the process of removing the sanitary items from the sanitary bin 100. Specifically, as is shown in the embodiment in Fig. 1, the sanitary bin 100 comprises one or more packets engagements 205 located about the periphery of the sanitary bin 102 the output access means 25 110. In this manner, a person who wishes to empty the sanitary bin 100 would secure a disposal packet about the output access means 110 using the packet engagement 205. Thereafter, the person would cause the output access means to open, such as by activating a button or the like such that any sanitary items within the sanitary bin 100 fall into the packet. Once the sanitary items have been ejected from the sanitary bin 100 and have fallen into the packet, the output 30 access means 110 will close. The person then removes the packet for disposal. As is apparent from the figure, the packet engagement 205 comprises one or more packets engagements tabs 205. In the embodiment shown, the sanitary bin 100 comprises three packet engagement tabs 205, being 205a, 205b and 205c.

It should be noted that in one embodiment, the sanitary bin 100 comprises further packet 35 engagements (not shown) for engaging a packet within the interior of the sanitary bin. In this

manner, the interior packet engagement is adapted for engaging the packet within the interior of the sanitary bin 100 in an open configuration in use. As such, the packet is maintained by the packet engagement 205 so as to receive sanitary items therein that are disposed through the input access means 105.

5 Turning now to Fig. 3, there is shown an embodiment wherein the sanitary bin further comprises one or more wall mountings 305 for mounting the sanitary bin to a wall in use. In this preferred embodiment, the sanitary bin 100 is adapted for mounting to a wall so as to provide clear access to both the input access means 105 and the output access means 110. The wall mountings 305 may take on different embodiments depending on the application, and may take the form of a
10 simple recess for receiving a screw head therein, a protrusion such as a look, adhesive tape and the like.

However, in a preferred embodiment shown in Fig. 3, the wall mounting 305 comprises a first portion 305a adapted to be fastened to the wall and a second portion 305b adapted for releasable engagement with the first portion 305a. In this manner, the first portion 305a comprises wall
15 mountings 310 so as to, for example allow for the first portion 305a to be screwed into the wall. Thereafter, the second portion 305b may be releaseably fastened to the first portion 305a, so as to allow for the quick removal of the sanitary bring 100 from the wall.

Referring to the embodiment given in Fig. 5, in a preferred embodiment the mechanical interlock between the first portion 305a and the second portion 305b is a slidable mechanical interlock,
20 wherein to detach the second portion 305b from the first portion 305a the second portion 305b is moved vertically with respect to the first portion 305a.

In one embodiment the outer profile of the sanitary bin 100 may be adapted so as to lie snug against the wall, such as by having a flattened portion. Furthermore, the outer profile may be configured so as to allow the sanitary bin 100 to lie snug within a corner.

25 In a yet further embodiment, the sanitary bin further comprises one or more sticker indicia demarcating one or more areas on an outer surface of the sanitary bin for receiving respective stickers therein. In this manner a user can adhere stickers to the sanitary bin 100 depending on her mood such as, for example, a daisy one month and a storm cloud the next, being a good way especially for young girls to let others in the house know how they are feeling.

30 Referring now to Fig. 4, there is shown a preferred embodiment of the sanitary bin 100 wherein the sanitary bin 100 comprises a side compartment 405. The side compartment 405 is adapted for storage of the various items relating to the sanitary bin 100. While in the embodiment shown in Fig. 4, there is shown the sanitary bin 100 comprising one side compartment 405, it should be appreciated that in various embodiments the sanitary bin 100 may comprise two site
35 compartments located at either side of the sanitary bin 100.

As is apparent from the embodiment given, the side compartment 405 comprises a door 410 configurable between an open configuration as shown in Fig. 4 and a close configuration as shown in Fig. 3. The door 410 may be biased towards open configuration by means of a spring or the like. Furthermore, the door 410 may be secured in place by a latch or the like operable by the user by means of a button (not shown).

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In various embodiments, the side compartment 405 may comprise one or shelves 415 to aid in the storage of items. Furthermore, the side compartment 405 may comprise a hook 420 for engaging sanitary packets, for example. In a yet further embodiment, the side compartment comprises a sanitary dispenser such as a hand sanitary dispenser. The sanitary dispenser may be integral with the side compartment 405 or separate, yet is adapted for securement within the side compartment 405.

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To reiterate, the sanitary bin 100 is adapted for discreet disposal of sanitary items or other products. Sanitary items may be disposed of into the sanitary bin 100 via the input access means 105, and may be ejected from the sanitary bin 100 via the output access means 110. The input access means 105 may be configured to transition from a closed configuration to an open configuration for receiving sanitary items therein in use. The output access means 110 may be configured to transition from a closed configuration to an open configuration to allow the ejection of the sanitary items from the sanitary bin 100. As shown in the above embodiments, the output access means 110 may be biased towards the closed configuration. In particular, the output access means 110 may be located at the lower position of the sanitary bin 100, and may be adapted to transition towards the open configuration under the weight of the sanitary items in use. The output access means 110 may comprise locking means for selectively securing the output access means 110 in the closed configuration. The locking means may comprise a latch or the like for selectively locking the output access means 110. In practice, the input access means 105 may be biased towards the open configuration.

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The sanitary bin 100 may further comprise a packet engagement for securing a packet therein in use. The packet engagement may be adapted for engaging the packet in an open configuration in use wherein the opening of the packet corresponds in position to the input access means in use. The sanitary bin 100 may further comprise one or more wall mountings for mounting the sanitary bin to a wall in use.

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The sanitary bin 100 may comprise one or more sticker indicia demarcating one or more areas on an outer surface of the sanitary bin for receiving respective stickers therein.

Alternative exemplary embodiment

Shown in Figs. 6 to 8 are perspective views of another exemplary embodiment of a sanitary bin 600 from different angles. In this embodiment, the sanitary bin 600 comprises a body 605, a side

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compartment 610, an output access means 615, an input access means 620, a toilet roll holder 625 and a wall mount mechanism 630.

Turning to Fig. 9, the input access means 620 may comprise a sealing means 621 adapted to provide a seal in use. The sealing means 621 may be substantially airtight so as to prevent flow of fluid (e.g. air) therethrough, and may comprise rubber. Such a design is useful for preventing leakage of odours of the sanitary items from the sanitary bin 600. When a user disposes of a sanitary item into the sanitary bin 600 via the input access means 620, the sealing means 621 resiliently deforms when the sanitary item is forced therethrough. The sealing means 621 comprises first and second sealing portions 621a, 621b (e.g., membranes) adapted to cooperate to form the seal in use. In particular, the first and second sealing portions 621a, 621b are configured such that a gap therebetween is substantially zigzagged. However, in other embodiments, the gap between the first and second sealing portions 621a, 621b may be of other shapes or patterns.

In one embodiment, the input access means 620 may comprise a lid 620a, which may comprise a lip portion 620b adapted for opening the lid 620a in use. In particular, the lid may be hingedly coupled to the bin.

The output access means 620 may be laterally accessible, and may comprise a bin 616 having a handle 617. The handle 617 facilitates removal of the bin 616 from the sanitary bin 600 when the user wishes to clear the disposed sanitary items from the bin 616. The bin 616 may comprise a packet engagement (not shown) adapted for releasably fastening a packet (e.g. a bag). For example, the packet engagement may comprise a hook located in the bin adapted for releasably fastening the packet inside the bin 616. The packet arrangement may further be arranged such that items entering into the sanitary bin 600 via the input access means 620 are collected by the packet inside the bin 616.

In another embodiment (not shown), the output access means 620 may instead comprise a door having a handle, and the packet engagement may be disposed on one of an interior surface of the door and an interior surface of the sanitary bin 600 for releasably fastening the packet in the manner described hereinabove.

The toilet roll holder 625 is adapted for holding at least one toilet paper roll (not shown), and is releasably fastenable to the body 605 of the sanitary bin 600. The toilet roll holder 625 may slidably, releasably and mechanically interlock with the body 605. In particular, the toilet roll holder 625 comprises a plurality of engaging holes 626, which substantially have the outer shape of a figure "8", and the body 605 comprises a plurality of engaging protrusions 606 for slidably, releasably, mechanically and respectively engaging the engaging holes 626.

In the particular embodiment shown in Figs. 6 to 8, each of the engaging holes 626 has first and second hole portions in fluid communication with each other, the first hole portion having a

larger diameter than the second hole portion. Each of the engaging protrusions 606 has a round flanged portion having a diameter larger than that of the second hole portion and smaller than that of the first hole portion, such that the round flanged portion may be inserted into the corresponding hole 626 via the first hole portion thereof for subsequent slidable and releasable engagement with the second hole portion. However, it is appreciated that other embodiments may comprise any number of engaging holes 626 and engaging protrusions, which may be of any suitable shapes.

In this embodiment, the toilet roll holder 625 comprises a plurality of holding portions 627 for holding respective toilet paper rolls (not shown). Moreover, the toilet roll holder 625 further comprises a spacer 628 adapted for spacing the toilet paper rolls from each other so as to prevent one of the toilet paper rolls from inadvertently dispensing paper when paper is being drawn from the other of the toilet paper rolls. Furthermore, the holding portions 627 are configured to be selectively releasable for replenishment of toilet paper rolls. In particular, the toilet roll holder 625 may further comprise at least one latch 629 or the like adapted for selectively releasing the holding portions 627 so as to facilitate replenishment of the toilet paper rolls. It should be appreciated that in other embodiments, the toilet roll holder 625 may comprise only one holding portion 627.

It is worth noting that, given that the sanitary bin 600 may be designed to be portable, the toilet roll holder 625 may be configured such that it can be disassembled to facilitate storage in the side compartment 610. Of course, if dimensions of the toilet roll holder 625 are smaller than those of the side compartment 610, the toilet roll holder 625 may be stored in the side compartment 610 without first being disassembled. Also, dimensions of the sanitary bin 600 may be reduced so as to improve portability. On the other hand, when the sanitary bin 600 is to be used in a non-portable, fixed manner (e.g. in a public place for public use), dimensions of the sanitary bin 600 may be increased.

The side compartment 610 comprises a door 611, which comprises a latch 612 for selectively locking the door 611. The latch 612 may comprise a button 613 depressible for selectively releasing the door 611.

To facilitate access, the mount mechanism 630 may be adapted for slidably and releasably mounting the body 605 onto a surface (e.g. a wall surface) in use. The mount mechanism 630 is shown to comprise a plurality of mount holes 631, 632 at the rear surface. The mount holes 631, 632 are adapted for slidably and releasably mounting the body 605 onto respective mount hooks on the surface. It is to be noted that, in another embodiment, the mount mechanism 630 may instead comprise a plurality of mount hooks (not shown) for slidably and releasably mounting the body 605 onto respective mount recesses or mount holes (not shown).

In another embodiment, the sanitary bin 600 may further comprise at least one of a liquid dispenser, a shelf and a deodoriser. The liquid dispenser is adapted for dispensing various liquids (e.g., liquid soap). The shelf is adapted for placement of various articles (e.g. sanitary items) thereon, and may comprise a door similar to ones described hereinabove. The deodoriser may be
5 an electronic deodoriser comprising air filters. Alternatively the deodoriser may be configured to spray deodorant either manually by user or automatically in a preconfigured manner.

In practice, the sanitary bin 600 may comprise any number of colours, and may also comprise more than one pattern (e.g. visual feature). For example, the bin 616, the door 611 of the side compartment 610, and the lid 620 may be of different colours.

10 **Interpretation**

Embodiments:

Reference throughout this specification to “one embodiment” or “an embodiment” means that a particular feature, structure or characteristic described in connection with the embodiment is included in at least one embodiment of the present invention. Thus, appearances of the phrases
15 “in one embodiment” or “in an embodiment” in various places throughout this specification are not necessarily all referring to the same embodiment, but may. Furthermore, the particular features, structures or characteristics may be combined in any suitable manner, as would be apparent to one of ordinary skill in the art from this disclosure, in one or more embodiments.

Similarly it should be appreciated that in the above description of example embodiments of the
20 invention, various features of the invention are sometimes grouped together in a single embodiment, figure, or description thereof for the purpose of streamlining the disclosure and aiding in the understanding of one or more of the various inventive aspects. This method of disclosure, however, is not to be interpreted as reflecting an intention that the claimed invention requires more features than are expressly recited in each claim. Rather, as the following claims
25 reflect, inventive aspects lie in less than all features of a single foregoing disclosed embodiment. Thus, the claims following the Detailed Description of Specific Embodiments are hereby expressly incorporated into this Detailed Description of Specific Embodiments, with each claim standing on its own as a separate embodiment of this invention.

Furthermore, while some embodiments described herein include some but not other features
30 included in other embodiments, combinations of features of different embodiments are meant to be within the scope of the invention, and form different embodiments, as would be understood by those in the art. For example, in the following claims, any of the claimed embodiments can be used in any combination.

Different Instances of Objects

As used herein, unless otherwise specified the use of the ordinal adjectives “first”, “second”, “third”, etc., to describe a common object, merely indicate that different instances of like objects are being referred to, and are not intended to imply that the objects so described must be in a given sequence, either temporally, spatially, in ranking, or in any other manner.

Specific Details

In the description provided herein, numerous specific details are set forth. However, it is understood that embodiments of the invention may be practiced without these specific details. In other instances, well-known methods, structures and techniques have not been shown in detail in order not to obscure an understanding of this description.

Terminology

In describing the preferred embodiment of the invention illustrated in the drawings, specific terminology will be resorted to for the sake of clarity. However, the invention is not intended to be limited to the specific terms so selected, and it is to be understood that each specific term includes all technical equivalents which operate in a similar manner to accomplish a similar technical purpose. Terms such as "forward", "rearward", "radially", "peripherally", "upwardly", "downwardly", and the like are used as words of convenience to provide reference points and are not to be construed as limiting terms.

Comprising and Including

In the claims which follow and in the preceding description of the invention, except where the context requires otherwise due to express language or necessary implication, the word “comprise” or variations such as “comprises” or “comprising” are used in an inclusive sense, i.e. to specify the presence of the stated features but not to preclude the presence or addition of further features in various embodiments of the invention.

Any one of the terms: including or which includes or that includes as used herein is also an open term that also means including at least the elements/features that follow the term, but not excluding others. Thus, including is synonymous with and means comprising.

Scope of Invention

Thus, while there has been described what are believed to be the preferred embodiments of the invention, those skilled in the art will recognize that other and further modifications may be made thereto without departing from the spirit of the invention, and it is intended to claim all such changes and modifications as fall within the scope of the invention. For example, any formulas given above are merely representative of procedures that may be used. Functionality may be added or deleted from the block diagrams and operations may be interchanged among

functional blocks. Steps may be added or deleted to methods described within the scope of the present invention.

Although the invention has been described with reference to specific examples, it will be appreciated by those skilled in the art that the invention may be embodied in many other forms.

5 *Industrial Applicability*

It is apparent from the above, that the arrangements described are applicable to the sanitary ware industries.

Claims

1. A sanitary bin comprising:
input access means for disposing sanitary items therein; and
output access means for ejecting the sanitary items therefrom.
- 5 2. A sanitary bin as claimed in claim 1, wherein the output access means is configured to transition from a closed configuration to an open configuration so as to allow the ejection of the sanitary items therefrom in use.
3. A sanitary bin as claimed in claim 1, wherein the output access means is biased towards the closed configuration.
- 10 4. A sanitary bin as claimed in claim 1, wherein the output access means is located at a lower position of the sanitary bin.
5. A sanitary bin as claimed in claim 4, wherein the output access means is adapted to transition towards the open configuration under the weight of the sanitary items in use.
6. A sanitary bin as claimed in claim 1, wherein the output access means comprises locking
15 means for selectively securing the output access means in the closed configuration.
7. A sanitary bin as claimed in claim 6, wherein the locking means comprises a latch.
8. A sanitary bin as claimed in claim 1, wherein the input access means is configured to transition from a closed configuration to an open configuration for receiving sanitary items therein in use.
- 20 9. A sanitary bin as claimed in claim 8, wherein the input access means is biased towards the open configuration.
10. A sanitary bin as claimed in claim 1, further comprising a packet engagement for securing a packet there in in use.
11. A sanitary bin as claimed in claim 10, wherein the packet engagement is adapted for
25 engaging the packet in an open configuration in use wherein the opening of the packet corresponds in position to the input access means in use.
12. A sanitary bin as claimed in claim 1, further comprising one or more wall mountings for mounting the sanitary bin to a wall in use.
13. A sanitary bin as claimed in claim 1, further one or more sticker indicia demarcating one or
30 more areas on an outer surface of the sanitary bin for receiving respective stickers therein.
14. A sanitary bin as claimed in claim 1, wherein the input access means comprises a lid.
15. A sanitary bin as claimed in claim 14, wherein the lid comprises a lip portion adapted for opening the lid in use.
16. A sanitary bin as claimed in claim 15, further comprising a body, the lid being hingedly
35 coupled to the body.

17. A sanitary bin as claimed in claim 1, wherein the input access means comprises a sealing means adapted to provide a seal in use.
18. A sanitary bin as claimed in claim 17, wherein the sealing means comprises first and second sealing portions adapted to cooperate to form the seal in use.
- 5 19. A sanitary bin as claimed in claim 18, wherein the first and second sealing portions are configured such that a gap therebetween is substantially of a predetermined shape.
20. A sanitary bin as claimed in claim 19, wherein the gap is substantially zigzagged.
21. A sanitary bin as claimed in claim 17, wherein the sealing means is substantially airtight.
22. A sanitary bin as claimed in claim 17, wherein the sealing means comprises rubber.
- 10 23. A sanitary bin as claimed in claim 1, wherein the output access means is laterally accessible.
24. A sanitary bin as claimed in claim 23, wherein the output access means comprises a door.
25. A sanitary bin as claimed in claim 24, wherein the door comprises a handle.
26. A sanitary bin as claimed in claim 24, wherein the door comprises a packet engagement
15 adapted for releasably fastening a packet.
27. A sanitary bin as claimed in claim 26, wherein the packet engagement comprises at least one hook for releasably fastening the packet.
28. A sanitary bin as claimed in claim 26, wherein the packet engagement is adapted to
20 position the packet such that items entering the sanitary bin via the input access means are collected by the packet in use.
29. A sanitary bin as claimed in claim 23, wherein the output access means comprises a bin.
30. A sanitary bin as claimed in claim 29, wherein the bin comprises a handle.
31. A sanitary bin as claimed in claim 29, wherein the bin comprises a packet engagement
adapted for releasably fastening a packet.
- 25 32. A sanitary bin as claimed in claim 31, wherein the packet engagement comprises at least one hook for releasably fastening the packet.
33. A sanitary bin as claimed in claim 32, wherein, in use, the packet engagement is adapted to
position the packet such that items to be disposed of into the sanitary bin via the input access
means are collected by the packet.
- 30 34. A sanitary bin as claimed in claim 1, further comprising a toilet roll holder.
35. A sanitary bin as claimed in claim 34, wherein the toilet roll holder is adapted for holding
at least one toilet paper roll.
36. A sanitary bin as claimed in claim 34, further comprising a body, wherein the toilet roll
holder is releasably fastenable to the body.

37. A sanitary bin as claimed in claim 36, wherein the toilet roll holder slidably, releasably and mechanically interlocks with the body.
38. A sanitary bin as claimed in claim 34, wherein the toilet roll holder comprises a holding portion adapted for holding a toilet paper roll.
- 5 39. A sanitary bin as claimed in claim 38, wherein the toilet roll holder further comprises another holding portion adapted for holding another toilet paper roll
40. A sanitary bin as claimed in claim 39, wherein the toilet roll holder further comprises a spacer arranged between the holding portions and adapted for spacing the toilet paper rolls from each other.
- 10 41. A sanitary bin as claimed in claim 38, wherein the holding portion is selectively releasable for replenishment of toilet paper rolls.
42. A sanitary bin as claimed in claim 41, wherein the toilet roll holder further comprises a latch adapted for selectively releasing the holding portion
43. A sanitary bin as claimed in claim 1, further comprises a body, and a mount portion
15 adapted for slidably and releasably mounting the body onto a surface in use.
44. A sanitary bin as claimed in claim 1, wherein the sanitary bin is portable
45. A sanitary bin as claimed in claim 1, further comprising a side compartment
46. A sanitary bin as claimed in claim 45, further comprising a toilet roll holder able to be fit into the side compartment.
- 20 47. A sanitary bin as claimed in claim 46, wherein the toilet roll holder can be disassembled.
48. A sanitary bin as claimed in claim 46, wherein the toilet roll holder has dimensions smaller than those of the side compartment,
49. A sanitary bin as claimed in claim 45, wherein the side compartment is laterally accessible.
50. A sanitary bin as claimed in claim 49, wherein the side compartment comprises a door.
- 25 51. A sanitary bin as claimed in claim 50, wherein the door comprises a latch for selectively locking the door.
52. A sanitary bin as claimed in claim 51, wherein the latch comprises a button depressible for selectively releasing the door.
53. A sanitary bin as claimed in claim 1, further comprising a liquid dispenser.
- 30 54. A sanitary bin as claimed in claim 1, further comprises a shelf.
55. A sanitary bin as claimed in claim 1, further comprises a deodoriser.
56. A sanitary bin as claimed in claim 1, wherein the sanitary bin comprises more than one colour.
57. A sanitary bin as claimed in claim 1, wherein the sanitary bin comprises more than one
35 pattern.

Fig. 1a

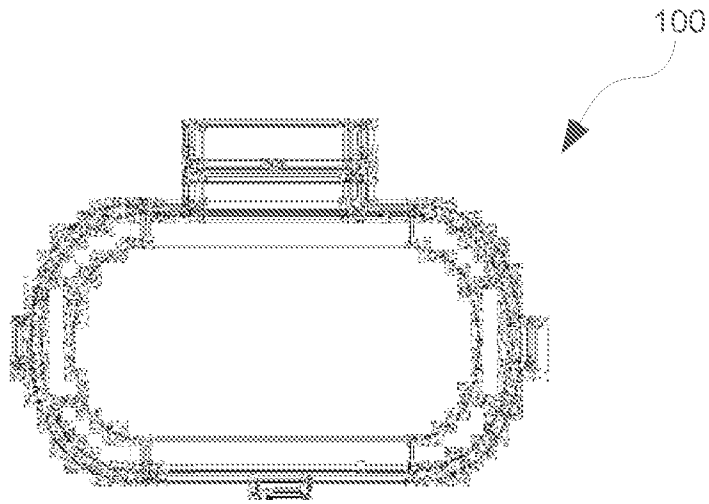


Fig. 1b

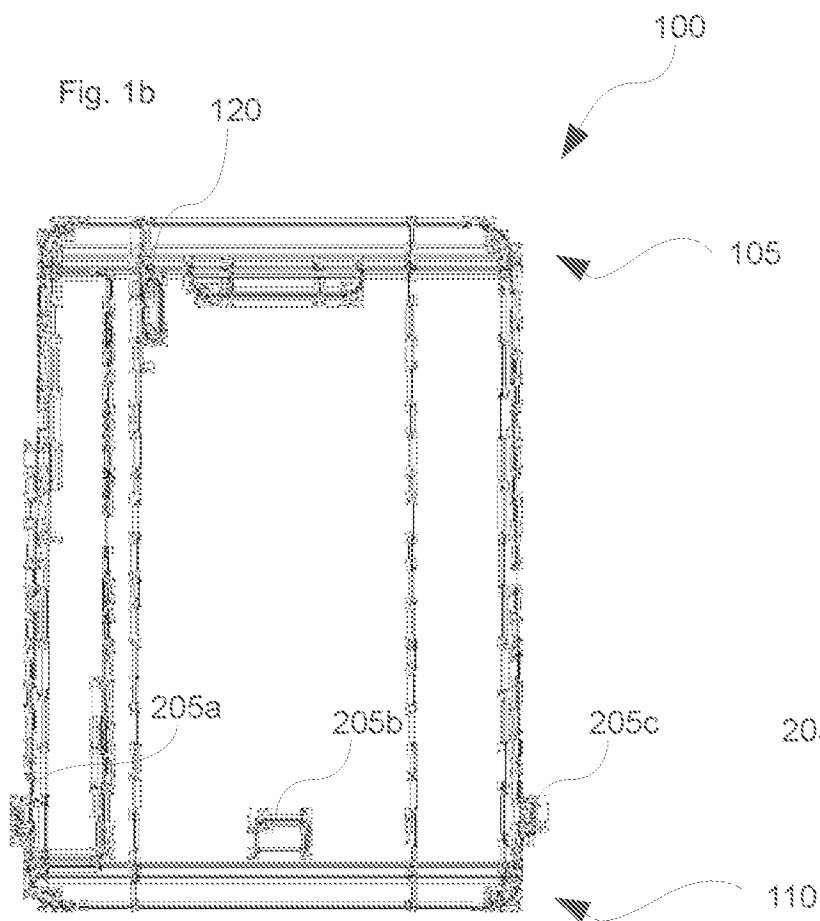


Fig. 1c

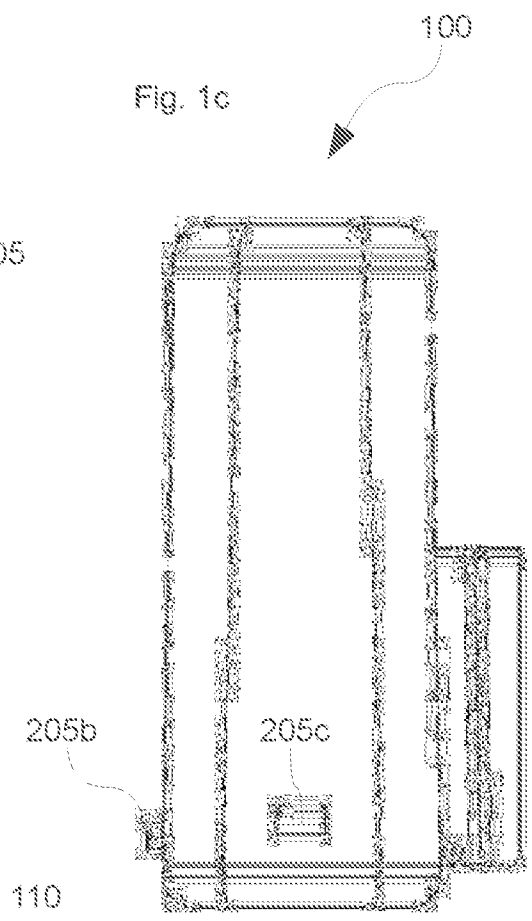


Figure 1

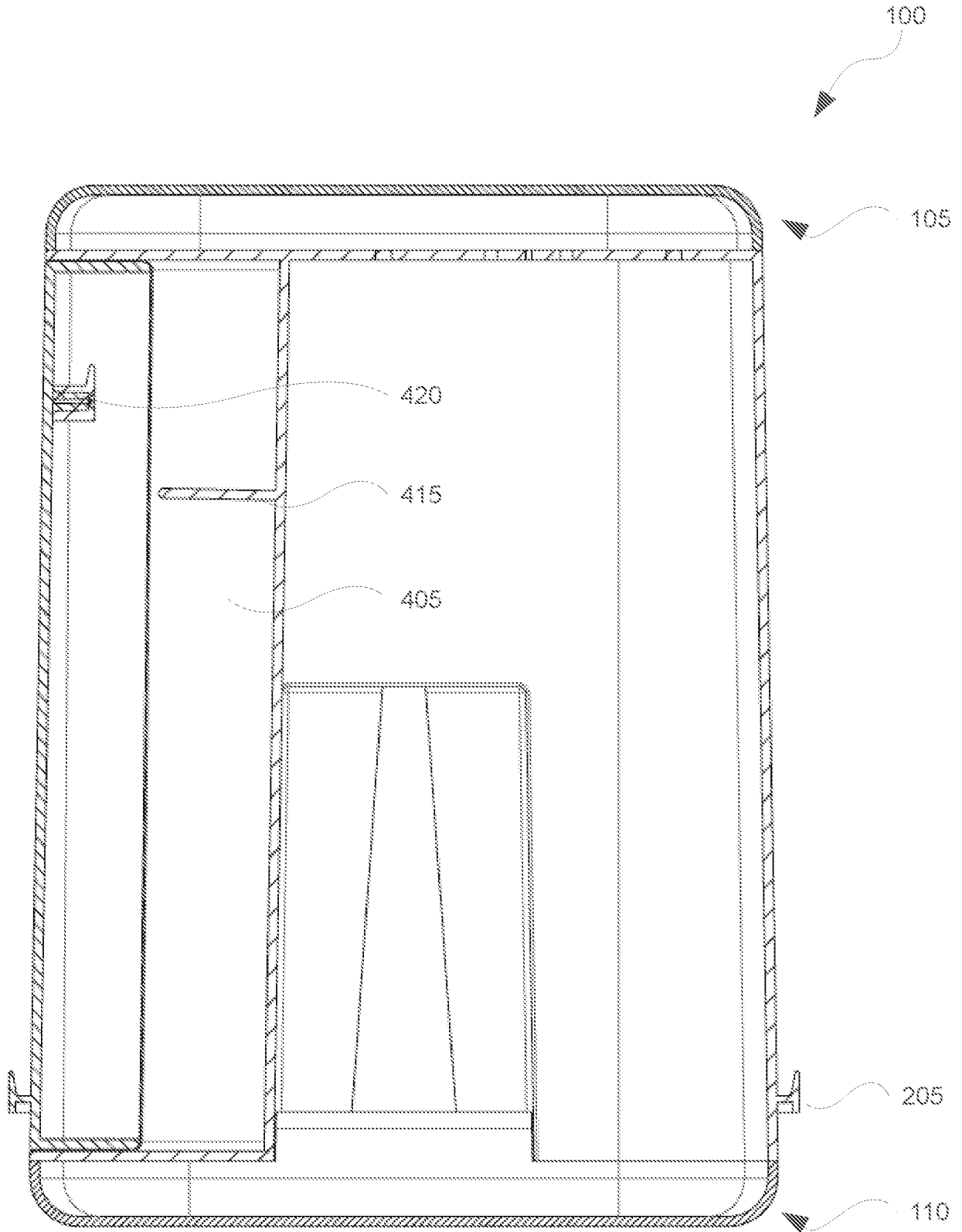


Figure 2

Fig. 3a

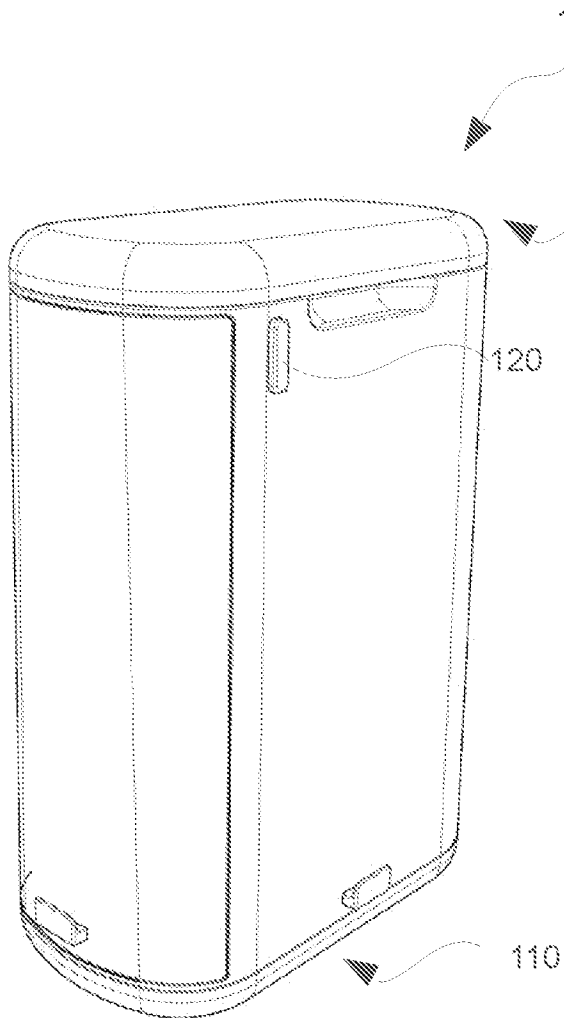


Fig. 3b

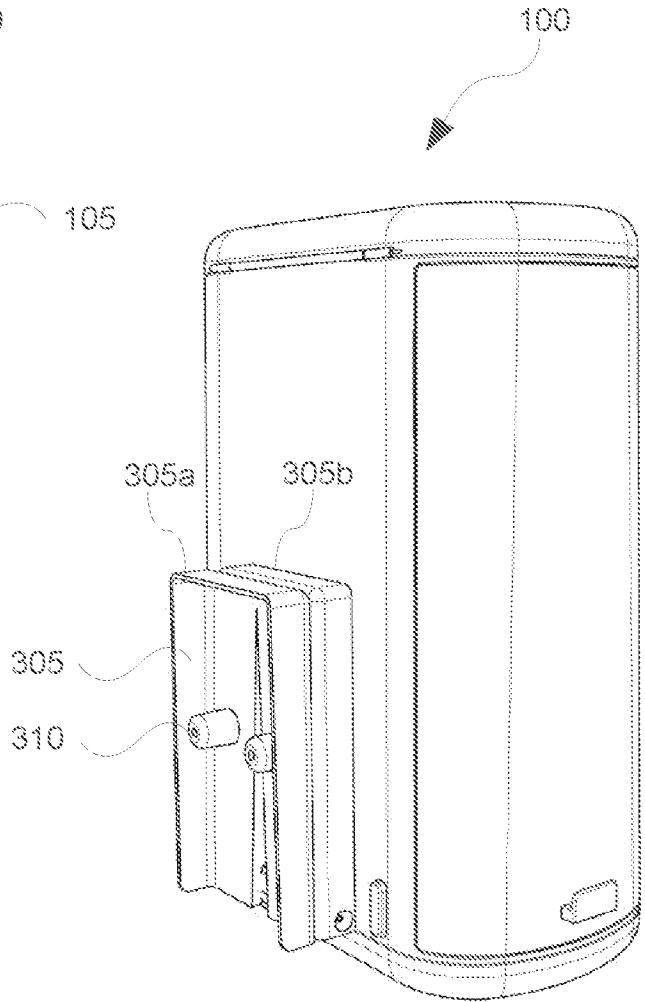


Figure 3

Fig. 4a

Fig. 4b

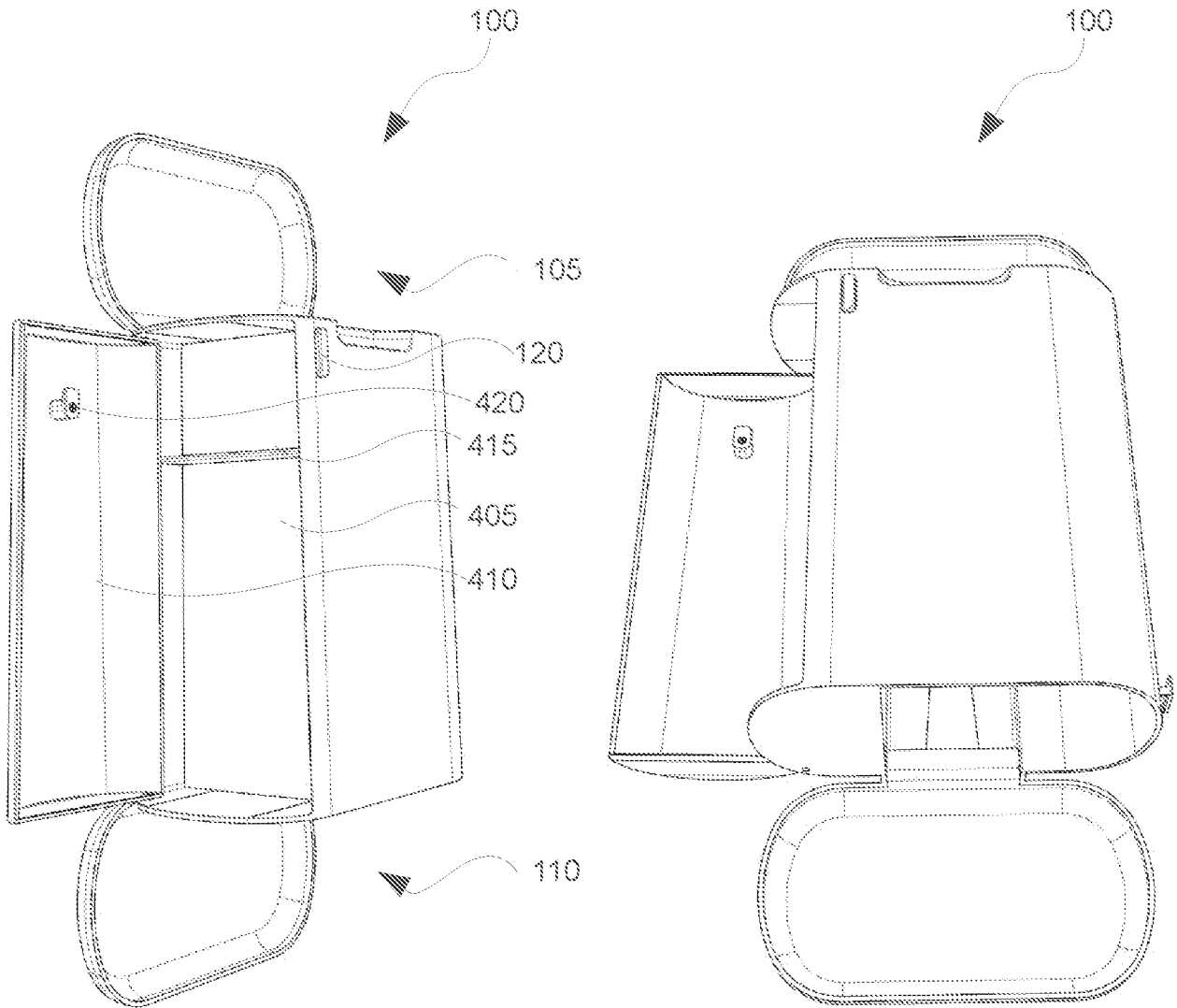


Figure 4

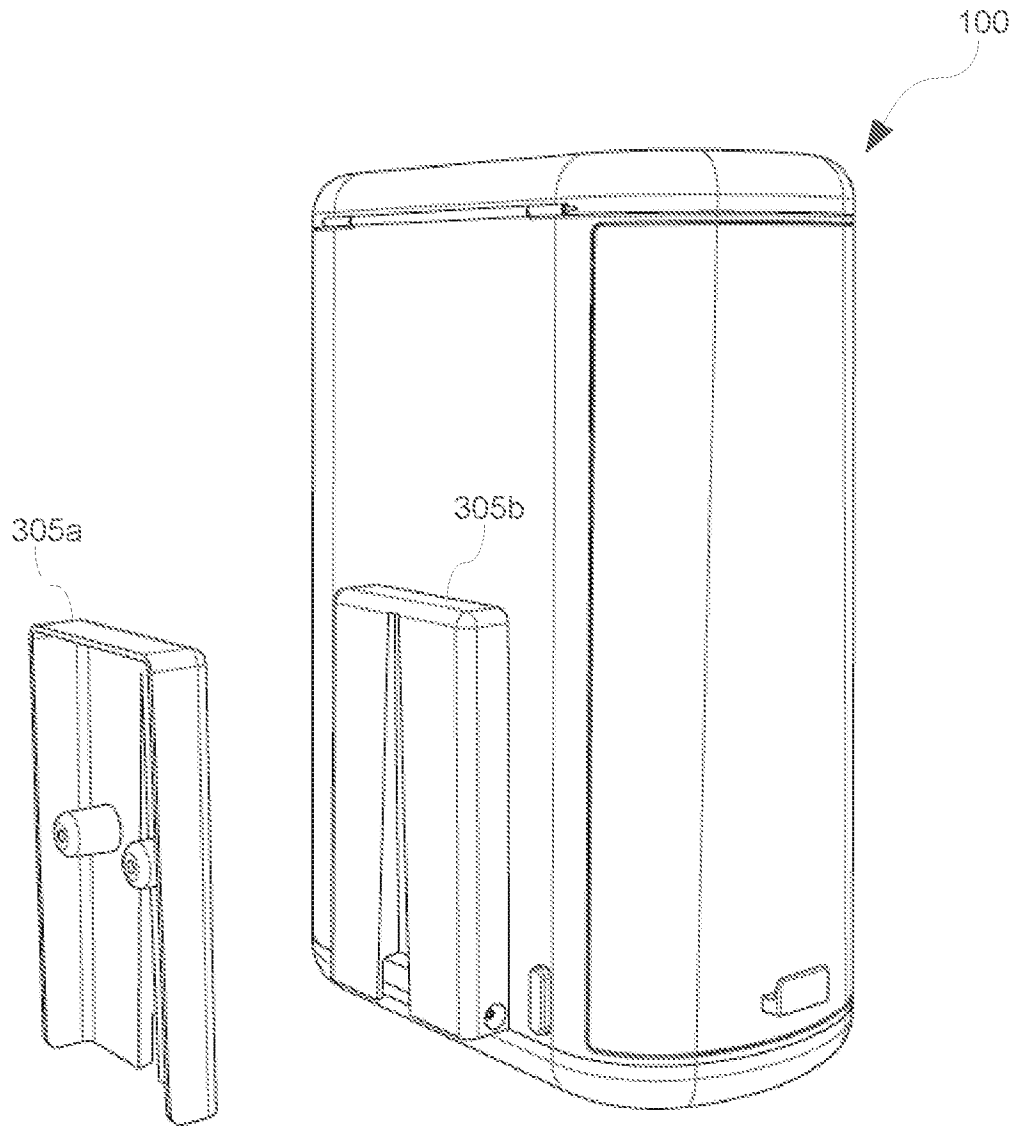


Figure 5

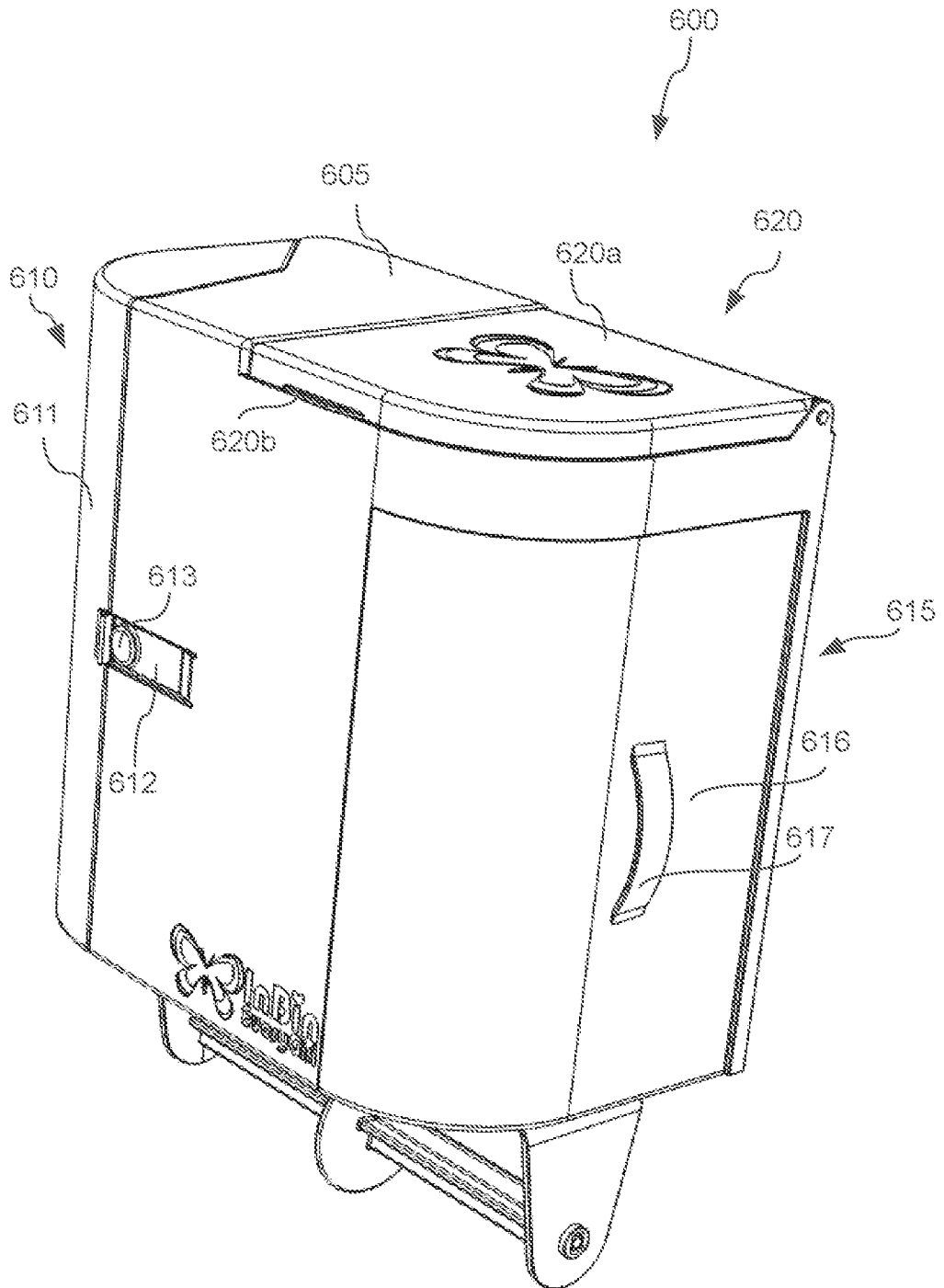


Figure 6

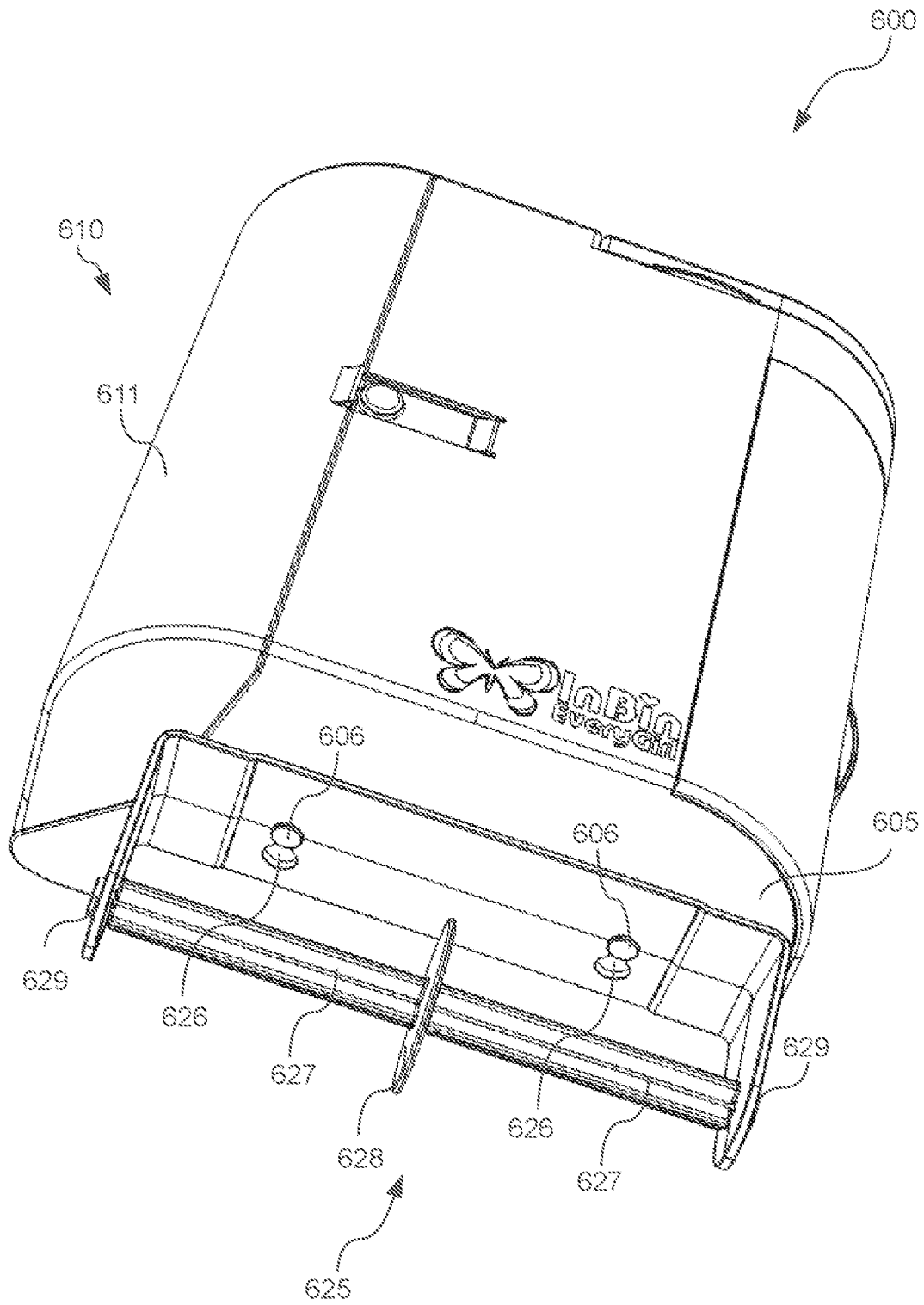


Figure 7

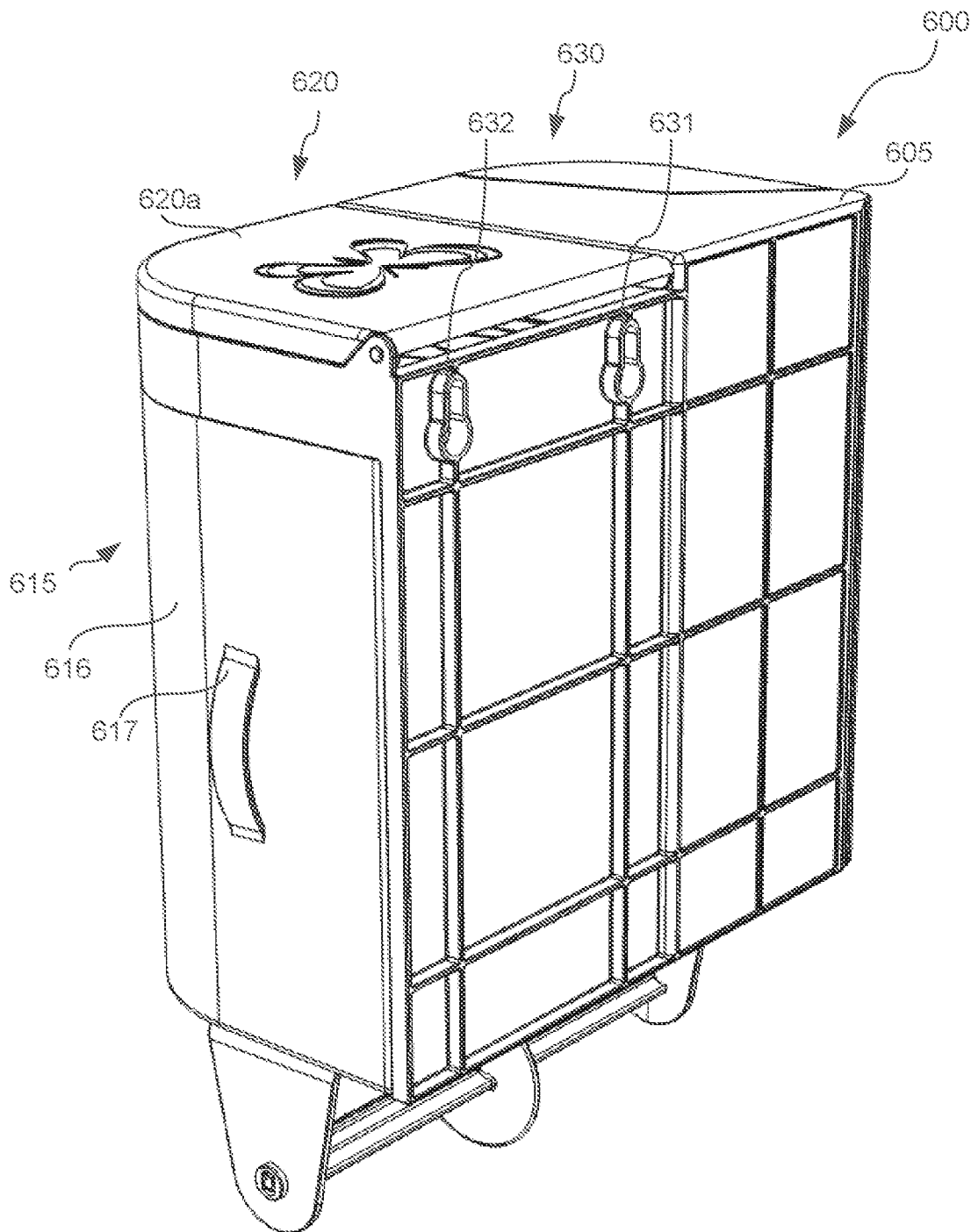


Figure 8

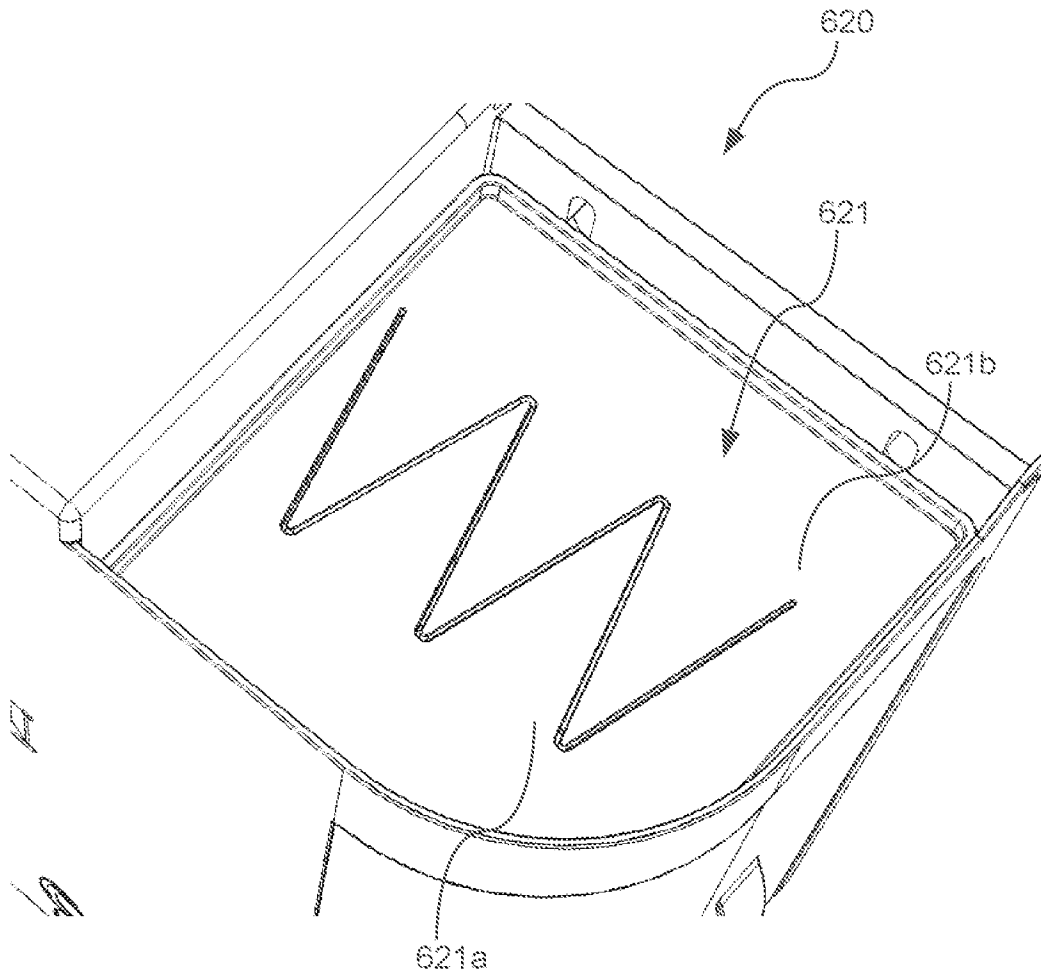


Figure 9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/AU2013/001042

A. CLASSIFICATION OF SUBJECT MATTER B65F 1/14 (2006.01) B65F 1/12 (2006.01) B65F 5/00 (2006.01)		
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)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) B65F1/- with keywords (sanitary, bin, eject, door, paper, holder) and the like terms		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	Documents are listed in the continuation of Box C	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> 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	"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	
"E" earlier application or patent but published on or after the international filing date	"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	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"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	
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family	
"P" document published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search 29 January 2014	Date of mailing of the international search report 29 January 2014	
Name and mailing address of the ISA/AU AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA Email address: pct@ipaaustralia.gov.au Facsimile No.: +61 2 6283 7999	Authorised officer Aditya Angadi AUSTRALIAN PATENT OFFICE (ISO 9001 Quality Certified Service) Telephone No. 0399359624	

INTERNATIONAL SEARCH REPORT

International application No.

C (Continuation).

DOCUMENTS CONSIDERED TO BE RELEVANT

PCT/AU2013/001042

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2009/0223993 A1 (LORENZATI) 10 September 2009 Figures 1-9, abstract, paragraphs [0027]	1-57
X	US 2006/0151519 A1 (WHITE) 13 July 2006 Figures 2b, 6-7, abstract	1-57
X	CA 2757878 A1 (COMERFORD) 17 May 2012 Figures 1-12, abstract, page 8 lines 12-14	1-57

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU2013/001042

This Annex lists known patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document/s Cited in Search Report		Patent Family Member/s	
Publication Number	Publication Date	Publication Number	Publication Date
US 2009/0223993 A1	10 Sep 2009	US 2009223991 A1	10 Sep 2009
		US 2009223992 A1	10 Sep 2009
		US 2009223993 A1	10 Sep 2009
		WO 2009110920 A1	11 Sep 2009
		WO 2010126859 A1	04 Nov 2010
US 2006/0151519 A1	13 Jul 2006	None	
CA 2757878 A1	17 May 2012	US 2012228322 A1	13 Sep 2012

End of Annex

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

Form PCT/ISA/210 (Family Annex)(July 2009)