

SLIDER PACKAGING STRUCTURE

Technical Field

The present invention relates generally to the field of consumer goods packaging. More particularly, it relates to a package having a slider for ease in removing goods from the package.

Background of the Invention

In the competitive world of consumer goods, packaging plays a pivotal role in not only attracting buyers but also ensuring the protection of goods as they pass from manufacturing to the hands of the consumers. A significant issue that has been observed with many packaging solutions that contain a set of articles is the lack of effective protection for the remaining articles in the set once one item is removed from the package.

Many packaging designs are geared towards appealing presentation and easy access to the first item in the set. However, once the initial item is taken out, the packaging often fails to adequately secure the remaining items. This can lead to unnecessary wastage as the exposed items are vulnerable to damage, contamination, or spillage.

From a consumer perspective, the absence of protective packaging for remaining items can be frustrating. It forces consumers to either use the remaining items quickly or resort to alternative, often makeshift, storage solutions, which can be both inconvenient and messy.

In cases where the remaining items are exposed and subsequently go to waste, this not only affects consumers but also has environmental implications. Increased waste due to inadequate packaging can contribute to environmental concerns.

In view thereof, it is therefore evident that a demand exists for packaging solutions that not only fulfil the roles of product presentation and convenient item removal from a set, but which also enhance the protection of the remaining items until they are used. It is desirable to explore innovative designs that integrate features such as resealable or reclosable elements that allow easy partial removal of items into the package. Such an approach would not only improve the user experience but also align with environmental objectives, leading to reduced waste and potentially enhance in overall product quality.

Accordingly, it is an object of the invention to provide a package that ameliorates at least some of the problems of existing packaging designs.

Summary of the Invention

According to a first aspect of the invention, there is provided a package for consumer goods, said package comprising: at least one housing adapted to contain goods loaded into said package, said housing comprising at least two side panels and one or more access ends; at least one slider panel movably insertable into, and withdrawable from, said housing via said access ends; wherein said slider panel comprises a base which movably carries said goods and is thereby adapted to move said goods within said housing; and one or more perforated taps located on one or more of said side panels, said taps adapted to enable access and removal of said goods that are located adjacent said taps.

The advantage of the embodiments in accordance with the invention as summarised above, as compared with the prior art, is that the package provides ease of retrieval for the packaged goods. By incorporating a slider panel with a base within the package, manufacturers ensure that consumers can effortlessly remove the goods without the need to tilt, shake, or struggle with the packaging. This feature is particularly useful for items that need to be accessed individually while keeping the remaining goods secure, and when customers want to inspect the goods without fully opening the packaging. The present package can be used for batteries, hooks, candies, cigarettes, cigars, or other items which are sold in sets in the market.

Preferably, said housing is defined by a front panel, a first side panel, a second side panel, a back panel, a top panel, and a bottom panel of the package. Preferably, the perforated taps are placed on any part of any one or more of said top panel, bottom panel, first side panel, or second side panel of said housing.

Preferably, said top panel comprises a first-member flap, which is foldably connected to the upper edge of the front panel, a second-member flap, which is foldably connected to the upper edge of the first side panel, and a third-member flap, which is foldably connected to the upper edge of the second side panel. Preferably, said first-member flap has a foldably extended end which is insertable into a slit created by the second- and third-member flaps when the second- and third-member flaps are folded inwards.

Preferably, wherein the slider panel has one or more protrusions adapted to act as a handle that can be used for pulling said slider panel outwards from said housing. Preferably, the

perforated tap is adapted to be reclosed after removal of one or more of said goods. More preferably, the slider panel has a hole adapted to enable display or storage of the package.

Preferably, said slider panel extends substantially along the length of said housing adjacent one of said panels and at least partially along the length of an opposing panel thereby forming a U-shaped or hook-shaped configuration, said configuration adapted to serve as a base for goods contained in the package.

Alternatively, said package comprises: two housings adapted to contain goods loaded into said package, said housings comprising at least two side panels and one or more access ends; two slider panels, comprising a first slider panel and a second slider panel, that are placed back-to-back to each other, movably insertable into, and withdrawable from, said housings.

Preferably, the two housing sections comprise a first housing and a second housing placed back-to-back to each other in the package, wherein the first housing is defined by a front panel, a first half of the first side panel, a first half of the second side panel and the first slider panel; and the second housing is defined by the second slider panel, a second half of the first side panel, a second half of the second side panel and a back panel of the package. Advantageously, each of the housings has a top panel, each comprising a three-member flap as defined above.

Preferably, in the first housing, the first-member flap of the first top panel is foldably connected to the upper edge of the front panel, the second-member flap of the top panel is foldably connected to the upper edge of the first half of the first side panel, and the third-member flap of the top panel is foldably connected to the upper edge of the first half of the second side panel. More preferably, the first-member flap is adapted to close a gap created between the front panel, the first slider panel, the first half of the first side panel and the first half of the second side panel.

Advantageously, in the second housing section, the first-member flap of the second top panel thereof is foldably connected to the upper edge of the back panel, the second-member flap is foldably connected to the upper edge of the second half of the first side panel, and the third-member flap is foldably connected to the upper edge of the second half of the second side panel.

Preferably, the first-member flap has a length that reaches the upper edge of the second slider panel and is thereby adapted to close the gap created between the second slider panel, the second half of the first side panel, the second half of the second side panel and the back panel.

Preferably, the slider panel has a hole adapted to enable display or storage of the package, and said slider panel further comprises: a two-member foldably connectable flap containing two complementary parts, foldably connected to a hole of the slider panel, said two-member foldably connectable flap adapted to prevent the slider panel from sliding into the housing when the two complementary parts thereof are engaged with each other; and a perforated line adjacent a protruding end of the slider panel, whereby the slider panel can be reduced in size by cutting along said perforated line.

Preferably, said two complementary parts comprise a first member flap, which is foldably connected to one side of the hole of the slider panel, and the second member flap, which is foldably connected to the other side of the hole of the slider panel wherein the first member flap has a protruding end, and the second member flap is adapted to receive and resiliently engage with the protruding end of said first member flap.

Preferably, said perforated taps are located in one or more of said top, middle, bottom, or any part of the first side panel and/or the second side panel of said housings and said housings, slider panels and bases are made of cardboard, wood, plastic, or any suitable material.

According to another aspect of the invention, there is provided a method for removing an item from the package, said method comprising the steps of:

- a) loading goods into the housing via the top panel thereof so that they are located on the base of said slider panel or panels;
- b) closing said top panel;
- c) pulling said slider panel outward until one of the goods supported by the base of the slider panel is located adjacent a perforated tap in a first side panel or a second side panel;
- d) removing said goods through the perforated tap by opening said perforated tap;
- e) repeating steps c) to d) until the desired number of goods have been removed; and
- f) closing the perforated tap.

According to another aspect of the invention, there is provided a method for removing goods from the package, wherein the method comprises:

- a. loading goods into the housing via the top panel thereof so that they are located on the base of said slider panel or panels;
- b. closing said top panel;
- c. pulling at least one of said slider panels outward until one of the goods supported by the base of the slider panel is located adjacent a perforated tap in a first side panel or a second side panel;
- d. removing said goods through the perforated tap by opening the perforated tap;
- e. repeating steps c) to d) until the desired number of goods have been removed;
- f. closing the perforated tap;
- g. engaging the first-member flap with the second-member flap to prevent the slider panel from sliding in to said housing; and
- h. cutting off the excess slider panel along said perforated line.

Alternatively, in the method described above, step h) precedes step g).

According to another aspect of the invention, there is provided a method for loading goods into the package, the method comprising the steps of:

- a. loading said goods in sets of 5 or fewer into the housing via said top panel thereof;
- b. inserting a flat item into said horizontal hole in said slider panel to catch said goods as they are loaded;
- c. removing said insertable flat item from said horizontal hole, thereby allowing the set of goods being loaded to descend and fill the housing section of the package onto the base of the slider panel;
- d. repeating steps a. to c.

Preferably, in the method described above, the insertable flat item is a board or a stick.

Now will be described, by way of specific, non-limiting examples, preferred embodiments of the invention with reference to the drawings.

Brief Description of Drawings

Illustrative embodiments of the present invention will now be described with reference to the accompanying figures, in which:

Figure 1A shows a right perspective view of the package (1) housing fewer than ten items (19).

Figure 1B shows a left perspective view of the package (1) housing fewer than ten items (19).

Figure 2A shows a right perspective view of the slider panel (15).

Figure 2B shows a left perspective view of the slider panel (15).

Figure 3 shows an assembly comprising of a package (1), a slider panel (15) and items (19) fewer than ten in number.

Figure 4A shows a right perspective view of the package (1a) housing more than ten items (19a).

Figure 4B shows a left perspective view of the package (1a) housing more than ten items (19a).

Figure 5A shows a right perspective view of two slider panels (15a and 15b) placed back-to-back to each other inside the package (1a).

Figure 5B shows a left perspective view of two slider panels (15a and 15b) placed back-to-back to each other inside the package (1a).

Figure 6 shows an assembly comprising of a package (1a), two slider panels (15a and 15b) placed back-to-back to each other inside the package (1a) and items (19a) more than ten in number.

Figure 7A shows a right perspective view of another embodiment of the package (1b) housing fewer than ten items (19b).

Figure 7B shows a left perspective view of another embodiment of the package (1b) housing fewer than ten items (19b).

Figure 8A shows a right perspective view of another embodiment of the slider panel (15c).

Figure 8B shows a left perspective view of another embodiment of the slider panel (15c).

Figure 9 shows an assembly comprising of the package (1b), slider panel (15c) and items (19b) fewer than ten in number.

Figures 10, 10A and 10B show the mechanism of loading of items (19a) (involving more than 10 items) into the housing section (15a or 15b).

- Figure 10 shows the initial stage showing all the parts in the assembly.
- Figure 10A shows the initial loading of 5 items (19a) into the housing section (15a or 15b).
- Figure 10B shows the further loading of items (19a) into the housing section (15a or 15b).

Figure 11A shows a right perspective view of another embodiment of the package (1c).

Figure 11B shows a left perspective view of another embodiment of the package (1c).

Figure 12A shows a right perspective view of another embodiment of the slider panel (15d) with a perforated line (25) at the top portion thereof.

Figure 12B shows a left perspective view of another embodiment of the slider panel (15d) with a perforated line (25) at the top portion thereof.

Figure 13A shows an assembly comprising the package (1c), the slider panel (15d) and items (19c) inside the package (1c).

Figure 13B shows an assembly comprising the back view of the package (1c), the slider panel (15d) and items (19c) inside the package.

Detailed Description of the Invention

The present invention relates to a package that provides ease of retrieval for packaged items. By incorporating a slider panel with a base within the package, manufacturers ensure that consumers can effortlessly remove the item without the need to tilt, shake, or struggle with the packaging. This feature is particularly useful for items that need to be accessed individually while keeping the remaining items secure, and when customers want to inspect the item without fully opening the packaging. The present package can be used for batteries, hooks, candies, cigarettes, cigars, or other items which are sold in sets in the market.

Referring to Figures 1A, 1B, 2A, 2B and 3, there is shown an exemplary embodiment of the present invention. There is shown a package (1) having a front panel (2), a first side panel (3), a second side panel (4), a back panel (12), a top panel (5), and a bottom panel (14). The front panel (2) of the package (1) may have or may not have a hole (11), allowing some parts of the items (19) within the package to be visible from the outside.

The top panel (5) can be opened and closed, and it is particularly useful for loading items (19) into the package (1). Particularly, the top panel (5) of the package (1) comprises a three-member flap (6, 7, 8). The first-member flap (6) is foldably connected to the upper edge of the front panel (2) and of the same width as the front panel (2), the second-member flap (8) is foldably connected to the upper edge of the first side panel (3) and of the same width as the first side panel (3), and the third-member flap (7) is foldably connected to the upper edge of the second side panel (4) and of the same width as the second side panel (4).

When loading items (19) into the package (1), the three-member flap (6, 7, 8) is folded outward to expose a gap created between the front panel (2), the back panel (12), the first side panel (3) and the second side panel (4). After the loading process, the second- and third-member flaps (7, 8) are folded inward then followed by the first-member flap (6) to close the gap created between the front panel (2), the back panel (12), the first side panel (3) and the second side panel (4). The first-member flap (6) has a foldably extended end, and whereby the foldably extended end is insertable into a slit, said slit being formed by the second- and third-member flaps (8, 7) and the back panel (12) when the second- and third-member flaps (7, 8) are folded inwards to close the said gap created between the front panel (2), the back panel (12), the first side panel (3) and the second side panel (4).

Alternatively, the first-member flap (6) may not have a foldably extended end but has a length sufficient to reach the edge of the back panel (12), thereby to close the said gap created between the front panel (2), the back panel (12), the first side panel (3) and the second side panel (4). The lengths of the second and third-member flaps (8, 7) are shorter than, or of the same width as, the front panel (2). As a further alternative, the top panel may consist of one, two or more than three flaps serving the same purpose.

The bottom panel (14) of the package (1) serves as the support for the entire package (1) and is normally always closed. However, the bottom panel (14) can also be opened, if necessary, in case the items (19) in the package (1) become stuck inside and don't move. The bottom panel (14) may also comprise a three-member flap (14e, 14f, 14g) similar to the top panel (5) or one, two, or more than three flaps, which can also be opened or closed. However, in

alternative embodiments, the bottom panel (14) can also be glued or pasted either permanently or temporarily at the end of the first-member flap (14e).

All these panels [a front panel (2), a first side panel (3), a second side panel (4), a top panel (5), a back panel (12), and a bottom panel (14)] create a space in between which serves as a housing section (13) to contain the items (19) loaded into the package (1). The top panel (5) is opened when loading items (19) into the housing section (13) of the package (1), and closed after the items (19) have been loaded. In alternative embodiments, the top panel (5) can be glued or pasted temporarily after each loading process.

The package (1) also comprises one or more perforated taps (9, 10) on either or both the first side panel (3) and the second side panel (4) thereof. The perforated tap can be placed on the top, middle, bottom, or any part of the first side panel (3) and/or the second side panel (4) of the package (1). The first side panel (3) and/or the second side panel (4) can have more than one perforated taps (9, 10). This allows for easy removal of items from any desired section of the package (1).

A slider panel (15) is movably insertable into the package (1) at the back portion thereof, running parallel to the back panel (12), allowing for easy outward or upward movement of the slider panel (15). The slider panel (15) is longer than the back panel (12) and has a portion which protrudes from the back panel (12) and such protruding portion (18) acts as a handle for pulling the slider panel (15) outwards. The slider panel (15) also has a base (16) which can be placed on top, middle or any part of the slider panel (15). This allows for customization based on the size, shape, and weight of the item (19).

The items inside the housing section (13) of the package (1) are placed sequentially above the base (16) and can be slid outwards when the slider panel (15) is pulled outward. The slider panel (15) and its base (16) must be strong enough to support the items (19), to allow the items (19) to be slid outwards with ease, preventing jams or breakage, and to withstand repetitive sliding motions of the slider panel (15) without wear or damage.

The width and length of the base (16) should be enough to fit within the housing section (13) and to allow for easy pulling of the slider panel (15) outward. The thickness of the base (16) should be sufficient to provide the necessary sturdiness for supporting the items placed above it sequentially. The housing section, slider panel (15) and the base (16) can be made of cardboard, wood, plastic, or any suitable material.

The base (16) is slid outwards by the slider panel (15) until one of the items (19) supported by the base (16) reaches a perforated tap (9, 10) from either or both the first side panel (3) and second side panel (4) enabling easy removal of the item (19) through the perforated tap (9, 10). These perforated taps (9, 10) enable partial or complete removal of the item (19) while maintaining the integrity of the package (1).

Further, the perforated tap (9, 10) has also a reclosable nature. This means that, every after an item is removed, the perforated tap (9, 10) can be easily closed again. This feature maintains the integrity of the package and ensures that the remaining items (19) stay protected until the next use. Furthermore, the protruding portion (18) on the slider panel (15) has a hole (17) that allows for the package (1) to be hung for display or for storage. The item (19) can be showcased on store shelves or displays without the need for additional packaging materials.

The above-described package (1) can accommodate a minimum of two items (19) but fewer than ten items. If there are more than ten (10) items (19a), in an alternative embodiment two (2) slider panels (15a, 15b) are utilized as shown in Figures 4A, 4B, 5A, 5B and 6, with each slider panel (15a; 15b) having its own base (16a, 16b).

The two (2) slider panels (15a, 15b) are positioned back-to-back to each other and placed in the center of the package (1a). The package (1a) as shown in Figure 4A has basically the same parts as the package (1) described in the previous paragraphs. However, there are two (2) top panels (5a, 5b) of the package (1a) and each top panel comprises a three-member flap (6a, 7a, 8a or 6b, 7b, 8b). The package (1a) also comprises two housing sections (13a, 13b) whereby the first housing section (13a) is created between the front panel (2a), first half of the first side panel (3a), first half of the second side panel (4a) and the first slider panel (15a). The second housing section (13b) is formed at the back of the first housing section (13a) whereby the second housing section (13b) is created between the second slider panel (15b), the second half of the first side panel (3a), the second half of the second side panel (4a) and the back panel (12a). Each housing section (13a, 13b) has its own top panel (5a, 5b), the first top panel (5a) comprises a three-member flap (6a, 7a, 8a) and the second top panel (5b) comprises another three-member flap (6b, 7b, 8b).

In the first housing section (13a), the first-member flap (6a) of the top panel (5a) is foldably connected to the upper edge of the front panel (2a) and of the same width as the front panel (2a), the second-member flap (7a) is foldably connected to the upper edge of the first half of the first side panel (3a), and the third-member flap (8a) is foldably connected to the upper edge of the first half of the second side panel (4a). When loading items (19a) into the first

housing section (13a) of the package (1a), the three-member flap (6a, 7a, 8a) is folded outward to expose a gap created between the front panel (2a), the first slider panel (15a), the first half of the first side panel (3a) and the first half of the second side panel (4a).

After the loading process, the second- and third-member flaps (7a, 8a) are folded inward then followed by the first-member flap (6a) to close the said gap created between the front panel (2a), the first slider panel (15a), the first half of the first side panel (3a) and the first half of the second side panel (4a). The length of the first-member flap (6a) is sufficient to close the gap created between the edges of the front panel (2a) and the first slider panel (15a), wherein the first-member flap (6a) has a foldably extended end, and whereby the foldably extended end is insertable to the slit formed by the second- and third-member flaps (7a, 8a) and the first slider panel (15a) when the second- and third-member flaps (7a, 8a) are folded inwards to close the said gap.

Alternatively, the first-member flap (6a) may not have a foldably extended end but a length that reaches the edge of the first slider panel (15a) sufficient to close the said gap created between the front panel (2a), the first slider panel (15a), the first half of the first side panel (3a) and the first half of the second side panel (4a). The lengths of the second and third-member flaps (7a, 8a) are shorter than the width of or of the same size as that of the front panel (2a). In alternative embodiments, the top panel (5a) can be glued or pasted temporarily after each loading process.

In the second housing section (13b), the first-member flap (6b) of the top panel (5b) is foldably connected to the upper edge of the back panel (12a) and of the same width as the back panel (12a), the second-member flap (7b) is foldably connected to the upper edge of the second half of the first side panel (3a), and the third-member flap (8b) is foldably connected to the upper edge of the second half of the second side panel (4a). When loading items (19a) into the second housing section (13b) of the package (1a), the three-member flap (6b, 7b, 8b) is folded outward to expose a gap created between the second slider panel (15b), the second half of the first side panel (3a), the second half of the second side panel (4a) and the back panel (12a).

After the loading process, the second- and third-member flaps (7b, 8b) are folded inward then followed by the first-member flap (6b) to close the said gap created between the back panel (12a), the second slider panel (15b), the second half of the first side panel (3a) and the second half of the second side panel (4a). The length of the first-member flap (6b) is sufficient to close the gap formed between the upper edges of the back panel (12a) and the second slider panel

(15b), wherein the first-member flap (6b) has a foldably extended end, and whereby the foldably extended end is insertable to the slit formed by the second- and third-member flaps (7b, 8b) and the back panel (12a) when the second- and third-member flaps (7b, 8b) are folded inwards to close the said gap.

Alternatively, the first-member flap (6b) may not have a foldably extended end but a length that reaches the upper edge of the second slider panel (12a) enough to close the said gap created between the second slider panel (15b), the second half of the first side panel (3a), the second half of the second side panel (4a) and the back panel (12a). The lengths of the second and third-member flaps (7b, 8b) are shorter than the width of or of the same size as that of the back panel (12a). In alternative embodiments, the top panel (5b) can be glued or pasted temporarily after each loading process.

The bottom panel (14a) of the package (1a) serves as the support for the entire package (1a) and is normally closed. However, the bottom panel (14a) can also be opened in case the items (19a) in the package (1a) become stuck inside and do not move. The bottom panel (14a) may also comprise a four-member flap which are folded inwards to close the gap created by the front panel (2a), first side panel (3a), second side panel (4a) and the back panel (12a). However, in some embodiments, the bottom panel (14a) can also be glued or pasted permanently or temporarily.

The package (1a) also comprises one or more perforated taps (9a, 9b, 10a, 10b) on either or both the first side panel (3a) and the second side panel (4a) thereof. The perforated tap can be placed on the top, middle, bottom, or any part of the first side panel (3a) and/or the second side panel (4a) of the package (1a). The first side panel (3a) and/or the second side panel (4a) can have more than one perforated taps (9a, 9b, 10a, 10b). This allows for easy removal of items (19a) from any desired section of the package (1a).

Each of the slider panels (15a, 15b) has a vertical hole (20, 20a) and a horizontal hole (21, 21a) in the middle thereof. The vertical hole (20, 20a) is useful for visual inspection of the items (19a) inside the housing of the package (1a), while the horizontal hole (21, 21a) facilitates the easy loading of the items (19a) into the housing sections (13a 13b) of the package (1a). See Figures 10, 10A and 10B for an illustration of the process of loading of more than ten items. This allows for automation of the loading process.

Figures 7A, 7B, 8A, 8B and 9 show another embodiment of the present inventive package (1b). As shown, the slider panel (15c) is extendable and can encase the items (19b) loaded

into the package (1b). This type of package (1b) supports heavier items (19b), typically fewer than ten in number. This package (1b) has similar parts as those of package (1) comprising a front panel (2b), a first side panel (3b), a second side panel (4b), a back panel (12b), a top panel (5c), and a bottom panel (14b). The front panel (2b) of the package (1b) may have or may not have a hole (11b), allowing some parts of the items (19b) within the package (1b) to be visible from the outside.

The top panel (5c) can be opened and closed, and it is particularly useful for loading items (19b) into the package (1b). Particularly, the top panel (5c) of the package (1b) also comprises a three-member flap (6d, 7d, 8d). The first-member flap (6d) is foldably connected to the upper edge of the front panel (2b) and is of the same width as the front panel (2b). The second-member flap (7d) is foldably connected to the upper edge of the first side panel (3b) and of the same width as the first side panel (3b). The third-member flap (8d) is foldably connected to the upper edge of the second side panel (4b) and of the same width as the second side panel (4b). The bottom panel (14b) of the package (1b) serves as the support for the entire package (1b) and is normally closed.

The bottom panel (14b) may also comprise a four-member flap (14c), which can also be opened or closed. The bottom panel (14b) can be opened, if necessary, in case the items (19b) in the package (1b) become stuck inside and do not move when the slider panel (15c) is pulled outward. However, in alternative embodiments, the bottom panel (14b) can also be glued or pasted closed, either permanently or temporarily, at the end of the first-member flap (6d).

All these panels [a front panel (2b), a first side panel (3b), a second side panel (4b), a top panel (5c), a back panel (12b), and a bottom panel (14b)] create a space between them which serves as a housing section (13c) to contain the items (19b) loaded into the package (1b). The top panel (5c) is opened when loading items (19b) into the housing section (13c) of the package (1b), and closed after the items (19b) have been loaded. In alternative embodiments, the top panel (5c) can be glued or pasted temporarily after each loading process.

The package (1b) also comprises one or more perforated taps (9c, 10c) on either or both the first side panel (3b) and the second side panel (4b) thereof. The perforated tap can be placed on the top, middle, bottom, or any part of the first side panel (3b) and/or the second side panel (4b) of the package (1b). The first side panel (3b) and/or the second side panel (4b) can have more than one perforated taps (9c, 10c). This allows for easy removal of items (19b) from any desired section of the package (1b).

A slider panel (15c) is movably insertable into the package (1b) at the back portion thereof, running parallel to the back panel (12b), allowing for easy outward or upward movement of the slider panel (15c). The slider panel (15c) is longer than the back panel (12b) and protrudes upwards beyond the back panel (12b). The protrusion serves as a handle for pulling the slider panel (15c) outward. The slider panel (15c) also extends in length at its lower end, and the extended end (23) stretches downwards until the bottom of the housing section (13c), and from the bottom of the housing section (13c), the extended end (23) foldably stretches back upwards in a manner that runs parallel to the front panel (2b), creating a U-shaped portion which serves as the base for the items (19b) that are loaded into the package (1b).

The items (19b) can be slid outwards when the slider panel (15c) is pulled outward. The slider panel (15c) must be strong enough to support the items (19b), to allow the items (19b) to be slid outwards with ease, preventing jams or breakage, and to withstand repetitive sliding motions of the slider panel (15c) without wear or damage. The width and length of the slider panel (15c) together with its extended end (23) should be enough to fit within the housing section (13c) to allow for easy pulling of the slider panel (15c) outward. The slider panel (15c) can be made of cardboard, wood, plastic, or any suitable material.

The slider panel (15c) is slid outwards along with its extended end until one of the items (19b) supported thereof reaches a perforated tap (9c, 10c) from either or both the first side panel (3b) and second side panel (4b) enabling easy removal of the item (19b) through the perforated tap (9c, 10c). These perforated taps (9c, 10c) enable partial or complete removal of the item (19b) while maintaining the integrity of the package (1b).

The slider panel (15c) offers stronger support especially for larger-sized items (19b) when the slider panel (15c) is pulled outward.

Furthermore, the perforated tap (9c, 10c) has also a reclosable nature. This means that, after an item is removed, the perforated tap (9c, 10c) can be easily closed again. This feature maintains the integrity of the packaging and ensures that the remaining items (19b) stay protected until the next use. Furthermore, the protrusion (18b) on the upper end of the slider panel (15c) has a hole (26c) that allows for the package (1b) to be hung for display or for storage. The item (19b) can be showcased on store shelves or displays without the need for additional packaging materials.

In another embodiment as shown in Figures 11A, 11B, 12A, 12B, 13A, and 13B, the package (1c) has one slider panel (15d) wherein the slider panel (15d) has a base (16c) that is

composed of two bases connected to each other side by side. The slider panel (15d) is placed in the center of the package (1c).

The package (1c) as shown in Figure 11A and 11B has two (2) top panels (5d, 5e) of the package (1c) and each of these top panels (5d, 5e) comprises a three-member flap (6e, 7e, 8e or 6f, 7f, 8f). The package (1c) also comprises two housing sections (13d, 13e) whereby the first housing section (13d) is created between the front panel (2c), first half of the first side panel (3c), first half of the second side panel (4c) and the slider panel (15d). The second housing section (13e) is formed at the back of the first housing section (13d) whereby the second housing section (13e) is created by the slider panel (15d), the second half of the first side panel (3c), the second half of the second side panel (4c) and the back panel (12c). Each housing section (13d, 13e) has its own top panel (5d, 5e), the first top panel (5d) comprises a three-member flap (6e, 7e, 8e) and the second top panel (5e) comprises another three-member flap (6f, 7f, 8f).

In the first housing section (13d), the first-member flap (6e) of the top panel (5d) is foldably connected to the upper edge of the front panel (2c) and of the same width as the front panel (2c), the second-member flap (7e) is foldably connected to the upper edge of the first half of the first side panel (3c), and the third-member flap (8e) is foldably connected to the upper edge of the first half of the second side panel (4c).

When loading items (19c) into the first housing section (13d) of the package (1c), the three-member flap (6e, 7e, 8e) is folded outward to expose a gap created between the front panel (2c), the slider panel (15d), the first half of the first side panel (3c) and the first half of the second side panel (4c). After the loading process, the second- and third-member flaps (7e, 8e) are folded inward then followed by the first-member flap (6e) to close the said gap created between the front panel (2c), the slider panel (15d), the first half of the first side panel (3c) and the first half of the second side panel (4c). The length of the first-member flap (6e) is sufficient to close the gap created between the edges of the front panel (2c) and the slider panel (15d), wherein the first-member flap (6e) has a foldably extended end, and whereby the foldably extended end is insertable into the slit formed by the second- and third-member flaps (7e, 8e) and the slider panel (15d) when the second- and third-member flaps (7e, 8e) are folded inwards to close the said gap.

Alternatively, the first-member flap (6e) may not have a foldably extended end but sufficient length to reach the edge of the slider panel (15d) thereby to close the said gap created between the front panel (2c), the slider panel (15d), the first half of the first side panel (3c) and

the first half of the second side panel (4c). The lengths of the second and third-member flaps (7e, 8e) are shorter than the width or of the same size of the front panel (2c). In alternative embodiments, the top panel (5d) can be glued or pasted temporarily after each loading process.

In the second housing section (13e), the first-member flap (6f) of the top panel (5e) is foldably connected to the upper edge of the back panel (12c) and of the same width as the back panel (12c), the second-member flap (7f) is foldably connected to the upper edge of the second half of the first side panel (3c), and the third-member flap (8f) is foldably connected to the upper edge of the second half of the second side panel (4c).

When loading items (19c) into the second housing section (13e) of the package (1c), the three-member flap (6f, 7f, 8f) is folded outward to expose a gap created between the slider panel (15d), the second half of the first side panel (3c), the second half of the second side panel (4c) and the back panel (12c). After the loading process, the second- and third-member flaps (7f, 8f) are folded inward then followed by the first-member flap (6f) to close the said gap created between the back panel (12c), the slider panel (15d), the second half of the first side panel (3c) and the second half of the second side panel (4c). The length of the first-member flap (6f) is sufficient to close the gap formed between the upper edges of the back panel (12c) and the slider panel (15d), wherein the first-member flap (6f) has a foldably extended end, and whereby the foldably extended end is insertable into the slit formed by: the second- and third-member flaps (7f, 8f) and the back panel (12c) when the second- and third-member flaps (7f, 8f) are folded inwards to close the said gap.

Alternatively, the first-member flap (6f) may not have a foldably extended end but has a length that reaches the upper edge of slider panel (15d) sufficient to close the said gap created between the slider panel (15d), the second half of the first side panel (3c), the second half of the second side panel (4c) and the back panel (12c). The lengths of the second and third-member flaps (7f, 8f) are shorter than the width or of the same size as that of the back panel (12f). In some embodiments, the top panel (5e) can be glued or pasted temporarily after each loading process.

The bottom panel (14d) of the package (1c) serves as the support for the entire package (1c) and is normally closed. However, the bottom panel (14d) can also be opened in case the items (19c) in the package (1c) become stuck inside and do not move. The bottom panel (14d) may also comprise of a four-member flap which are folded inwards to close the gap created by the front panel (2c), first side panel (3c), second side panel (4c) and the back panel (12c).

However, in some embodiments, the bottom panel (14d) can also be glued or pasted permanently or temporarily.

The package (1c) also comprises one or more perforated taps (9e, 9d, 10e, 10d) on either or both the first side panel (3c) and the second side panel (4c) thereof. The perforated tap can be placed on the top, middle, bottom, or any part of the first side panel (3c) and/or the second side panel (4c) of the package (1c). The first side panel (3c) and/or the second side panel (4c) can have more than one perforated taps (9e, 9d, 10e, 10d). This allows for easy removal of items (19c) from any desired section of the package (1c).

The slider panel (15d) has a vertical hole (20b) in the middle thereof. The vertical hole (20b) is useful for visual inspection of the items (19c) inside the housing of the package (1c).

The slider panel (15d) has a 2-member foldably connectable flap (24a, 24b) containing two complementary parts such as the first member flap (24a), which is foldably connected to one side of the hole (20b) of the slider panel (15d), and the second member flap (24b), which is foldably connected to the other side of the hole (20b) of the slider panel. The first member flap (24a) has a protruding end, and the second member flap (24b) has an uneven end designed to receive the protrusion from the first member flap (24a) when they are engaged with each other. The two-member foldably connectable flap (24a, 24b) prevents the slider panel (15d) from sliding back down when the two member flaps are engaged with each other. This minimizes empty spaces in the package (1c) and ensures that the remaining items (19c) inside the package (1c) remain horizontally aligned or balanced inside the housing section.

The slider panel (15d) also has another hole (26d) at its topmost portion, and below said hole (26d), there is a perforated line (25). The slider panel (15d) can be reduced in size by cutting along the said perforated line (25).

This package (1c) may also have two slider panels positioned back-to-back to each other and placed in the center of the package (1c). The two slider panels will have the same features as the slider panel (15d) as mentioned above.

The package (1c) has the advantage of preventing the remaining items inside the package (1c) from moving around the housing (13d,13e) during storage.

All the foregoing packages can be made of cardboard, wood, plastic or any suitable material.

It can be appreciated that the package according to the present invention may operate in accordance with the following methods:

A method for removing a item (19, 19b) from the package (1, 1b) as described above, wherein the method comprises the following steps:

- a) Loading items (19, 19b) into the housing sections (13, 13c) of the package (1, 1b) by opening the top panel (5, 5c) thereof;
- b) Closing the top panel (5, 5c) of the package (1, 1b) after the items (19, 19b) are loaded into the package (1, 1b);
- c) Pulling a slider panel (15, 15c) outward until one of the items supported by the base (16) or extended end (23) of the slider panel (15, 15c) reaches a perforated tap (9, 10, 9c, 10c) from a first side panel (3, 3b) or a second side panel (4, 4b);
- d) Removing one item (19, 19b) through the perforated tap (9, 10, 9c, 10c) by opening the perforated tap (9, 10, 9c, 10c) from either the first side panel (3, 3b) or the second side panel (4, 4b);
- e) Repeating steps c) to d) until the desired number of items (19, 19b) is removed;
- f) Closing the perforated tap (9, 10, 9c, 10c).

The above method operates best for package (1) or (1b) with fewer than ten items. The loading process involving fewer than ten items is typically straightforward.

On the other hand, the procedure for loading more than ten items differs from the procedure for loading the package with fewer than ten items. Below are the steps involved for loading more than ten items (19a) into the package (please refer to Figures 4A, 4B, 5A, 5B, 10, 10A and 10B):

1. Loading items in sets (a set of 5 or fewer items) (19a) into the housing section (13a, 13b) of the package (1a) by opening the top panel (5a, 5b) thereof;
2. Inserting a flat item (22) such a board or a stick into the horizontal hole (21, 21a) of one slider panel (15a, 15b) to catch the items (19a) as they are loaded into the housing section (13a, 13b) of the package (1a);
3. Pulling out the insertable flat item (22) from the horizontal hole (21, 21a), allowing the set of items (19a) being loaded to descend and fill the housing section (13a, 13b) of the package (1a) onto the base (16a, 16b) of the slider panel (15a, 15b);
4. Repeating steps 1 to 3 until the housing sections (13a, 13b) of the package (1a) reach their maximum capacities.

The insertable flat item (22) should be about the same width as the horizontal hole (21, 21a).

The below method can be performed when more than two items (19c) are involved.

A method for removing a item (19c) from the package (1c) as described above, wherein the method comprises the following steps:

- a) Loading items (19c) into the housing sections (13d, 13e) of the package (1c) by opening the top panel (5d) thereof;
- b) Closing the top panel (5d) of the package (1c) after the items (19c) are loaded into the package (1c);
- c) Pulling a slider panel (15d) outward until one of the items supported by the base (16c) reaches a perforated tap (9d, 9e, 10d, 10e) from a first side panel (3c) or a second side panel (4c);
- d) Removing one item (19c) through the perforated tap (9d, 9e, 10d, 10e) by opening the perforated tap (9d, 9e, 10d, 10e) from either the first side panel (3c) or the second side panel (4c);
- e) Repeating steps c) to d) until the desired number of items (19c) is removed;
- f) Closing the perforated tap (9d, 9e, 10d, 10e);
- g) Cutting off the topmost portion of the slider panel (15d) from the perforated line (25) to reduce the size of the slider panel (15d);
- h) Engaging the two-member foldably connectable flap (24a, 24b) together to prevent the slider panel (15d) from sliding back down to ensure that the remaining batteries inside the package (1c) remain horizontally aligned.

Steps g) or h) can be interchanged.

The present package with a slider panel and base design offers a blend of functionality and accessibility for various items, including battery packs, hook packs, magazines, loaders, and more. Its ability to provide easy retrieval, innovative display, customizable base placement, controlled item removal, and sturdy slider mechanisms makes it a compelling option for those who are aiming to enhance their item packaging and consumer experience. The present package not only enhances the user experience but also offers practical benefits in terms of storage and organization.

It will be appreciated by those skilled in the art that the above are merely examples of how the invention may be put into practice. There are many other physical configurations possible, which while different in some details, would nevertheless fall within the spirit and scope of the invention.

CLAIMS

1. A package for consumer goods, said package comprising:
 - at least one housing adapted to contain goods loaded into said package, said housing comprising at least two side panels and one or more access ends;
 - at least one slider panel movably insertable into, and withdrawable from, said housing via said access ends; wherein said slider panel comprises a base which movably carries said goods and is thereby adapted to move said goods within said housing; and
 - one or more perforated taps located on one or more of said side panels, said taps adapted to enable access and removal of said goods that are located adjacent said taps.
2. The package according to claim 1, wherein said housing is defined by a front panel, a first side panel, a second side panel, a back panel, a top panel, and a bottom panel of the package.
3. The package according to claim 2, wherein the perforated taps are placed on any part of any one or more of said top panel, bottom panel, first side panel, or second side panel of said housing.
4. The package according to claim 3, wherein said top panel comprises a first-member flap, which is foldably connected to the upper edge of the front panel, a second-member flap, which is foldably connected to the upper edge of the first side panel, and a third-member flap, which is foldably connected to the upper edge of the second side panel.
5. The package according to claim 4, wherein said first-member flap has a foldably extended end which is insertable into a slit created by the second- and third-member flaps when the second- and third-member flaps are folded inwards.
6. The package according to claim 1, wherein the slider panel has one or more protrusions adapted to act as a handle that can be used for pulling said slider panel outwards from said housing.
7. The package according to claim 1, wherein the perforated tap is adapted to be reclosed after removal of one or more of said goods.

8. The package according to claim 6, wherein the protrusion on the slider panel has a hole adapted to enable display or storage of the package.
9. The package according to any one of claims 1 to 8, wherein said slider panel extends substantially along the length of said housing adjacent one of said panels and at least partially along the length of an opposing panel thereby forming a U-shaped or hook-shaped configuration, said configuration adapted to serve as a base for goods contained in the package.
10. The package for consumer goods of any one of claims 1 to 9, said package comprising:
 - two housings adapted to contain goods loaded into said package, said housings comprising at least two side panels and one or more access ends;
 - two slider panels, comprising a first slider panel and a second slider panel, that are placed back-to-back to each other, movably insertable into, and withdrawable from, said housings.
11. The package according to claim 10, wherein the perforated taps are placed on any part of any one or more of said top panel, bottom panel, first side panel, or second side panel of said housing.
12. The package according to claim 10, wherein the two housing sections comprise a first housing and a second housing placed back-to-back to each other in the package, wherein the first housing is defined by a front panel, a first half of the first side panel, a first half of the second side panel and the first slider panel; and the second housing is defined by the second slider panel, a second half of the first side panel, a second half of the second side panel and a back panel of the package.
13. The package according to claim 10, wherein each of the housings has a top panel, each comprising a three-member flap as defined in claim 4.
14. The package according to claim 13, wherein, in the first housing, the first-member flap of the first top panel is foldably connected to the upper edge of the front panel, the second-member flap of the top panel is foldably connected to the upper edge of the first half of the first side panel, and the third-member flap of the top panel is foldably connected to the upper edge of the first half of the second side panel.

15. The package according to claim 14, wherein the first-member flap is adapted to close a gap created between the front panel, the first slider panel, the first half of the first side panel and the first half of the second side panel.
16. The package according to claim 13, wherein, in the second housing section, the first-member flap of the second top panel thereof is foldably connected to the upper edge of the back panel, the second-member flap is foldably connected to the upper edge of the second half of the first side panel, and the third-member flap is foldably connected to the upper edge of the second half of the second side panel.
17. The package according to claim 16 wherein the first-member flap has a length that reaches the upper edge of the second slider panel and is thereby adapted to close the gap created between the second slider panel, the second half of the first side panel, the second half of the second side panel and the back panel.
18. The package according to claim 10, wherein the protrusion on the slider panel has a hole adapted to enable display or storage of the package.
19. The package according to claim 18, wherein said slider panel further comprises:
 - a two-member foldably connectable flap containing two complementary parts, foldably connected to a hole of the slider panel, said two-member foldably connectable flap adapted to prevent the slider panel from sliding into the housing when the two complementary parts thereof are engaged with each other; and
 - a perforated line adjacent a protruding end of the slider panel, whereby the slider panel can be reduced in size by cutting along said perforated line.
20. The package according to claim 19, wherein said two complementary parts comprise a first member flap, which is foldably connected to one side of the hole of the slider panel, and the second member flap, which is foldably connected to the other side of the hole of the slider panel wherein the first member flap has a protruding end, and the second member flap is adapted to receive and resiliently engage with the protruding end of said first member flap.
21. The package according to claim 19, wherein said perforated taps are located in one or more of said top, middle, bottom, or any part of the first side panel and/or the second side panel of said housings.

22. The slider package according to any one of claims 1 to 21, wherein said housings, slider panels and bases are made of cardboard, wood, plastic, or any suitable material.
23. A method for removing goods from the package according to any one of claims 1 to 18, said method comprising the steps of:
- a) loading goods into the housing via the top panel thereof so that they are located on the base of said slider panel or panels;
 - b) closing said top panel;
 - c) pulling said slider panel outward until one of the goods supported by the base of the slider panel is located adjacent a perforated tap in a first side panel or a second side panel;
 - d) removing said goods through the perforated tap by opening said perforated tap;
 - e) repeating steps c) to d) until the desired number of goods have been removed; and
 - f) closing the perforated tap.
24. A method for removing goods from the package according to any one of claims 19 to 22, wherein the method comprises:
- a. loading goods into the housing via the top panel thereof so that they are located on the base of said slider panel or panels;
 - b. closing said top panel;
 - c. pulling at least one of said slider panels outward until one of the goods supported by the base of the slider panel is located adjacent a perforated tap in a first side panel or a second side panel;
 - d. removing said goods through the perforated tap by opening the perforated tap;
 - e. repeating steps c) to d) until the desired number of goods have been removed;
 - f. closing the perforated tap;
 - g. engaging the first-member flap with the second-member flap to prevent the slider panel from sliding in to said housing; and
 - h. cutting off the excess slider panel along said perforated line.
25. The method according to claim 23 wherein step h) precedes step g).

26. A method for loading goods into the package according to claims 10-18, the method comprising the steps of:

- a. loading said goods in sets of 5 or fewer into the housing via said top panel thereof;
- b. inserting a flat item into said horizontal hole in said slider panel to catch said goods as they are loaded;
- c. removing said insertable flat item from said horizontal hole, thereby allowing the set of goods being loaded to descend and fill the housing section of the package onto the base of the slider panel;
- d. repeating steps a. to c..

27. The method according to claim 25 wherein the insertable flat item is a board or a stick.