Abstract: A container (12) for packaging a blister pack (14) and for dispensing articles from the blister pack (14) includes a base (20) and a cover (22). A spine (24) connects the base (20) and the cover (22). The blister pack (14) can be secured in the container (12) when the container (12) is open by a securing post (38) that extends from the base (20) and a securing cap arm (40) that extends from the spine (24). The spine (24) can be arranged to be together or apart from the base (20) when the container (12) is open to engage or disengage the blister pack (14).
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BLISTER PACK CONTAINER

CROSS-REFERENCE TO RELATED APPLICATIONS
This application claims the benefit of U.S. Provisional Patent Application Serial No. 60/865,434, filed November 12, 2006, the entirety of which is incorporated by reference herein.

TECHNICAL FIELD
This disclosure relates generally to containers and, more specifically, to containers that secure, enclose, and facilitate dispensing articles from blister packs.

BACKGROUND
Child-resistant or lockable containers, wherein multiple movements are required to open the container, have many uses. One use for a lockable container is to inhibit access to articles such as medicine and medicaments, in the form of pills and tablets, which if consumed by an unintended person could be fatal. A well known example of a lockable container is a medicine bottle with a locking cap. To remove the locking cap from the medicine bottle and access the articles therein, the typical locking cap mechanism requires coordinated actions that may include alignment, tipping, axial pressure, inward radial squeezing, and turning.

By way of another example, articles may be packaged in a primary container and the primary containers grouped and packaged in a secondary container. Examples of primary containers include chips, satchels, pouches, pillows, vials, blister packs, and the like. An example of a secondary container is a paperboard box although when a paperboard box holding one or more primary containers is opened, all of the articles are immediately available. Children who can open such secondary containers have access to a dangerous quantity of articles that are not intended for their consumption.

Against the present state of the art, the Applicant seeks to create a need and market for containers that can store and orderly dispense articles
from primary containers. The Applicant also seeks to create a need and market for a container with child-resistant features that require coordinated motions to unlock.

**SUMMARY**

The various embodiments of the present disclosure provide a container for a securing panel that is taught and illustrated as a blister pack. The container includes a feature that allows a blister pack to be secured and released from the container when the container is in an open configuration.

The container also includes a child resistant locking feature.

According to an exemplary embodiment, a container includes a base, a cover, and a spine where the spine is connected to the base by a first hinge and to the cover by a second hinge. The base includes a securing post and the spine includes a securing cap arm. The securing post and securing cap arm are configured to releasably secure a blister pack to the container when the spine is together with the base. Specifically, a blister pack includes an aperture that receives the securing post when the blister pack is placed in the base. The securing cap arm is positioned over the distal end of the securing post when the spine is together with the base. In embodiments where the securing post and the securing cap arm include engaging elements, such as a detent and a void, the securing post and the securing cap arm are engaged to secure the blister pack on the securing post. The arrangement of the spine, base, securing post, securing cap arm, detent, and void is advantageous as an automated packaging machine can easily perform the operations necessary to load a blister pack in the container and secure the blister pack therein. The engaging elements provide additional child resistance. However, in alternative embodiments, the snapping elements are omitted and the securing cap arm obstructs the blister pack from being removed from the locking post.

According to one aspect of the disclosure, the container further includes a locking arm that is connected to the base by a third hinge. The locking arm and the cover can engage one another to releasably lock the container in a closed configuration. The locking arm includes wings or
displaceable portions that can be displaced to disengage the locking arm from the cover. The base includes recesses in which the displaceable portions are nested when the locking arm is together with the base. The displaceable portions are displaceable into the recesses.

In certain embodiments, the locking arm includes tabs and the cover includes apertures and the tabs and the apertures engage one another to releasably lock the container in a closed configuration.

According to another aspect of the disclosure, the container includes an arrangement of support ribs that support a blister pack such that an article can be expelled from the blister pack into a space in between the blister pack and the base. The arrangement of support ribs defines channels for guiding articles toward a removal area.

In certain embodiments, the locking arm and the support ribs are configured to engage a blister flange of a blister pack when the locking arm is together with the base. Similarly, in certain embodiments, the spine further includes tabs. The tabs and the support ribs are configured to engage a blister flange of a blister pack when the spine is together with the base.

According to another aspect of the disclosure, the container includes a lock flap that is connected to the base by a fourth hinge. The lock flap includes an engaging tab, the cover includes an aperture, and the base includes a locking post. To releasably lock the container in a closed configuration, the engaging tab extends through the aperture and engages the locking post when the lock flap is together with the cover.

The foregoing has broadly outlined some of the aspects and features of the present disclosure, which should be construed to be merely illustrative of various potential applications of the disclosure. Other beneficial results can be obtained by applying the disclosed information in a different manner or by combining various aspects of the disclosed embodiments. Accordingly, other aspects and a more comprehensive understanding of the disclosure may be obtained by referring to the detailed description of the exemplary embodiments taken in conjunction with the accompanying drawings, in addition to the scope of the disclosure defined by the claims.
BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an exploded perspective view of a package that includes a container, according to a first exemplary embodiment of the present disclosure.

FIGs. 2 and 3 are perspective views of the package of FIG. 1, the container being in an open configuration.

FIG. 4 is a perspective view of the package of FIG. 1, the container being in a closed configuration.

FIG. 5 is an exploded perspective view of a package that includes a container, according to a second exemplary embodiment of the present disclosure.

FIG. 6 is a perspective view of the package of FIG. 5, the container being in an open configuration.

FIG. 7 is a perspective view of the package of FIG. 5, the container being in a closed configuration.

FIG. 8 is an exploded perspective view of a package that includes a container, according to a third exemplary embodiment of the present disclosure.

FIG. 9 is a perspective view of the package of FIG. 8, the container being in a closed configuration.

FIG. 10 is a partial cross sectional view of the package of FIG. 8, the container being in a closed configuration.
DETAILED DESCRIPTION

As required, detailed embodiments of the present disclosure are disclosed herein. It must be understood that the disclosed embodiments are merely exemplary of the disclosure that may be embodied in various and alternative forms, and combinations thereof. As used herein, the word "exemplary" is used expansively to refer to embodiments that serve as illustrations, specimens, models, or patterns. The figures are not necessarily to scale and some features may be exaggerated or minimized to show details of particular components. In other instances, well-known components, systems, materials, or methods have not been described in detail in order to avoid obscuring the present disclosure. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a basis for the claims and as a representative basis for teaching one skilled in the art to variously employ the present disclosure.

Referring now to the drawings, wherein like numerals indicate like elements throughout the several views, the drawings illustrate certain of the various aspects of exemplary embodiments of a package that includes a container and a blister pack. The container facilitates dispensing articles from the blister pack. Referring to a first exemplary embodiment illustrated in FIGs. 1-4, a package 10 includes a container 12, a blister pack 14, and an optional insert 16. The container 12 includes a base 20 and a cover 22 that are hingedly connected along opposite edges of a spine 24. More specifically, the illustrated spine 24 is a panel with an edge that is connected to the base 20 by a living hinge H1 and an opposite edge that is connected to the cover 22 by a living hinge H2. In alternative embodiments, it is contemplated that any hinged, rotatable, pivotable, operatively mated, slidable, or jointed connection, and the like, can be substituted for a living hinge.

A "U" shaped locking arm 26 is hingedly connected to the base 20 by a living hinge H3. The locking arm 26 facilitates releasably locking the container 12 in a closed configuration. The illustrated locking arm 26 includes wings 27a, 27b that are flexible, displaceable portions of the locking arm 26. Each wing 27a, 27b includes a release button 28a, 28b and an engaging tab 30a, 30b. The release button 28a, 28b facilitates displacing the wing 27a,
27b or otherwise indicates the optimal contact position for displacing the wing 27a, 27b.

A variable child-resistance feature is provided by varying the width of the container 12. A wide container 12 will provide a high level of child-resistance because a child is not expected to have a hand big enough to simultaneously press both release buttons 28a, 28b of a wide container, nor the coordination to simultaneously press both release buttons 28a, 28b with both hands as well as rotate the cover 22 from the base 20. A narrow container 12 may provide less child-resistance because a child may have a hand big enough to press both release buttons 28a, 28b and open the cover 22 with the other hand.

The illustrated locking arm 26 is integrally formed as part of the container 12 so as to be mechanically connected to the base 20. In alternative embodiments, the locking arm 26 and the base 20 can be formed separately and then can be permanently or releasably connected to one another through a process such as chemical bonding, welding, and the like.

The base 20 includes recesses 32a, 32b in base sidewalls 34a, 34b. When the locking arm 26 is seated with the base 20 as shown in FIG. 2, the release buttons 28a, 28b are nested in the recesses 32a, 32b. In certain embodiments, an alternative locking arm includes a single wing having a release button and engaging tab while the base includes only a single recess.

The illustrated cover 22 includes tab engaging apertures 36a, 36b in cover sidewalls 37a, 37b. The tab engaging apertures 36a, 36b are positioned so as to receive the engaging tabs 30a, 30b when the container 12 is in a closed configuration, as shown in FIG. 4. In other words, the closed configuration can be described as when the locking arm 26 is seated, such that the release buttons 28a, 28b are nested within their respective recesses 32a, 32b, and the cover 22 is closed over the base 20. Taken together, the engaging tabs 30a, 30b and the tab engaging apertures 36a, 36b provide means for releasably locking the container 12 in a closed configuration.

Turning again to FIGs. 1 and 2, the base 20 further includes a securing post 38 and the spine 24 includes a securing cap arm 40. The securing post 38 and the securing cap arm 40 are dimensioned and positioned to provide
means for releasably securing a blister pack 14 in the container 12. This means for securing allows the container 12 to be refilled with a fresh blister pack 14 after the previous blister pack 14 has been depleted. Referring to FIGs. 1 and 2, the base 20 and spine 24 are arranged such that the securing post 38 can receive the blister pack 14. Specifically, the spine 24 is pivoted away from the base 20 about the hinge H1. Referring to FIG. 3, once the blister pack 14 is received on the securing post 38, the base 20 and spine 24 are arranged such that the securing cap arm 40 retains the blister pack 14 on the securing post 38. Specifically, the spine 24 is pivoted to be together with the base 20 such that the securing cap arm 40 is positioned proximate to the distal end of the securing post 38. In the illustrated embodiment, the securing cap arm 40 includes a detent 44 that snaps into a void 46 located at the distal end of the securing post 38. In alternative embodiments, the securing cap arm 40 and the securing post 38 can be engaged to one another by means for engaging including detents, apertures, ribs, hooks, pins, tabs, teeth, wedges, a latch arrangement, a catch arrangement, elements that are press fit to one another, combinations thereof, and the like.

In the exemplary embodiments, the container 12 is molded as a single unit such that the base 20, cover 22, spine 24, locking arm 26, securing post 38 and securing cap arm 40 are integrally formed and connected to one another. For example, the container 12 can be molded from a material such as Polypropylene (PP), which facilitates forming the live hinges H1, H2, H3. In alternative embodiments, the base 20, cover 22, spine 24, and locking arm 26 are formed separately from a more rigid material such as Acrylonitrile Butadiene Styrene (ABS) and connected to one another to form the container 12. It should be noted that the container 12 can be formed from any suitable material and by any suitable process to provide the structure and functionality described herein.

In general, a blister pack includes a tray having a plurality of blisters. The blisters are typically filled with an item that is held in the blister by a seal, such as a sheet of aluminum foil. The seal is broken to dispense the item from the blister pack. In the illustrated embodiment, the blister pack 14 includes a blister.€ipejture 50 that is formed in a blister flange 52 to facilitate
securing the blister pack 14 in the container 12. Likewise, the insert card 16 includes an insert aperture 60 to facilitate securing the insert card 16 in the container 12.

The insert 16 may include any kind of information in any form or media including text and/or graphics printed on the insert 16, a CD attached to the insert 16, a CD or booklet that is placed in a pocket of the insert 16, combinations thereof, and the like.

In practice, the process of assembling the package 10 or filling or refilling the container 12 may be undertaken by any number of entities including the manufacturer or provider of the container 12, the manufacturer or provider of the blister pack 14, a third party such as a physician or pharmacist, or the user. One method of filling the container will now be described with reference to FIGs. 1-4.

As shown in FIGs. 1 and 2, this method includes arranging the locking arm 26 to be together with the base 20. Further, the method includes placing the blister pack 14 in the base 20 such that the securing post 38 is inserted through the blister aperture 50. In those embodiments that include the insert 16, the securing post 38 is likewise inserted through the insert aperture 60 as the insert 16 is placed in the base 20.

Next, as shown in FIGs. 2 and 3, the spine 24 is arranged to be together with the base 20. Specifically, the spine 24 is brought into and held in an orientation that is substantially perpendicular to the base 20 such that the securing cap arm 40 is positioned proximal to the securing post 38. In certain embodiments, the securing cap arm 40 is in contact with and is flexed by the securing post 38. The detent 44 and the void 46 are then snapped together to secure the blister pack 14 and the insert 16 in the base 20 of the container 12. In the illustrated embodiment, the blister pack 14 can move along the securing post 38 and is securing thereon to provide child resistance.

As illustrated in FIGs. 3 and 4, the cover 22 is closed over the base 20 and the arm 26 such that the tab engaging apertures 36a, 36b receive the engaging tabs 30a, 30b to releasably lock the container 12 in a closed configuration. The closed configuration illustrated in FIG. 4 is typically the
configuration for storing and/or transporting the package 10 when the user is not operating the container 12 to dispense items from the blister pack 14.

To open the container 12, the user presses each of the release buttons 28a, 28b to inwardly displace the wings 27a, 27b. This action disengages the engaging tabs 30a, 30b from the tab engaging apertures 36a, 36b, thus disengaging the cover 22 from the locking arm 26. As best shown in FIG. 3, the user then flips the cover 22 back from the base 20, lifts the insert 16 to reveal the blister pack 14, lifts the blister pack 14 from the inside surface of the base 20, and pushes down on a blister 70 to release the contents thereof. For example, the contents may be a medicament in the form of a tablet. The contents can be dispensed directly into the user's hand or into the base 20 and then retrieved by the user. The user then closes the cover 22 to return the container 12 to the closed configuration shown in FIG. 4.

In alternative embodiments, an alternative blister pack is operated as needed to release the contents from the blister pack. Alternative blister packs include those with additional child resistant features. It should be understood that the container 12 is not limited to use with a blister pack 14. Rather, the container 12 can be used with any securing panel that is configured to be secured in the container 12. Generally described, the securing panel can provide primary packaging for items. For example, a securing panel can include a tray, an insert, compartments, pockets, structure for receiving syringes or vials, clips, combinations thereof, and the like.

To refill the container 12, a refilling entity, including a physician, a pharmacist, or the user, opens the cover 22 and rotates the spine 24 away from the base 20 along the connecting living hinge H1. Thereby, the securing cap arm 40 is separated from the securing post 38 and the insert 16 and the depleted blister pack 14 can be removed. The refilling entity then secures a new blister pack 14 in the container 12 according to the concepts described herein. Although the filling and refilling concepts have been described with reference to a manual method, the container 12 lends itself to automated filling and refilling.

The illustrated container 12 is shown as a clamshell configuration wherein the cover 22 pivotally lifts off the base 20. In alternative
embodiments, the cover 22 is configured to slide relative to the base 20 when
the engaging tabs 30a, 30b are disengaged from the tab engaging apertures 32a, 32b, in part, because the cover 22 is not connected to the spine 24. In other alternative embodiments, the cover 22 is configured to lift entirely off the
base 20 when the engaging tabs 30a, 30b are disengaged from the tab
engaging apertures 32a, 32b, in part, again because the cover 22 is not connected to the spine 24. Of course, the cover 22 could pivot with respect to the base 20 from any point of contact.

While the illustrated means for securing the blister 14 to the container
12 includes the securing post 38 and the securing cap arm 40, means for
securing can additionally or alternatively include interlocking mechanical elements familiar to those skilled in the art such as teeth, dimples, apertures, ribs, pegs, detents, combinations thereof, and the like. The interlocking mechanical elements can be positioned on one or multiple interior surfaces of
the container 12 to facilitate positioning and securing the blister pack 14 in the container 12. Additionally, means for securing can include ultrasound welds and chemicals such as adhesives.

A second exemplary embodiment of a package 100 will now be
described with reference to FIGs. 5-7. The elements of the second
embodiment that are substantially similar to elements that have been
introduced and described in the first embodiment will be designated with the
same reference numbers and are not further discussed except where useful
for understanding. As best shown in FIG. 5, the illustrated package 100
includes a number of the elements introduced above, including a container
12, a blister pack 14, and an insert 16. As above, the container 12 includes a
base 20, a cover 22, a spine 24, a locking arm 26, wings 27a, 27b, release
buttons 28a, 28b, engaging tabs 30a, 30b, recesses 32a, 32b, side walls 34a,
34b, tab engaging apertures 36a, 36b, cover side walls 37a, 37b, a securing
post 38, and a securing cap arm 40. Further, the blister pack 16 includes a
blister aperture 50 (obstructed from view), a blister flange 52, and blisters 70.

In the second embodiment, the base 20 further includes an
arrangement of support ribs 110 on the inner surface thereof. It should be
understood that the number, size, shape, and arrangement of the support ribs
110 can vary while still providing the functionality described herein. Multiple variations of the illustrated arrangement of the support ribs 110 are contemplated for a blister pack 14 that includes various configurations of blisters 70. It is also contemplated that blisters 70 can be arranged with respect to a desired arrangement of support ribs 110.

The illustrated support ribs 110 are arranged to support the blister pack 14 above the inside surface of the base 20 and to thereby facilitate dispensing articles from the blister pack 14. Specifically, the amount of space between the blister pack 14 and the base 20 is selected to be suitably large such that an object can be expelled from the blister pack 14 into the space.

Rows of channel support ribs 110a define rib channels 112 and a dispensing channel 114. The dispensing channel 114 is defined between the rows of channel support ribs 110a. The illustrated arrangement of channels support ribs 110a provides that the rib channels 112 flow into the dispensing channel 114 and the dispensing channel 114 flows into a dispensing trap 116 that is positioned at the end of the dispensing channel 114. The flow direction in the dispensing channel 114 is indicated by arrows. The channel support ribs 110a do not obstruct articles as they are expelled from the blisters 70 nor as the articles migrate through the rib channels 112 and through the dispensing channel 114.

With continued reference to FIG. 5, longitudinal perimeter support ribs 110b extend substantially parallel to and are offset from the base side walls 34a, 34b. The channel support ribs 110a in each row extend inwardly from a respective longitudinal perimeter support rib 110b toward the dispensing channel 114. Transverse perimeter support ribs 110c extend between the longitudinal perimeter support ribs 110b.

The illustrated channel support ribs 110a are straight but angled with respect to the longitudinal perimeter support ribs 110b. In alternative embodiments, the channel support ribs 110a have alternative shapes, for example, curved shapes.

In this second embodiment, the locking arm 26 also includes a dispensing trap cover 118. The dispensing trap cover 118 includes an aperture 119 that allows access to the dispensing trap 116 when the locking
arm 26 is seated with the base 20. Additionally, the dispensing trap cover 118 and/or other portions of the locking arm 26 are configured to cooperate with an adjacent transverse perimeter support rib 110c to engage the blister flange 52 or an insert, as described in further detail below. In alternative embodiments, the aperture 119 is omitted from the dispensing trap cover 118 such that the locking arm 26 covers the dispensing trap 116. In such embodiments, the locking arm 26 is rotated away from the base 20 to access the dispensing trap 116.

In this second embodiment, the cover 22 includes a dispensing aperture 120 that is positioned to cooperatively align with the dispensing trap 116 and the aperture 119. The dispensing aperture 120 allows the user to retrieve an article from the container 12 when it is closed and locked, as shown in FIG. 7. Referring now to FIGs. 5 and 6, the cover 22 includes at least one insert clip 122 for holding the insert 16.

In this second embodiment, a compliance insert 124 is overlaid the blister pack 14 to provide dosage information or other indicia of interest to the user. The compliance insert 124 includes a compliance insert aperture 126 and blister apertures 128. By way of illustration and not limitation, the compliance insert 124 includes indicia of the days of the week next to each blister aperture 128 to help the user keep track of usage. The compliance insert 124 is secured to the container 100 by the compliance insert aperture 126 in a manner similar to that described above with respect to the first insert aperture 60.

In this second embodiment, the spine 24 includes spine hold down tabs 130. The spine hold down tabs 130 are configured to cooperate with the adjacent transverse perimeter support rib 110c to engage the blister flange 52 or the compliance insert 124.

In this embodiment, means for securing the blister pack 14 in the base 20 can include the locking arm 26, the spine hold down tabs 130, the transverse perimeter support ribs 110c, and the compliance insert 124. According to one-arrangement, the locking arm 26 and the spine hold down tabs 130 cooperate with the transverse perimeter support ribs 110c to secure edges of the blister flange 52. An edge of the blister pack 14 is captured and
held between the locking arm 26 and the adjacent transverse perimeter support rib 110c when the locking arm 26 is seated with the base 20, and an opposite edge of the blister pack 14 is captured and held between the spine hold down tabs 130 and the adjacent transverse perimeter support rib 110c when the spine 24 is seated with the base 20. According to another arrangement, the blister pack 14 is placed on the arrangement of support ribs 110, the compliance insert 124 is placed over the blister pack 14, and the locking arm 26 and the spine hold down tabs 130 cooperate with the transverse perimeter support ribs 110c to secure edges of the compliance insert 124, thereby securing the blister pack 14. This means for securing restricts the ability to pry the blister pack 14 out of the container 12.

Similar means for securing may be placed at various other locations. To achieve a similar purpose, an inwardly facing lip (not shown) can be provided at the top edge along a length of the side walls 34a, 34b by which edges of the blister flange 52 are captured and covered when the blister flange 52 is placed on the support ribs 110. This restricts the ability to pry the blister pack 14 out of the container 12.

An exemplary method of assembling the package 100 is now described. In practice, and similar to the description above, the blister pack 14 is loaded and locked in the container 12 by placing the blister pack 14 so that it rests on the upper surfaces of the support ribs 110. Referring to FIGs. 5 and 6, the securing post 38 is threaded through the blister pack aperture 50 (obstructed from view), the securing post 38 is threaded through the compliance insert aperture 126, the securing cap arm 40 is set to obstruct the end of the securing post 38, and the locking arm 26 is closed. Thereafter, the cover 22 is closed to resemble the closed and locked container 12 illustrated in FIG. 7.

An exemplary method of dispensing an article is now described. The blister pack 14 is placed on the arrangement of support ribs 110 such that the blister pack 14 is elevated above or otherwise offset from the base 20. To dispense an article from the blister pack 14, a user applies pressure to a blister 70 in the tradition way, or as needed for the particular blister pack, so that the article breaks through the backing of the blister pack 14 and is
expelled into a respective channel 112. The container 12 is then manipulated by the user so that the article slides from a rib channel 112 to the dispensing channel 114, and then to the dispensing trap 116 where the item is retrieved by the user.

A third embodiment of a package 200 is described with reference to FIGs. 8-10. Those elements introduced and described above that are substantially similar to the elements in this alternative embodiment will be designated with the same reference numbers and are not further discussed except where useful for understanding. Referring to FIG. 8, the illustrated package 200 includes a container 12, blister packs 14, and an insert 16. The container 12 includes a base 20, a cover 22, a spine 24, a securing post 38, a securing cap arm 40, and an alternative means for releasably locking the container 12 in a closed configuration. The blister packs 14 each include a blister aperture 50 and blisters 70. The insert 16 includes an insert aperture 60.

The container 12 is sized to hold multiple blister packs 14. As understood by one skilled in the art, the container 12 can be sized to hold various numbers of blister packs 14 and various numbers of inserts 16.

In the third exemplary embodiment, as best shown in FIG. 10, means for releasably locking the container 12 in a closed configuration includes a locking post access 210, a locking post 212, a locking post encasement 214, a lock flap 216, and a lock flap engaging tab 218. The lock flap 216 is attached to the base 20 by a living hinge H4. The locking post 212 includes a laterally extending detent 220 that releasably engages a locking aperture 222 positioned on the lock flap engaging tab 218. Further, means for locking the container in a closed configuration 12 includes a recess 230 and a cover engaging aperture 232. In the illustrated embodiment, means for locking comprises components that are integrally formed, that is, formed during a single manufacturing process. As understood by those skilled in the art, the various components can be provided separately and attached to each other.

The container 12 can be locked by the following illustrative description. The cover 22 is closed over the base 20, as shown in FIG. 9 such that the cover engaging aperture 232 is positioned immediately adjacent the locking
post detent 220 and above the locking post access 210. Thereafter, the lock flap 216 is rotated upwardly about the live hinge H4 until the lock flap engaging tab 218 passes through the cover engaging aperture 232 and the leading edge of the lock flap engaging tab 218 contacts the detent 220. The user then applies downward pressure to the outward facing surface of the locking flap 216, causing the locking post 212 to be pushed laterally or inwardly toward the blister pack 14 until the leading edge of the tab 218 moves past the detent 220. As the leading edge of the tab 218 moves past the detent 220 the locking aperture 222 is presented, which relieves the lateral force on the locking post 212 and allows it to spring back to its normal position, so that the detent 220 engages the locking aperture 222 as best shown in FIG. 10.

A method of opening the illustrated container 12 is now described. A user reaches into the locking post access 210 with a finger or tool to locate the locking post 212. The user then pushes laterally on the locking post 212, causing the locking post 212 to lean inwardly toward the blister pack 14, and continues to push until the detent 220 is fully removed from the locking aperture 222. With the detent 220 fully removed from the engaging tab 218 the cover 22 is partially disengaged from the base 20. While maintaining the locking post 212 in its disengaged position the user locates an edge of the lock flap 216, such as the edge that cantilevers over the cover recess 230, and lifts and rotates the lock flap 216 about the live hinge H4 at least until the engaging tab 218 is substantially withdrawn from the cover engaging aperture 232. The locking post 212 is then returned to its normal position by removing the lateral pressure. The result of these opening sequence steps is best shown in FIG. 9. The user can then rotate the lock flap 216 completely back if desired and lift the cover 22 to access the contents of the blister pack 14.

The law does not require and it is economically prohibitive to illustrate and teach every possible embodiment of the present claims. Hence, the above-described embodiments are merely exemplary illustrations of implementations set forth for a clear understanding of the principles of the disclosure. Variations, modifications, and combinations may be made to the above-described embodiments without departing from the scope of the
claims. All such variations, modifications, and combinations are included herein by the scope of this disclosure and the following claims.
CLAIMS

What is claimed is:

1. A container (12), comprising:
   a base (20) including a securing post (38);
   a cover (22);
   a spine (24) including a securing cap arm (40), wherein the spine (24) is connected to the base (20) and to the cover (22);
   wherein the securing post (38) and securing cap arm (40) are configured to releasably secure a securing panel (14) to the container (12).

2. The container (12) of claim 1, further comprising a locking arm (26) that is connected to the base (20) by a third hinge (H3);
   wherein the locking arm (26) and the cover (22) can engage one another to releasably lock the container (12) in a closed configuration.

3. The container (12) of claim 2, wherein the locking arm (26) comprises a displaceable portion (27a, 27b), the displaceable portion (27a, 27b) being displaceable to disengage the locking arm (26) from the cover (22).

4. The container (12) of claim 3, wherein the base (20) includes a recess (32a, 32b) in which a button (28a, 28b) of the displaceable portion (27a, 27b) is nested when the locking arm (26) is seated with the base (20).

5. The container (12) of claim 2, wherein the locking arm (26) comprises a pair of displaceable portions (27a, 27b), the displaceable portions (27a, 27b) being displaceable toward one another to disengage the locking arm (26) from the cover (22).

6. The container (12) of claim 2, wherein the locking arm (26) comprises a tab (30a, 30b) and the cover (22) comprises an aperture (36a, 36b), wherein the tab (30a, 30b) and the aperture (36a, 36b) can engage one another to releasably lock the container (12) in a closed configuration.
7. The container (12) of claim 1, the base (20) further comprising an arrangement of support ribs (110) that can support a securing panel (14) such that an article can be expelled from the securing panel (14) into a space in between the blister pack (14) and the base (20).

8. The container (12) of claim 7, wherein the arrangement of support ribs (110) defines at least one channel (112, 114) for guiding an article toward a removal area (116).

9. The container (12) of claim 7, wherein the locking arm (26) and the support ribs (110) are configured to engage a flange (52) of a securing panel (14) when the locking arm (26) is seated with the base (20).

10. The container (12) of claim 7, wherein the locking arm (26) and the support ribs (110) are configured to engage an insert (124) when the locking arm (26) is seated with the base (20).

11. The container (12) of claim 7, wherein the spine (24) further comprises tabs (130), wherein the tabs (130) and the support ribs (110) are configured to engage a flange (52) of a securing panel (14) when the spine (24) is seated with the base (20).

12. The container (12) of claim 7, wherein the spine (24) further comprises tabs (130), wherein the tabs (130) and the support ribs (110) are configured to engage an insert (124) when the spine (24) is seated with the base (20).

13. The container (12) of claim 1, wherein the spine (24) is connected to the base (20) by a first hinge (H1) and to the cover (22) by a second hinge (H2).

14. The container (12) of claim 1, further comprising means for engaging the securing cap arm (40) and the securing post (38) to one another.
15. The container (12) of claim 14, wherein means for engaging comprises a detent (44) and a void (46).

16. The container (12) of claim 1, further comprising a lock flap (216) that is connected to the base (20) by a fourth hinge (H4), the lock flap (216) comprising an engaging tab (218);
   the cover (22) further comprising an aperture (232);
   the base (20) further comprising a locking post (212) that is accessible through a locking post access (210);
   wherein the engaging tab (218) extends through the aperture (232) and engages the locking post (212) to releasably lock the container (12) in a closed configuration.

17. A container (12), comprising:
   a base (20) comprising recesses (32a, 32b);
   a cover (22) that is hingedly connected to the base (20); and
   a locking arm (26) that is hingedly connected to the base (20), the locking arm (26) being configured such that opposed displaceable portions (27a, 27b) thereof are nested in the recesses (32a, 32b) when the locking arm (26) is seated with the base (20);
   wherein the locking arm (26) and the cover (22) can engage one another to releasably lock the container (12) in a closed configuration.
   wherein the displaceable portions (27a, 27b) are displaceable toward one another to disengage the locking arm (26) from the cover (22).

18. The container (12) of claim 17, wherein each of the displaceable portions (27a, 27b) comprises a tab (30a, 30b) and the cover (22) comprises apertures (36a, 36b), wherein the tabs (30a, 30b) and the apertures (36a, 36b) engage one another to releasably lock the container (12) in a closed configuration.
19. A container (12), comprising:
   a base (20) comprising a locking post (212) that is accessible through a
   locking post access (210);
   a cover (22) that is hingedly connected to the base (20), the cover (22)
   comprising an aperture (232); and
   a lock flap (216) that is hingedly connected to the base (20), the lock
   flap (216) comprising an engaging tab (218);
   wherein the engaging tab (218) extends through the aperture (232) and
   engages the locking post (212) to releasably lock the container (12) in a
   closed configuration.