KNIFE BLADE PACK

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Abstract

A blister pack assembly includes a backing card comprising a first opening therethrough; a blister pack releasably secured to the backing card and comprising a first portion and a second portion, wherein the first portion and the second portion are connected via a living hinge, the living hinge enabling the first portion and the second portion to be pivoted between open and closed positions; the first and the second portions defining a storage space therebetween when in the closed position, at least one interengaging, reusable securement to enable the first and the second portions to be releasably secured in the closed position, and a non-reusable securement that secure the first and the second portion to one another through the first opening in the backing card; wherein after the non-reusable securement is released, the blister pack can be removed from the backing card.
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BACKGROUND OF THE INVENTION

[0001] The present invention relates to display packaging and, more particularly, to product package for point of purchase packaging which may be used by the purchaser for the continuing storage of articles contained therein.

[0002] Point of purchase packaging with transparent elements is widely employed to display the articles being merchandised. There has been an increasing tendency to provide packaging which may be used subsequently by the purchaser to store the articles being purchased when such articles either have long life or comprise a multiplicity of expendable items that will be utilized and withdrawn from a blister pack from time to time.

[0003] The present invention provides several improvements over the prior art.

SUMMARY OF THE INVENTION

[0004] One aspect of the present invention provides a blister pack assembly. The blister pack assembly includes a backing card and a blister pack. The backing card includes a first opening therethrough and the blister pack is releasably secured to the backing card. The blister pack includes a first portion and a second portion, wherein the first portion and the second portion are connected via a living hinge. The living hinge enables the first portion and the second portion to be pivoted between open and closed positions. The first and the second portions of the blister pack define a storage space therebetween when in the closed position. The first and the second portions of the blister pack further defining a non-reusable securement that secure the first and the second portion to one another through the first opening in the backing card. The blister pack can be removed from the backing card after the non-reusable securement is released.

[0005] Another aspect of the present invention provides a product package. The product package includes a backing card, a blister pack and a multiplicity of blades. The backing card includes a first opening therethrough and the blister pack is releasably secured to the backing card. The blister pack includes a first portion and a second portion, wherein the first portion and the second portion are connected via a living hinge. The living hinge enables the first portion and the second portion to be pivoted between open and closed positions. The first and the second portions of the blister pack define a storage space therebetween when in the closed position. The first and the second portions of the blister pack further defining a non-reusable securement that secure the first and the second portion to one another through the first opening in the backing card. The blister pack can be removed from the backing card after the non-reusable securement is released. The multiplicity of blades is snugly seated in the storage space that is formed when the first and the second portions are in closed position.

[0006] These and other aspects of the present invention, as well as the methods of operation and functions of the related elements of structure and the combination of parts and economies of manufacture, will become more apparent upon consideration of the following description and the appended claims with reference to the accompanying drawings, all of which form a part of this specification, wherein like reference numerals designate corresponding parts in the various figures. It is to be expressly understood, however, that the drawings are for the purpose of illustration and description only and are not intended as a definition of the limits of the invention. As used in the specification and in the claims, the singular form of "a", "an", and "the" include plural referents unless the context clearly dictates otherwise.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1A is a front elevational view of a product package with a backing card, a blister pack and a knife in accordance with an embodiment of the present invention;

[0008] FIG. 1B is a rear elevational view of the product package with the backing card, the blister pack and the knife in accordance with an embodiment of the present invention;

[0009] FIG. 2 is a perspective view of the product package, in which the blister pack is being removed from the backing card in accordance with an embodiment of the present invention;

[0010] FIG. 3 is a perspective view of the product package, in which the blister pack is removed completely from the backing card in accordance with an embodiment of the present invention;

[0011] FIG. 4 is a perspective view of the product package, in which blister pack has been closed for convenient storage of the blades after being removed from the backing card in accordance with an embodiment of the present invention;

[0012] FIG. 5 is a perspective view of fully opened blister pack in which the blades are shown in phantom lines in accordance with an embodiment of the present invention;

[0013] FIG. 6 is a plan view of fully opened blister pack, in accordance with an embodiment of the present invention;

[0014] FIG. 7 is a sectional view thereof along the line 7-7 of FIG. 6, in which the blister pack is fully open in accordance with an embodiment of the present invention;

[0015] FIG. 8 is a sectional view similar to FIG. 7, but in which the blister pack is partially open in accordance with an embodiment of the present invention;

[0016] FIG. 9 is a sectional similar to FIG. 8, but in which the blister pack is fully closed in accordance with an embodiment of the present invention;

[0017] FIG. 10 is an exploded view of the package, in which the knife is to be mounted to the backing card in accordance with an embodiment of the present invention;

[0018] FIG. 11 is a front elevational view of the package, in which the knife is shown in phantom lines in accordance with an embodiment of the present invention;

[0019] FIG. 12 is a perspective view of the package in accordance with an embodiment of the present invention;

[0020] FIG. 13A is a front elevational view of a package, in which the knife is shown in phantom lines and non-reusable securements are formed near corners of the package, in accordance with another embodiment of the present invention;

[0021] FIG. 13B is a plan view of the blister pack shown in FIG. 13A, shown in an open position, in accordance with another embodiment of the present invention;

[0022] FIG. 14A is a front elevational view of a package, in which the knife is shown in phantom lines and non-reusable
securements are formed on removable perforated tabs of the package, in accordance with another embodiment of the present invention;

FIG. 14B is a plan view of the blister pack shown in FIG. 14A, shown in an open position, in accordance with another embodiment of the present invention;

FIG. 15A is a front elevational view of a package, in which the knife is shown in phantom lines and non-reusable securements are formed on removable perforated tabs of the package, in accordance with another embodiment of the present invention;

FIG. 15B is a plan view of the blister pack as shown in FIG. 15A, shown in an open position, in accordance with another embodiment of the present invention;

FIG. 16A is a front elevational view of a package, in which the knife is shown in phantom lines and non-reusable securements are formed within reusable securements, in accordance with another embodiment of the present invention; and

FIG. 16B is a plan view of the blister pack as shown in FIG. 16A, shown in an open position, in accordance with another embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

FIGS. 1A and 1B show a package 10 in accordance with an embodiment of the present invention. The package 10 may generally include a backing card 12, a blister pack 14 and a multiplicity of blades 16, where the blister pack 14 is releasably secured to the backing card 12. In one embodiment, the package 10 may also include a utility knife 34, although in some embodiments no utility knife 34 is provided.

The backing card 12 is generally planar and is formed from a material such as paperboard, plastic or cardboard. The backing card 12 includes a front surface 42 (see FIG. 1A) that is intended to be viewed by a customer and a rear surface 44 (see FIG. 1B). In one embodiment, the front surface 42 and/or the rear surface 44 may have advertising or promotional information such as indicia (not shown) for identifying the product to the customer. In another embodiment, the rear surface 44 may contain indicia (not shown) such as instructions for using the knife 34 and the blades 16. In one embodiment, the backing card 12 includes a first opening 18 therethrough to assist in securing the blister pack 14 to the backing card 12. Opening 18 is oblong in shape in one embodiment, although other shapes can be used.

As shown in FIG. 3, the blister pack 14 includes a first portion 20, a second portion 22, and a living hinge 24, one or more interengaging, reusable securements 28 and a non-reusable securement 30. In one embodiment, the blister pack 14 is integrally thermoformed from synthetic plastic material. The first portion 20 and the second portion 22 are generally transparent allowing the customer to view the blades 16 though the transparent first portion 20, and also through the second portion 22 when the blister pack 14 is removed from the card 12. The first portion 20 and the second portion 22 of the blister pack 14 are connected via the living hinge 24. The living hinge 24 enables the first portion 20 and the second portion 22 to be pivoted between open and closed positions. The first and the second portions 20, 22 of the blister pack 14 define a storage space 26, as can be seen in FIG. 9, therebetween when in the closed position. The storage space 26 is formed by a recess 48 molded into first portion 20 (see FIG. 2) that has a shape corresponding to that of the blades (e.g., trapezoidal in the illustrated embodiment), and the opposing portion (illustrated as flat) of the second portion 20. The multiplicity of blades 16 are snugly seated in the storage space 26 that is formed between the first and the second portions 20 and 22, when the first and the second portions 20, 22 are in closed position.

The one or more interengaging, reusable securements 28 of the first and the second portions 20, 22 of the blister pack 14 enable the first and the second portions 20, 22 to be releasably secured in the closed position. In one embodiment, the blister pack 14 may include interengaging, reusable securement 28 and a second interengaging, reusable securement 38 to releasably secure the blister pack 14 to the backing card 12 by forming their connection through hole 36 and hole 40 in the backing card 12 respectively. The one or more interengaging, reusable securements 28 allow the blister pack 14 to be reused repeatedly after the non-reusable securement 30 is initially broken.

The non-reusable securement 30 of the first and the second portions 20, 22 of the blister pack 14 secures the first and the second portion 20, 22 to one another through the first opening 18 in the backing card 12. The non-reusable securement 30 provides security from unwanted or unintended access to the blades 16 during transit or at point of sale. It may also provide a tamper evident indicia, since after the securement 30 is released, it cannot be re-secured by an individual. In one embodiment, the non-reusable securement 30 is in the form of series of individual dot connections 30 located on both the first and the second portions 20, 22 respectively. In one embodiment, the series of individual dot connections 30 are generally aligned in a straight line. The dot connections 30 located on the first portion 20 are sealed with the dot connections 30 located on the second portion 22 of the blister pack 14 by using heat sealing, sonic sealing, ultrasonic welds or any other non-reusable attachments that would be appreciated by one skilled in the art. The series of individual dot connections 30 can vary in number depending upon the articles that are secured in the storage space 26. In one embodiment, four to eight sealed dot connections are used to secure the first and the second portion 20, 22 to one another through the first opening 18 in the backing card 12. The non-reusable securements 30 are constructed and arranged to be easily broken by the user without damaging the blister pack 14.

In use, the package 10 is positioned on a retail display rack for display and selection by the customers. The backing card 12 generally includes a hanger hole 46 formed near the upper edge of the backing card 12. The hanger hole 46 enables the package 10 to be hung on a hanger (not shown), such as a rack hooks or display rails on a display stand, for display to the consumers in a retail store. The hanger hole 46 may be formed by cutting (e.g., stamping) away a piece of backing card material from the backing card 12 in a shape sufficient to receive the hanger. The hanger hole 46 as illustrated includes a horizontal slot with an enlarged circular region in the center, however, it should be appreciated that the hanger hole 46 may be configured in various shapes and sizes as would be appreciated by one skilled in the art. For example, in one embodiment, the package 10 may be positioned on the hanger using other hanging structures such as hooks attached to the back surface 44 of the backing card 12, just for example.

The backing card 12, as shown in FIG. 2, includes a tool engaging portion 32 and a blister pack engaging portion 80. While the blister pack engaging portion 80 is configured to secure the blister pack 14 to the backing card 12, the tool engaging portion 32 is configured to secure a tool 34, such as
knife 34 to the backing card 12. The tool engaging portion 32, in the illustrated embodiment, is generally an elongated narrow piece of the backing card 12 that extends from the upper portion of the backing card 12 and is separated from the blister pack engaging portion 80 by a gap 82. The tool engaging portion 32 includes one or more suspension holes 84 that are constructed and arranged to receive a screw 86 (as shown in FIG. 3). The one or more suspension holes 84 generally include first and second circular holes whose walls intersect to form a single figure-eight shape hole in the illustrated embodiment. The tool 34 is attached to the backing card 12 using the screw 86. The screw 86 prevents the withdrawal of the tool or the knife 34 from the backing card 12.

[0035] FIGS. 2, 3 and 4 show the process of removing the blister pack 14 from the backing card 12. As shown in FIG. 2, the blister pack 14 can be removed from the backing card 12 first by releasing the non-reusable securement 30. The non-reusable securement 30 can be released by pulling apart first and second portions 20 and 22 at their edges opposite the living hinge 24, so as to break the connections formed at non-reusable securement 30. In one embodiment, the non-reusable securement 30 provides a access to the blades 16, by allowing the customer to break the blister pack 14 slowly, for example by breaking one individual seal dot connection at a time rather than breaking a single large seal. Once the non-reusable securement 30 is released, the blister pack 14 can then be removed from the backing card 12, by disengaging one or more interengaging, reusable securement 28. Arrow A shows the direction in which the first portion 20 of the blister pack 14 moves when one or more interengaging, reusable securements 28 are disengaged.

[0036] As shown in FIG. 3, the interengaging, reusable securement 28 includes a protrusion 58 formed in the second portion 22 of the blister pack 14 and a complementary recess 60 formed in the first portion 20 of the blister pack 14. The protrusion 58 is generally cylindrical in shape. The complementary recess 60 is generally triangular in shape, but is constructed and arranged to accommodate the protrusion 58 completely therein. The circular wall of the protrusion 58 is constructed and arranged to frictionally engage and form a frictional and/or snap-fit connection with all three sides of the triangular complementary recess 60. It should be appreciated, however, that this embodiment is but one example of different types of engagement shapes, configurations and/or construction that can be provided. The protrusion 58 and the complementary recess 60 can be of any other engagement or retainer structure as would be appreciated by one skilled in the art.

[0037] Because the reusable securement 28 and the second reusable securement 38 are structurally identical, only one of the reusable securement is discussed in detail. The protrusion 58 located in the second portion 22 is constructed and arranged to engage with the complementary recess 60 located in the first portion 20 so as to releasably secure the first and the second portions 20, 22 in the closed position. Alternatively, in one embodiment, the protrusion 58 may be formed in the first portion 20 of the blister pack 14 with the complementary recess 60 formed in the second portion 22 of the blister pack 14. The complementary recess 60 is located on a peripheral flange 50 of the first portion 20 and the protrusion 58 is located on a planar surface 62 of the second portion.

[0038] In one embodiment, as shown in FIG. 3, the protrusion 58 of the reusable securement 28 extend through a second opening 36 in the backing card 12, and the protrusion 58 of the second reusable securement 38 extends through a third opening 40 in the backing card 12 to releasably secure with the complementary recesses 60 of the reusable securement 28 and the second reusable securement 38 respectively, thus, releasably connecting the blister pack 14 to the backing card 12. In this embodiment, both the reusable securement 28 and the second reusable securement 38 need to be disengaged to remove the blister pack 14 from the backing card 12. Once the protrusions 58 and the complementary recesses 60 of the reusable securement 28 and the second reusable securement 38 are disengaged, the protrusions 58 of the reusable securement 28 and the second reusable securement 38 are moved in a downwardly direction away from the backing card 12 to remove the protrusions 58 from the second opening 36 and the third opening 36 respectively. Arrow C shows the direction in which the blister pack 14 is moved when the blister pack 14 is released from the backing card 12.

[0039] FIG. 3 shows the blister pack 14 after being removed from the backing card 12 and placed in an open position. In the open position, the blister pack 14 provides a user access to the blades 16, which are snugly seated in the storage space 26. After accessing the blades 16, the user can close the blister pack 14 from the open position to a closed position as shown in FIG. 4.

[0040] In one embodiment, the first opening 18 of the backing card 12 generally takes the form of an elongated vertical slot. However, as would be appreciated by one skilled in the art, the first opening 18 can be of any shape and size to enable the first and the second portions 20, 22 are secured to one another through the first openings 18 using the non-reusable securement 30. In one embodiment, the second opening 36 and the third opening 40 of the backing card 12 are generally circular in shape. However, as would be appreciated by one skilled in the art the second opening 36 and the third opening 40 can be of any shape and size to enable the interengaging, reusable securement 28 and the second interengaging, reusable securement 38 extend through the second opening 36 and the third opening 40 respectively, when the blister pack 14 is secured to the backing card 12.

[0041] FIG. 4 shows an arrow B that indicates the direction in which the first portion 20 pivoted to move the blister pack 14 from the open position, as shown in FIG. 3, to a closed position. The phantom lines represent the first portion 20 of the blister pack 14, when the blister pack 14 is in the open position. When the blister pack is in the closed position, the first portion 20 can be secured the second portion 22 using the reusable securement 28 and/or the second reusable securement 38. Thus, after the blister pack 14 is removed from the backing card 12, the blister pack 14 can be repeatedly and reusable secured using the reusable securement 28 and/or the second reusable securement 38 to store multiplicity of articles such as knife blades and the like. The blister pack 14 is repeatedly and reusable secured to itself, to the backing card 12, or to both itself and the backing card 12.

[0042] As shown in FIGS. 5 and 6, the first portion 20 of the blister pack 14 includes a recess 48 in which the multiplicity of knife or like blades 16 are seated. The first portion 20 includes the peripheral flange 50 which extends about the recess 48. The recess 48 is formed therein and is defined by a sidewall 52 and a base wall 54. The sidewall 52 extends downwardly from the peripheral flange 50 and connects with the base wall 54. The base wall 54 of the recess 48 is generally parallel to the plane of the peripheral flange 50, and is positioned at a distance equal to the height of the side wall 52 in a downwardly direction from the flange 50. The recess 48 is
generally of trapezoidal shape with two arcuate extensions at the corners of the base of the trapezoid. The arcuate recess extensions serve to space and thereby space the sidewall defining the recess from the ends (corners) of the cutting edge of the blades.

In one embodiment, where the blister pack 14 includes both the reusable securement 28 and the second reusable securement 38, the complementary recess 60 of the reusable securement 28 and the complementary recess 60 of the second reusable securement 38 may be located on the peripheral flange 50 on each side of recess 48. In this embodiment, the protrusion 58 of the reusable securement 28 and the protrusion 58 of the second reusable securement 38 are positioned on the planar surface 62 to allow the engagement of the complementary recesses 60 with the protrusions 58.

The non-reusable securement 30, in the form of a series of individual dot connections 30, are positioned on the peripheral flange 50 of the first portion 20. These series of individual dot connections 30 are located between the short straight side 150 of the trapezoidal recess 48 and the edge 152 of the first portion 20 that is opposite from the living hinge 24. An identical series of individual dot connections 30 are located on the planar surface 62 of the second portion 22 of the blister pack 14 and are constructed and arranged to align with the series of individual dot connections 30 on the peripheral flange 50 of the first portion 20 of the blister pack 14. The series of individual dot connections 30 located on the first portion 20 and the second portion 22 are formed together and may be separated.

FIGS. 7-9 show the use (opening and closing) of the blister pack 14. As discussed earlier, the blister pack 14 can be pivoted about the living hinge 24 between the open position and the closed position. As discussed earlier, in the open position, as shown in FIG. 7, the blister pack 14 allows the user to access the articles, such as blades 16, stored in the storage space 26. In the closed position, as shown in FIG. 9, the blister pack 14 provides the storage space 26 to store the articles, such as blades 16.

As seen in FIGS. 7 and 9, the protrusion 58 of the second portion 22 and the complementary recess 60 of the first portion 20 are cooperatively dimensioned and configured so that the first portion 20 generally nests with the second portion 22 when in the closed position, with the flange 50 of the first portion 20, and the planar surface 62 of the second portion 22 in closely interlocking relationship. When the first portion 20 is brought into an overfitting relationship to close the blister pack 14, the protrusion 58 of the second portion 22 engages with the complementary recess 60 of the first portion 20 to releasably secure the first portion 20 with the second portion 22.

In one embodiment, the living hinge 24 of the blister pack 14 may include a hinge portion 64, a first connecting portion 66 and a second connecting portion 68. The hinge 64 is located between the first and the second connecting portions 66 and 68. The first connecting portion 66 is constructed and arranged to connect the hinge 64 with the first portion 20 and the second connecting portion 68 is constructed and arranged to connect the hinge 64 with the second portion 22 of the blister pack 14 respectively. The first connecting portion 66 and the second connecting portion 68 are structurally identical and generally have a C-shape or a U-shape channel structure. It should be appreciated that the living hinge 24 can be of any configuration, and may be considered to be only the hinge portion 64, or simply a flexible portion of the plastic material that forms a pivotal region.

The first portion 20 and the second portion 22 are bent around the backing card 12 through the use of the living hinge 24. The living hinge 24 may be made from plastic or some other deformable material allowing rotation of the first and second portions 20, 22 towards and away from each other. In the illustrated embodiment, the living hinge 24 is continuous, i.e., the living hinge 24 may extend across a length of adjacent sides of the first portion 20 and the second portion 22. However, in another embodiment, the living hinge 24 may be a discontinuous and segmented portion, depending on the desired stiffness or resistance to rotation. The deformation of the living hinge 24 pivots the first and second portions 20, 22 of the blister pack 14 to either a substantially open or closed position. In one embodiment, the living hinge 24 may be integrally formed with the first and the second portions 20 and 22.

FIG. 10 shows the manner in which a tool or knife 34 is mounted to the backing card 12. In the illustrated embodiment, the tool is a retractable utility knife 34 that includes a blade storage region 85 in the handle 87.

The knife 34 is mounted on the backing card 12 by using the screw 86. The screw 86 passes through both the mating handle members 88 and 90, with the backing card 12 that is placed in between the mating handle members 88 and 90, thus securing the knife 34 to the backing card 12. As discussed earlier, the screw 86 passes through suspension holes 84 of the tool engaging portion 52 to engage the knife 34 to the backing card 12 and prevent the knife 34 from being withdrawn from the backing card 12.

As shown in FIGS. 11 and 12, the blade 16 stored in the storage space 26 generally has a trapezoidal shape, with its cutting edge along the long straight side 102 thereof opposite a short straight side 104. The ends of the blades 16 can be defined by angular edges 106, 108. One or more notches 110 can be formed in the short straight edge 104 of the blade 16 and can be constructed and arranged to mate with a complementary blade engaging member (not shown) located in the utility knife 34.

FIG. 13A shows a package 100 in accordance with another embodiment of the present invention. The package 100 may generally include a backing card 112, a blister pack 114 and a multiplicity of blades 116, wherein the blister pack 114 is releasably secured to the backing card 112. The blister pack 114, as shown in FIGS. 13A and 13B, includes a first portion 120, a second portion 122, a living hinge 124, one or more reusable securements 128 and 138 (two shown), and non-reusable securements 130 (four shown). The multiplicity of blades 116 are snugly seated in a storage space 126 that is formed between the first and the second portions 120 and 122, when the first and the second portions 120, 122 are in closed position. The non-reusable securement 130 of the blister pack 114 secures the first and the second portion 120, 122 to one another through first openings 118 in the backing card 112. The reusable securements 128 and 138 of the blister pack 114 are constructed and arranged to releasably secure the blister pack 114 to the backing card 112 by forming their connection through a second opening 136 and a third opening 140 in the backing card 112 respectively.

The non-reusable securement 130, in the form of a series of individual dot connections 130, are positioned on a peripheral flange 180 of the first portion 120. Another series of individual dot connections 130 are located on a planar
surface 162 of the second portion 122 of the blister pack 114, and are constructed and arranged to align with the series of individual dot connections 130 on the peripheral flange 180 of the first portion 120 of the blister pack 114. The series of individual dot connections 130 located on the first portion 120 and the second portion 122 are welded or adhered together and may be separated. In illustrated embodiment, as shown in FIGS. 13A and 13B, two dot connections 130 are formed near corners between an edge 182 of the first portion 120 that is opposite the living hinge 124, and the reusable securements 128 and 138, and between an edge 183 of the second portion 122 that is opposite to the living hinge 124, and the reusable securements 128 and 138 to secure the first and the second portion 120, 122 to one another through openings 118 in the backing card 112. In such embodiment, two openings 118 are formed in the backing card 112 to enable the first and the second portions 120, 122 to be secured to one another through the first openings 118 using the non-reusable securements 130.

As shown in the illustrated embodiment, the first openings 118 of the backing card 112 may generally take the form of elongated vertical slots. However, as would be appreciated by one skilled in the art, the openings 118 can be of any shape and size to enable the first and the second portions 120, 122 to be secured to one another through the openings 118 using the non-reusable securement 130. The structure of the reusable securements 128 and 138 is same as the structure of the reusable securements 28 and 38, described in the previous embodiment. The shape and configuration of the second opening 136 and the third opening 140 in the backing card 112 are same as the shape and configuration of the second opening 36 and the third opening 40, described in the previous embodiment and hence will not be discussed in detail here.

FIG. 14A shows a package 200 in accordance with another embodiment of the present invention. The package 200 may generally include a backing card 212, a blister pack 214 and a multiplicity of blades 216, wherein the blister pack 214 is releasably secured to the backing card 212. The blister pack 214, as shown in FIGS. 14A and 14B, includes a first portion 220, a second portion 222, a living hinge 224, one or more interengaging, reusable securements 228 and 238, and one or more non-reusable securements 230. The multiplicity of blades 216 are snugly seated in a storage space 226 that is formed between the first and the second portions 220 and 222, when the first and the second portions 220, 222 are in closed position. The reusable securements 228 and 238 of the first and the second portions 220, 222 of the blister pack 214 enable the first and the second portions 220, 222 to be releasably secured in the closed position. The non-reusable securement 230 of the first and the second portions 220, 222 of the blister pack 214 secures the first and the second portion 220, 222 to one another through a first opening 218 in the backing card 212. The reusable securements 228 and 238 of the blister pack 214 are constructed and arranged to releasably secure the blister pack 214 to the backing card 212 by forming their connection through a second opening 236 and a third opening 240 in the backing card 212 respectively.

The non-reusable securement 230, in the form of series of individual dot connections 230, are positioned on a perforated tab 280 of the first portion 220 and on a perforated tab 286 of the second portion 222. As shown in FIG. 14B, the perforated tab 280 extends from a center of an edge 282 of the first portion 220 that is opposite to the living hinge 224, and the perforated tab 286 extends from a center of an edge 284 of the second portion 222 that is opposite to the living hinge 224. In the illustrated embodiment, the perforated tabs 280 and 286, each include two sealed dot connections that are used to secure the first and the second portion 220, 222 to one another through the first opening 218 in the backing card 212. In another embodiment, the perforated tabs 280 and 286 are in the form of semi-circular or semi-oval shaped tabs that are extending from the edges 282 and 284 respectively. However, as would be appreciated by one skilled in the art, the perforated tabs 280 and 286 can be of any shape and size to enable the first and the second portions 220, 222 are secured to one another through the first opening 218 using the non-reusable securement 230.

FIG. 14A shows a package 300 in accordance with another embodiment of the present invention. The package 300 may generally include a backing card 312, a blister pack 314 and a multiplicity of blades 316, wherein the blister pack 314 is releasably secured to the backing card 312. The blister pack 314, as shown in FIGS. 14A and 14B, includes a first portion 320, a second portion 322, a living hinge 324, one or more interengaging, reusable securements 328 and 338, and one or more non-reusable securements 330. The multiplicity of blades 316 are snugly seated in a storage space 326 that is formed between the first and the second portions 320 and 322, when the first and the second portions 320, 322 are in closed position. The reusable securements 328 and 338 of the first and the second portions 320, 322 of the blister pack 314 enable the first and the second portions 320, 322 to be releasably secured in the closed position. The non-reusable securement 330 of the first and the second portions 320, 322 of the blister pack 314 secures the first and the second portion 320, 322 to one another through a first opening 318 in the backing card 312. The reusable securements 328 and 338 of the blister pack 314 are constructed and arranged to releasably secure the blister pack 314 to the backing card 312 by forming their connection through a second opening 336 and a third opening 340 in the backing card 312 respectively.
314 and a multiplicity of blades 316, where the blister pack 314 is releasably secured to the backing card 312. The blister pack 314, as shown in FIGS. 15A and 15B, includes a first portion 320, a second portion 322, a living hinge 324, one or more interengaging, reusable securements 328 and 338, and one or more non-reusable securements 330. The multiplicity of blades 316 are snugly seated in a storage space 326 that is formed between the first and the second portions 320 and 322, when the first and the second portions 320, 322 are in closed position. The reusable securements 328 and 338 of the first and the second portions 320, 322 of the blister pack 314 enable the first and the second portions 320, 322 to be releasably secured in the closed position. The non-reusable securement 330 of the first and the second portions 320, 322 of the blister pack 314 secures the first and the second portion 320, 322 to one another through a first opening 318 in the backing card 312. The reusable securements 328 and 338 of the blister pack 314 are constructed and arranged to releasably secure the blister pack 314 to the backing card 312 by forming their connection through a second opening 336 and a third opening 340 in the backing card 312 respectively.

[0062] The non-reusable securement 330, in the form of series of individual dot connections 330, are positioned on a perforated tab 380 of the first portion 220 and on a perforated tab 386 of the second portion 324. As shown in FIG. 15B, the perforated tab 380 is formed between an edge 382 of the first portion 320 that is opposite to the living hinge 324, and a short side 381 of the trapezoidal recess 383. The perforated tab 386 is formed on a planar surface 362 of the second portion 322 and is constructed and arranged to align a perforated line 385 of the second portion 322 with a perforated line 387 of the first portion 320. In the illustrated embodiment, the perforated tabs 380 and 386, each include a plurality of sealed dot connections that are used to secure the first and the second portion 320, 322 to one another through the first opening 318 in the backing card 312. In one embodiment, the perforated tabs 380 and 386 are in the form trapezoidal shaped tabs. However, as would be appreciated by one skilled in the art, the perforated tabs 380 and 386 can be of any shape and size to enable the first and the second portions 320, 322 are secured to one another through the first opening 318 using the non-reusable securement 330.

[0063] The blister pack 314 can be removed from the backing card 312 first by releasing the non-reusable securement 330. Similar to prior embodiment, the non-reusable securement 330 can be released by pulling apart the perforated tab 380 of the first portion 320 and the perforated tab 386 of the second portion 322, so as to break the connections formed at non-reusable securement 330. In another embodiment, the perforated tabs 380 and 386 may be separated from the blister pack 314 along the perforations 385 and 387 to release the non-reusable securement 330. In such embodiment, the non-reusable securement 330 may be released without actually breaking the connections formed at non-reusable securement 330, as previously described. Once the non-reusable securement 330 is released, the blister pack 314 can then be removed from the backing card 312, by disengaging reusable securements 328 and 338.

[0064] The opening 318 of the backing card 312 may generally take the form of an elongated vertical slot. However, as would be appreciated by one skilled in the art, the opening 318 can be of any shape and size to enable the first and the second portions 320, 322 are secured to one another through the opening 318 using the non-reusable securement 330. The structure of the reusable securements 328 and 338 is same as the structure of the reusable securements 28 and 38, described in the prior embodiment and hence will not be described in detail here. The structure of the second opening 336 and the third opening 340 in the backing card 312 are same as the structure of the second opening 36 and the third opening 40, described in the prior embodiment and hence will not be discussed in detail here.

[0065] FIG. 16A shows a package 400 in accordance with another embodiment of the present invention. The package 400 may generally include a backing card 412, a blister pack 414 and a multiplicity of blades 416, where the blister pack 414 is releasably secured to the backing card 412. The blister pack 414, as shown in FIGS. 16A and 16B, includes a first portion 420, a second portion 422, a living hinge 424, one or more reusable securements 428 and 438, and one or more non-reusable securements 430. The multiplicity of blades 416 are snugly seated in a storage space 426 that is formed between the first and the second portions 420 and 422, when the first and the second portions 420, 422 are in closed position. In this embodiment, the backing card 412 has two openings, first opening 436 and second opening 440, that are formed therethrough, although it is contemplated that only a single opening may be provided in some embodiments. In this embodiment, both the reusable securements, and the non-reusable securements form their connections through the same opening in the backing card 412. Specifically, in the illustrated embodiment, wherein two sets of connections and two openings are used, the reusable securements 428 and 438 of the blister pack 414 are constructed and arranged to releasably secure the blister pack 414 to the backing card 412 by forming their connection through the openings 436 and 440 in the backing card 412 respectively. The non-reusable securement 430 of the blister pack 414 also secures the first and the second portion 420, 422 to one another through the same openings 436 and 440 in the backing card 412.

[0066] The reusable securements 428 and 438, each include a cylindrical protrusion 458 formed in the second portion 422 of the blister pack 414 and a complementary, generally triangular recess 460 formed in the first portion 420 of the blister pack 414. The complementary recess 460 is constructed and arranged to accommodate the protrusion 458 therein as previously described. The non-reusable securement 430 is formed on the top circular surface of protrusions 458, and on the end triangular surface of the complementary recesses 460. In the illustrated embodiment, as shown in FIGS. 16A and 16B, one sealed dot connection 430 formed on each protrusion 458 of the reusable securements 428 and 438, and formed on each complementary recess 460 of the reusable securements 428 and 438 are used to secure the first and the second portion 420, 422 to one another through the first opening 436 and the second opening 440 in the backing card 412 respectively.

[0067] The blister pack 414 can be removed from the backing card 412 by releasing the non-reusable securement 430. In one embodiment, the non-reusable securement 430 can be released by pulling apart the first and second portions 420 and 422 at their corners opposite the living hinge 424, so as to break the connections formed at non-reusable securement 430. Once the non-reusable securements 430 are released, the reusable securements 428 and 438 are also released, and the blister pack 414 can then be removed from the backing card 412.
In one embodiment, the first opening 436 and the second opening 440 of the backing card 412 generally are in the form of circular shaped openings. However, as would be appreciated by one skilled in the art, the first opening 436 and the second opening 440 can be of any shape and size to enable the first and the second portions 420, 422 to be secured to one another through the first opening 436 and the second opening 440 using the non-reusable securement 430 and the reusable securements 428 and 438. The structure of the reusable securements 428 and 438 is same as the structure of the reusable securements 28 and 38, described in the previous embodiment and hence will not be discussed in detail here.

In the embodiments noted above, it is contemplated that the non-reusable securement may simply take the form of an adhesive connection, a welded connection, or other type of non-reusable connection. The size, shape or location of these connections can vary greatly and the present disclosure is not limited to any particular configuration. In addition, the non-reusable securement need not extend through an opening in the backing card. For example, in one embodiment, it may be disposed beyond an outer edge of the backing card, or in a slot in the backing card that is not bounded on all sides (e.g., between an edge of the card and the utility knife 34).

As will be appreciated by one skilled in the art, the blister pack 14 of the present invention may be readily fabricated from synthetic thermoplastic resin sheet material by conventional thermoforming techniques including vacuum forming and pressure forming. Various thermoplastics providing resilient deformability, reasonable transparency and formability may be employed including polyvinyl chloride, polyethylene, polypropylene, ethylene/propylene copolymers and impact polystyrene. In one embodiment, polyvinyl chloride has been found advantageous in providing a reasonable balance of properties at relatively low cost.

Although the invention has been described in detail for the purpose of illustration based on what is currently considered to be the most practical and preferred embodiments, it is to be understood that such detail is solely for that purpose and that the invention is not limited to the disclosed embodiments, but, on the contrary, is intended to cover modifications and equivalent arrangements that are within the spirit and scope of the appended claims. For example, it is to be understood that the present invention contemplates that, to the extent possible, one or more features of any embodiment can be combined with one or more features of any other embodiment.

1. A blister pack assembly comprising:
   a backing card, the backing card comprising a first opening therethrough;
   a blister pack releasably secured to the backing card and comprising a first portion and a second portion, wherein the first portion and the second portion are connected via a living hinge, the living hinge enabling the first portion and the second portion to be pivoted between open and closed positions;
   the first and the second portions of the blister pack defining a storage space therebetween when in the closed position;
   the first and the second portions of the blister pack defining at least one interengaging, reusable securement to enable the first and the second portions of the blister pack to be releasably secured in the closed position after the first and the second portions of the blister pack have been pivoted via the living hinge to the open position, the first and the second portions of the blister pack further defining a non-reusable securement that secure the first and the second portion to one another through the first opening in the backing card, wherein the non-reusable securement is incapable of securing the first and the second portions of the blister pack to one another after the first and the second portions of the blister pack have been pivoted to the open position;
   wherein after the non-reusable securement is released, the blister pack can be removed from the backing card.

2. The blister pack of claim 1, further comprising a second opening through the backing card, and wherein the reusable securement is disposed in the second opening when the blister pack is secured to the backing card.

3. The blister pack of claim 1, further comprising a third opening through the backing card and a second reusable securement extending through the third opening when the blister pack is secured to the backing card.

4. The blister pack of claim 1, further comprising a tool engaging portion disposed on the backing card, wherein the tool engaging portion is configured to secure a tool to the card.

5. The blister pack of claim 1, wherein the non-reusable securement may be secured by a welded connection.

6. The blister pack of claim 1, wherein the reusable securement comprises a protrusion located on the second portion and a complementary recess located on the first portion.

7. The blister pack of claim 1, further comprising a fourth opening through the backing card to hang the blister pack for display.

8. The blister pack of claim 1, wherein the reusable securement and the non-reusable securement extend through the first opening.

9. The blister pack of claim 2, wherein the reusable securement and the non-reusable securement extend through the second opening.

10. The blister pack of claim 1, wherein the non-reusable securement is disposed on portions of the blister pack that can be separated from a remainder of the blister pack by perforations, and wherein the release of the non-reusable securement can be achieved by removing of the portions by tearing along the perforations.

11. A package of knife blades comprising:
   a backing card, the backing card comprising a first opening therethrough;
   a blister pack releasably secured to the backing card and comprising a first portion and a second portion, wherein the first portion and the second portion are connected via a living hinge, the living hinge enabling the first portion and the second portion to be pivoted between open and closed positions;
   the first and the second portions defining a storage space therebetween when in the closed position;
   the first and the second portions defining at least one interengaging, reusable securement to enable the first and the second portions to be releasably secured in the closed position after the first and the second portions have been pivoted to the open position,
   the first and the second portions further defining a non-reusable securement that secure the first and the second portion to one another through the first opening in the backing card, wherein the non-reusable securement is incapable of securing the first and the second portions to one another after the first and the second portions have been pivoted to the open position;
wherein after the non-reusable securement is released, the
blister pack can be removed from the backing card; and
multiplicity of blades disposed within the storage space.

12. The package of claim 11, further comprising a second
opening through the backing card, and wherein the reusable
securement is disposed in the second opening when the blister
pack is secured to the backing card.

13. The package of claim 11, further comprising a third
opening through the backing card and a second reusable
securement extending through the third opening when the
blister pack is secured to the backing card.

14. The package of claim 11, further comprising a tool
engaging portion disposed on the backing card, wherein the
tool engaging portion is configured to secure a tool to the card.

15. The package of claim 11, further comprising a tool
engaging portion disposed on the backing card, wherein the
tool engaging portion shaped to secure a knife to the card.

16. The package of claim 11, further comprising a fourth
opening through the backing card to hang the product pack-
age for display.

17. The package of claim 11, wherein the non-reusable
securement may be secured by a welded connection.

18. The package of claim 11, wherein the reusable secure-
ment comprises a protrusion located on the second portion
and a complementary recess located on the first portion.

19. The package of claim 11, further comprising one or
more holes in the backing card for receiving a screw of the
tool so as to secure the tool to the backing card.

20. The package of claim 11, wherein the reusable secure-
ment and the non-reusable securement extend through the
first opening.

21. The package of claim 12, wherein the reusable secure-
ment and the non-reusable securement extend through the
second opening.

22. The package of claim 11, wherein the non-reusable
securement is disposed on portions of the blister pack that can
be separated from a remainder of the blister pack by perfor-
ations, and wherein the release of the non-reusable securement
can be achieved by removing of the portions by tearing along
the perforations.

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