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(54) **EASY-OPEN PEEL POUCH**

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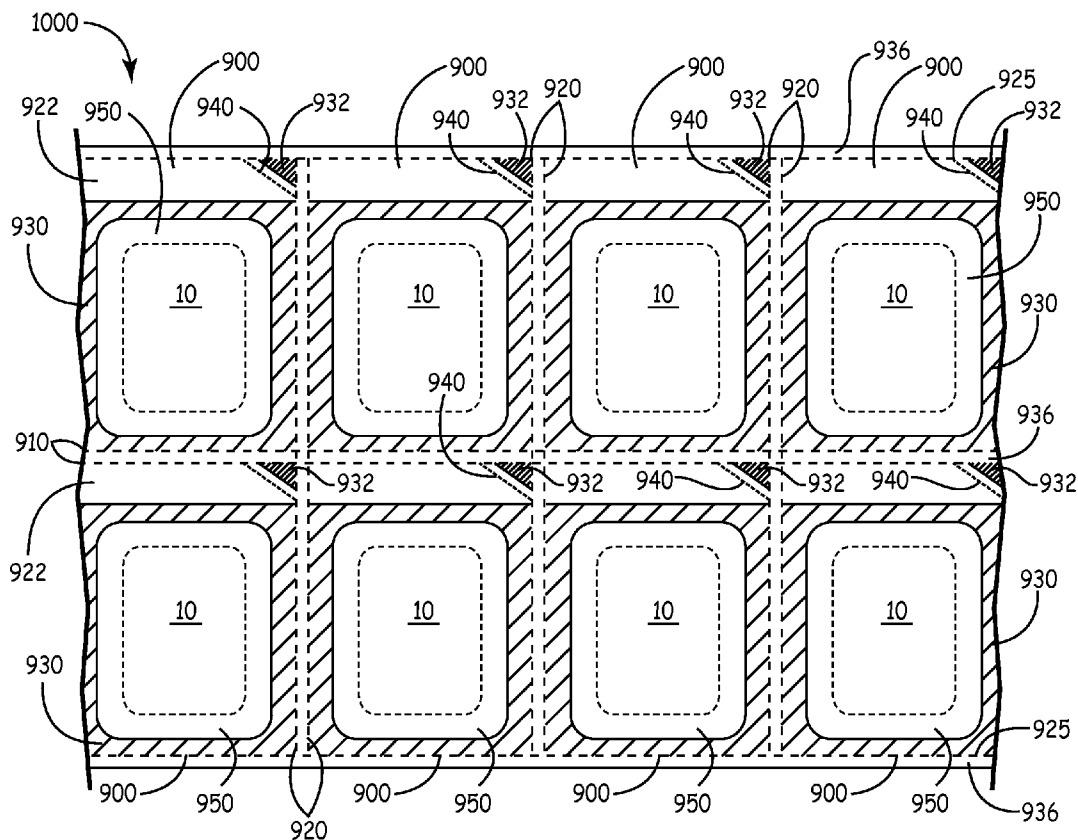
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(57) **ABSTRACT**

A package for containing and dispensing a product is disclosed. The package has a first layer, a second layer, and at least a first seal zone where the first layer is joined to the second layer by a peelable seal. The first seal zone has an inner perimeter that defines an unsealed pouch area for containing the sheet product. A tab cut is defined in the first layer that divides the package into a package zone and a tab zone. A method and relevant manufacturing equipment are also disclosed.



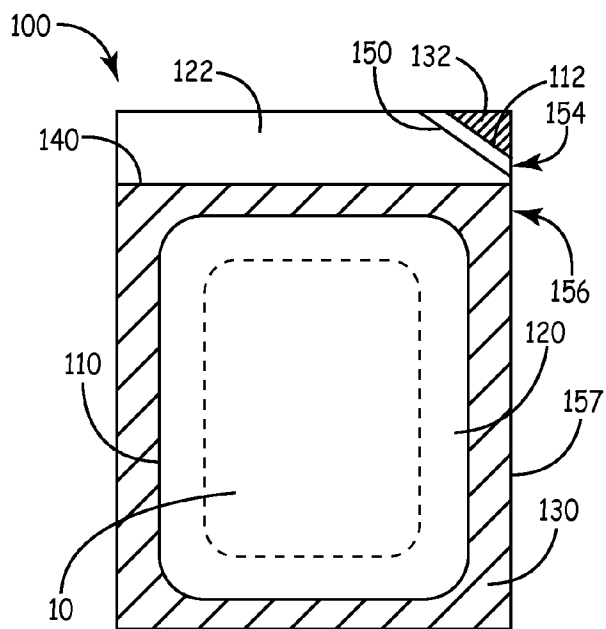


FIG. 1

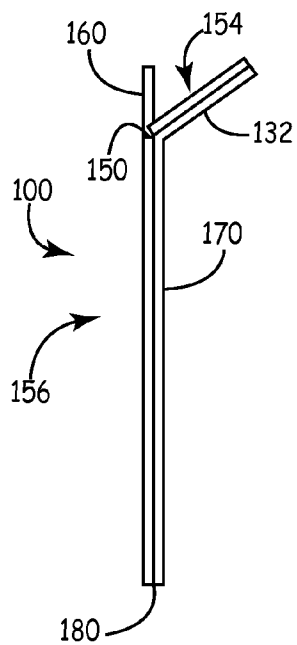


FIG. 2

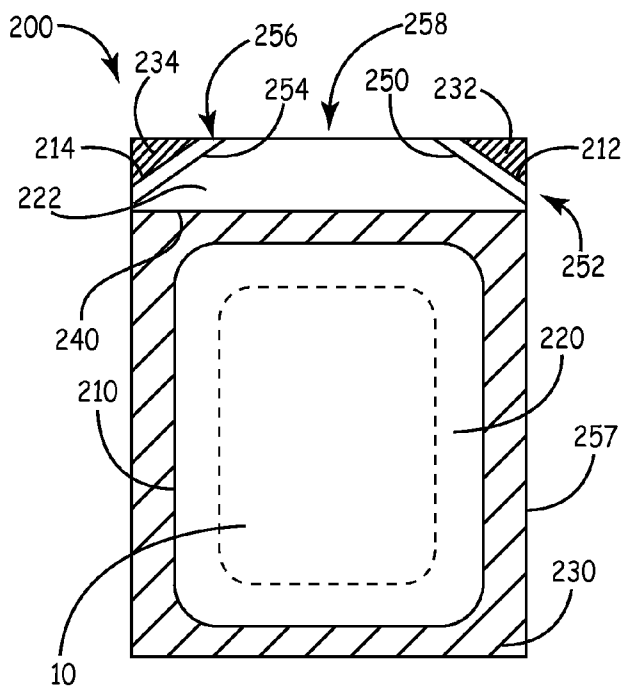


FIG. 3

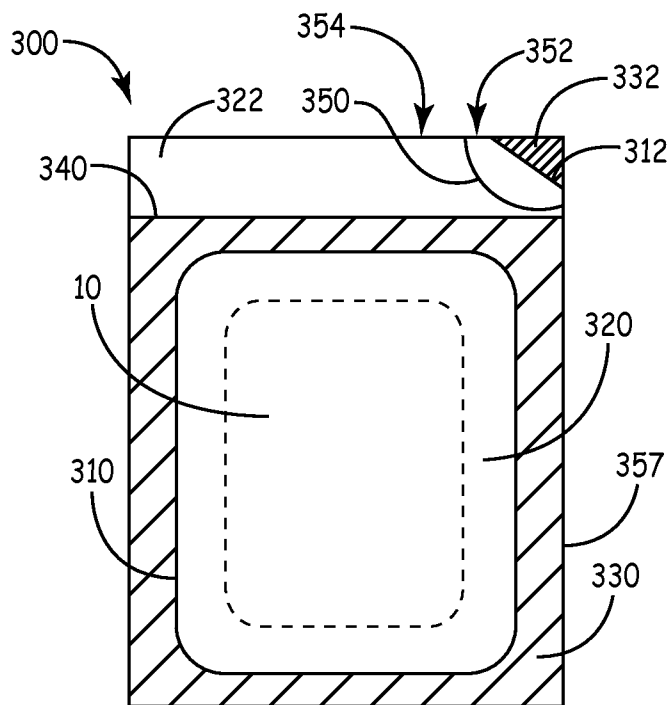


FIG. 4

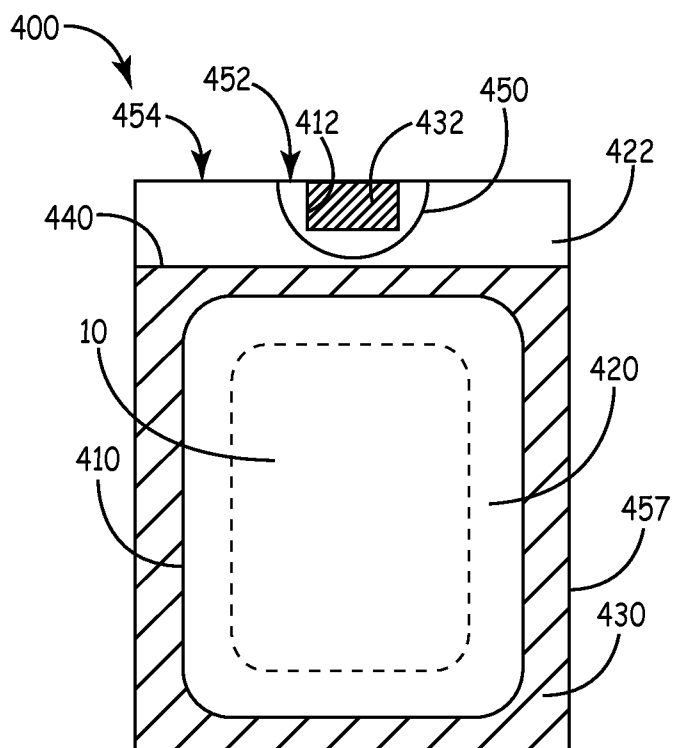


FIG. 5

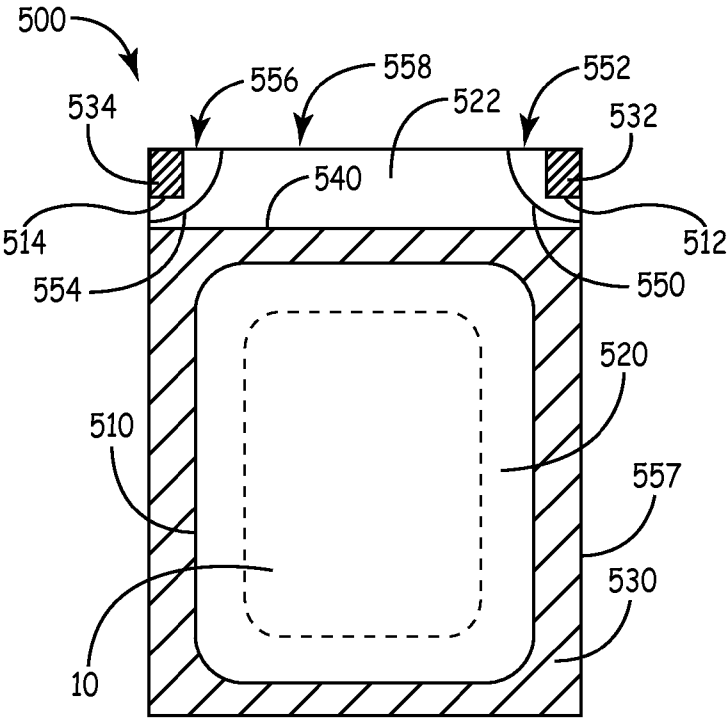


FIG. 6

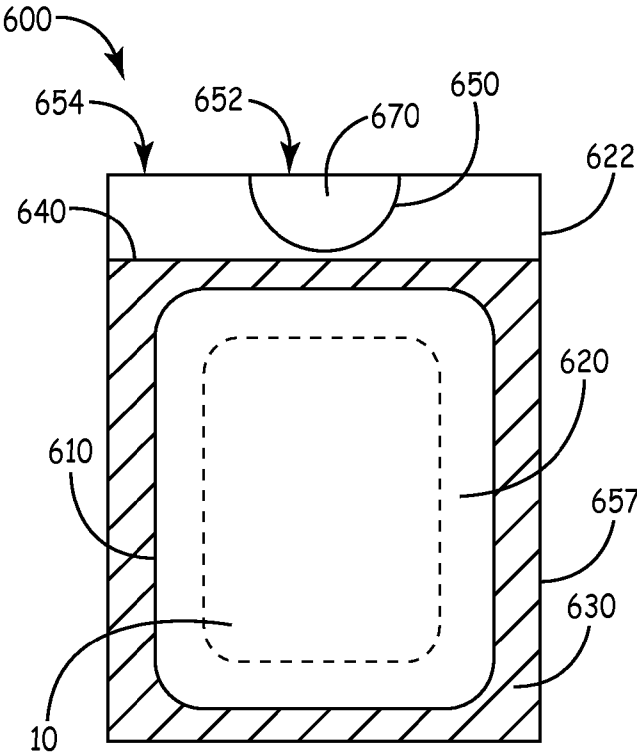


FIG. 7

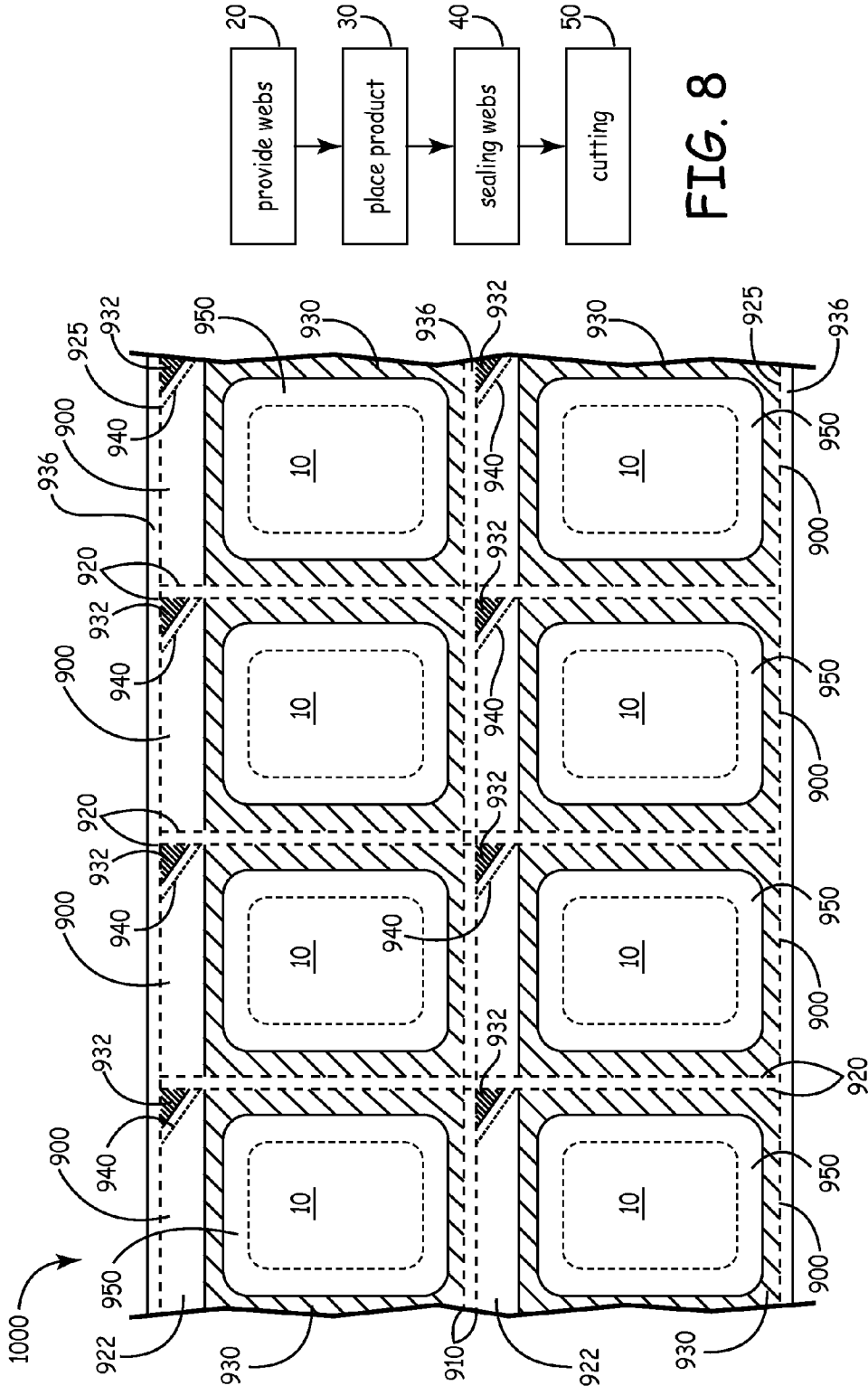


FIG. 9

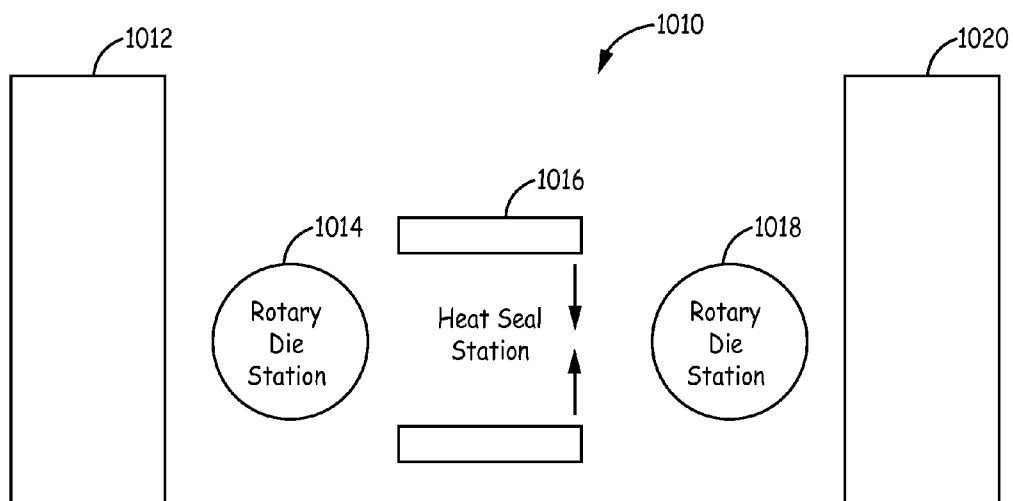


FIG. 10

EASY-OPEN PEEL POUCH

FIELD OF THE INVENTION

[0001] The technology described herein generally relates to a package having a pouch area. More particularly the technology described herein relates to a package where layers are peeled apart to access a pouch area.

BACKGROUND

[0002] Many different types of packages are made with two or more layers of material that are sealed together to form a pouch for containing a product, and then can be peeled apart to access the product. In some areas of technology, it is desirable to have access to products that are sterile for their eventual use. This is a common issue in the medical field, for example, where it is desirable that products used in medical procedures remain sterile over transport to and from manufacturing facilities, medical facilities, and the like, in addition to while stored in those facilities. In some package designs, it is difficult to separate the layers of package in order to grasp the layers and peel them apart. Static electricity may play a role in making the layers difficult to separate. A cutting process for cutting the outer package perimeter may fuse the layers together at their outer perimeters to some degree, which can make the layers difficult to separate.

[0003] Some packages are made with a notch that enables the user to tear all layers of the package starting at the notch, in order to gain access to at least part of the pouch area containing the product. However, tearing all layers across the pouch area can cause damage to fragile contents. Also, tearing all layers across one side of a pouch area can still make it difficult to remove the contents in some situations.

[0004] Time and frustration become issues in situations where a package requires the manual separation of thin layers to open especially when the user is wearing gloves or addressing an urgent medical need.

SUMMARY OF THE INVENTION

[0005] In one embodiment, a package for containing and dispensing a product includes a first layer, a second layer, and at least a first seal zone where the first layer is joined to the second layer by a peelable seal, the first seal zone having an inner perimeter that defines an unsealed pouch area for containing the product and an outer perimeter. The package further includes an unsealed header zone adjacent to the outer perimeter of the first seal zone, wherein the first layer is not joined to the second layer in the unsealed header zone. The package also includes a first tab cut in the first layer within the unsealed header zone, wherein the first tab cut divides the package into a package zone and a first tab zone.

[0006] In one embodiment, a method of forming a package for containing and dispensing a product includes providing a first layer web and a second layer web and placing a product on at least one pouch area of one of the first and second layer webs. The method also includes forming a combined web by sealing the first layer web to the second layer web at least at a first seal zone so that the first layer is joined to the second layer by a peelable seal surrounding the at least one pouch area, and leaving an unsealed header zone adjacent to an outer perimeter of the first seal zone where the first layer web is not sealed to the second layer web. The method further includes cutting at least one individual package around an outer package perimeter to separate the individual package from the

combined web, wherein cutting further comprises cutting only the first layer of the package at a first tab cut location within the unsealed header zone to define a first tab zone in the package.

[0007] In one embodiment, a device for forming a package for containing and dispensing a sheet product includes a heat seal plate for joining a first layer web and a second layer web with a heat seal at first seal zones to form a combined web, wherein the seal plate defines at least one first seal zone having an inner perimeter and an outer perimeter. The device also includes a cutting die for cutting the combined web to form at least one individual package and for cutting through only the first layer at a tab cut location, where the first tab cut location is not within any of the first seal zones on the combined web.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The invention may be more completely understood and appreciated in consideration of the following detailed description of various embodiments of the invention in connection with the accompanying drawings.

[0009] FIG. 1 depicts a front view of a package consistent with the technology disclosed herein.

[0010] FIG. 2 depicts a side view of the package of FIG. 1 with a tab portion and part of one layer bent away from the remainder of the package.

[0011] FIG. 3 depicts a front view of another embodiment of a package consistent with the technology disclosed herein.

[0012] FIG. 4 depicts a front view of yet another embodiment of a package consistent with the technology disclosed herein.

[0013] FIG. 5 depicts a front view of another embodiment of a package consistent with the technology disclosed herein.

[0014] FIG. 6 depicts a front view of another embodiment of a package consistent with the technology disclosed herein.

[0015] FIG. 7 depicts a front view of another embodiment of a package consistent with the technology disclosed herein.

[0016] FIG. 8 depicts a flow chart consistent with a method described herein.

[0017] FIG. 9 depicts an example web consistent with the technology disclosed herein.

[0018] FIG. 10 is a schematic drawing of one embodiment of package-making equipment disclosed herein.

DETAILED DESCRIPTION

[0019] The package described herein is generally configured to contain and dispense a product. The product can be medical in nature and can be related to surgical needs, pharmaceutical needs, medical emergency responder needs, and the like. In some embodiments the product is a wound dressing, a medical care product, a medical device, and the like. In some embodiments the product is a sheet product such as a soluble film that can be relevant to edible applications, oral applications, skin care applications, cosmetic applications, and the like. A sheet product generally is very thin and has width and length dimensions that are significantly larger than its thickness dimension, such as where the width and length are at least ten times the thickness dimension, or where the width and length are at least one-hundred times the thickness dimension. Sheet products sometimes have parallel sides. In some cases, a wound dressing is a sheet product.

[0020] FIG. 1 depicts a front view of a package consistent with the technology disclosed herein. FIG. 2 depicts a side

view of the package of FIG. 1 where a tab zone 154 and part of one layer 170 is bent away from the remainder of the package 100. The package 100 contains a product 10 and generally has a first layer 160 and a second layer 170. In FIG. 1, the product 10 is shown in dashed lines beneath the first layer 160. The product 10 may be visible through a transparent layer or layers or may not be visible within the package 100. The package 100 defines a first seal zone 130, illustrated with cross-hatching, where the first layer 160 is joined to the second layer 170 by a peelable seal 180. The first seal zone 130 has an inner perimeter 110 and an outer perimeter 140. In the embodiment of FIG. 1, the inner and outer perimeters 110, 140 both have a substantially rectangular shape, with the inner perimeter 110 having rounded corners. In other embodiments, these perimeters have different shapes, such as with or without rounded corners, with or without square corners, rectangles, ovals, circles, squares and others. An unsealed pouch area 120 is defined by the inner perimeter 110 of the first seal zone 130 and contains the product 10. A tab cut 150 is defined in the first layer 160 that divides the package into a package zone 156 and a tab zone 154.

[0021] In the current embodiment, the package 100 has an outer perimeter 157 that is rectangular and the tab zone 154 is defined in the corner of the package 100. In some embodiments it can be desirable to have a package in a different shape with a tab zone in a different location, however. Some alternatives will be discussed herein. In one embodiment, the package shape is circular, oval or tombstone shaped with a rectangular base portion and a curved top portion.

[0022] The package includes an unsealed header area 122 where the first layer 160 is unattached to the second layer 170. In the embodiment of FIG. 1, the outer perimeter 140 of the first seal zone 130 defines one side of the unsealed header area 122 and the outer perimeter 157 of the package defines other sides of the unsealed header area 122. In the unsealed header area 122, a user can separate the two layers and can grasp the first layer 160 and the second layer 170 to peel them apart to access the product 10. However, sometimes static electricity may play a role in making the layers difficult to separate. Also, the cutting process used to cut the outer package perimeter may fuse the layers together at their outer perimeters to some degree, which can make the layers difficult to separate. Also, if a user is wearing gloves, under time pressure or both, a delay in separating the two layers to peel them apart could be especially frustrating.

[0023] The tab cut 150 and tab zone 154 are configured to facilitate the separation of the first layer 160 from the second layer 170. The tab cut 150 through the first layer 160 in the unsealed header area 122 physically decouples the portion of the first layer 160 within the tab zone 154 from the portion of the first layer 160 outside of the tab zone 154 (in the package zone 156). As a result, when the user bends the package in the tab zone 154, the first layer 160 separates from the second layer 170 at the tab cut 150, so that the user can easily grasp the tab zone 154 of the package, easily grasp the first layer 160 in the unsealed header and then can pull the second layer 170 away from the first layer 160.

[0024] In some embodiments, such as the embodiment of FIG. 1, a second seal zone 132 is present in the tab zone 154 where the first layer 160 is joined to the second layer 170. The second seal zone 132 physically couples the portion of the first layer 160 within in the tab zone 154 to the second layer 170. As such, when the user grasps the tab zone 154, the user is grasping the sealed first and second layers in the tab zone

154. The second seal zone 132 is separated from the first seal zone 130 by the unsealed header area 122. Second seal zone boundary 112 defines a boundary of the second seal zone 132 and divides the second seal zone 132 from the unsealed header area 122.

[0025] In some embodiments, such as the embodiment shown in FIG. 7 which will be further described herein, the first layer is not joined to the second layer by a second seal zone. In these embodiments, a portion of the first layer in the tab zone is separated from the rest of the package by the tab cut and is no longer connected to the package. In these embodiments, the first layer of the package within the tab zone is removed, exposing the second layer in the tab zone. The first layer in the tab zone can be removed through use of a vacuum in one embodiment or a blower in another embodiment, although other methods can certainly be used as well. Each of the embodiments illustrated in FIGS. 1-6 are illustrated to include a second and sometimes a third seal zone but could also be provided without the additional seal zones. Likewise, the embodiment of FIG. 7 could be provided with the second seal zone. Where an embodiment includes a second seal zone, the step of removing the tab zone portion of the first layer is not necessary, since the tab zone portion of the first layer is adhered to the tab zone portion of the second layer. In this situation, the tab zone of the package includes the first and second layers adhered together, and the tab zone is therefore thicker than either of the two layers separately.

Layer Material Options

[0026] The first layer 160 and the second layer 170 can include a variety of materials and combinations of materials that are generally known in the art, such as a polyester film, spunbonded olefin, DuPont TYVEK® brand spunbonded olefin, linear low density polyethylene with polybutylene, biaxially oriented polyester film, polypropylene film, high density polyethylene film, BAREX® acrylonitrile co-polymer film available from BP Chemicals, Inc., cast polyethylene terephthalate (PET) or polyethylene terephthalate glycol (PETG) film, metal foil, aluminum foil, poly-vinylidene dichloride (PVDC) film, co-extruded films containing ethylene vinyl alcohol polymer (EVOH), polyvinyl alcohol (PVA) film, polyamide film, vinyl film, or composite laminations or coatings that contain the same. In a variety of embodiments, the first layer 160 and the second layer 170 are heat sealable. In some embodiments, only one of the first layer 160 and second layer 170 is heat sealable, and the other is a compatible material to create a peel seal. In one embodiment, each of the first and second layers includes a polyester layer, such as a DuPont TYVEK® brand spunbonded olefin, a tie layer and a sealant layer. In one embodiment, the polyester film, tie layer and sealant layer are coextruded or laminated to form a single film. One example of an appropriate sealant layer is linear low density polyethylene with polybutylene, which is activated by heat to bond to the other layer. In some embodiments, the layers are joined by methods other than heat sealing. For example, the layers may be joined by ultrasonic welding in some embodiments. In some embodiments, the layers may be joined by more than one method, such as both heat sealing and ultrasonic welding.

[0027] In a variety of embodiments, the first layer 160 and the second layer 170 are substantially non-permeable. In a variety of embodiments, the first layer 160 and the second layer 170 are substantially permeable. For example, a layer that includes a metal foil layer will be substantially non-

permeable, while a layer that includes a DuPont TYVEK® brand spunbonded olefin will be permeable. In a variety of embodiments, the first layer 160 and the second layer 170 are substantially flexible, although in some embodiments one of the first layer 160 or the second layer 170 or both are substantially rigid. In some embodiments, one or both of the layers is transparent so that the product 10 is visible through the transparent layer. Alternative terms that can be used to describe the first layer 160 and the second layer 170 include film, sheet, web, and the like.

[0028] The first layer 160 is generally coextensive with the second layer 170 so that the two layers share a common outer perimeter. As mentioned above, the first layer 160 and second layer 170 are joined with a peelable seal 180. Generally, the peelable seal 180 is a hermetic bond between the contacting surfaces of the first layer 160 and second layer 170. The peelable seal 180 can be formed by any appropriate method known in the art. In a variety of embodiments, peelable seal 180 is a heat seal or melt bonded relationship caused by the application of heat and pressure. In an alternate embodiment, peelable seal 180 is formed with a suitable adhesive applied to at least one of the contacting surfaces of the first layer 160 and second layer 170. In at least one embodiment, the peelable seal 180 is re-sealable, thereby allowing a user to reclose the package 100.

[0029] In general the peelable seal 180 is configured to have strength conducive to allowing a user to peel the first layer 160 and the second layer 170 apart without the use of tools, to access the product 10 there between. In one embodiment, the peelable seal strength is in the range of 1.25 to 2 pounds per linear inch of seal when pulled apart at 180 degrees at 12 inches per minute travel rate according to testing procedure TAPPI T-494 as published by the Technical Association of the Pulp and Paper Industry. In some embodiments the peelable seal strength is in the range of 1.0 to 2.5 pounds per linear inch of seal. In a variety of embodiments the peelable seal has strength in the range of 0.25 to 3.5 pounds per linear inch of seal.

Options for the Second Seal Zone

[0030] Similar to the first seal zone 130, the second seal zone 132 can be formed by any appropriate method known in the art. The second seal zone 132 can be formed in an identical way as the first seal zone 130, a similar way as the first seal zone 130 or in a different way. In one embodiment, the second seal zone 132 and the first seal zone 130 are formed through heat sealing the first layer 160 to the second layer 170.

Description of Embodiments of FIGS. 3-7

[0031] Those having skill in the art will appreciate the variety of configurations consistent with the technology disclosed herein. FIGS. 3-7 show five different embodiments where the tab zone or tab zones and the additional seal area or seal areas are configured in different ways. FIG. 3 depicts a front view of package embodiment 200 which includes a first layer and a second layer (not visible from the front view angle of FIG. 3) and defines a first seal zone 230 with an inner perimeter 210 and an outer perimeter 240. An unsealed pouch area 220 is defined by the inner perimeter 210 and contains a product 10. In this embodiment, however, a first tab cut 250 defines a first tab zone 252 and a second tab cut 254 defines a second tab zone 256. A second seal zone 232 in the first tab zone 252 and a third seal zone 234 in the second tab zone 256

are separated from the first seal zone by an unsealed header area 222. In the embodiment of FIG. 3, there are two tab zones 252 and 256 which both provide a location for the user to grasp when opening the package which will easily separate from the remainder of the unsealed header area so that the two layers of the package can be easily peeled apart. Second seal zone boundary 212 defines a boundary of the second seal zone 232 and divides the second seal zone 232 from the unsealed header area 222. The third seal zone 234 also has a boundary 214 that divides the third seal zone 234 from the unsealed header area 222.

[0032] Those having skill in the art will appreciate that a tab cut can have a variety of configurations and locations. In some embodiments the tab cut is a straight line. In other embodiments the tab cut is curved. In at least one embodiment the tab cut can include intersecting sides. In some embodiments depicted herein, the tab cut is near a corner while in some embodiments the tab cut is near a center of one side of the package. In other embodiments, the tab cut is located at different positions along a side of the package. FIG. 4 depicts a front view of yet another embodiment of a package consistent with the technology disclosed herein. In this embodiment the package 300 similarly has a first layer and a second layer (not visible from the front view of FIG. 4) and defines a first seal zone 330 with an inner perimeter 310 and an outer perimeter 340. An unsealed pouch area 320 is defined by the inner perimeter 310 and contains the product 10. A tab cut 350 defined in the first layer defines a tab zone 352 that is distinguished from a package zone 354. A second seal zone 332 is in the tab zone 352 and is separated from the first seal zone 330 by an unsealed header area 322. A boundary 312 of the second seal zone 332 separates the second seal zone 332 from the unsealed header area 322. In this embodiment the tab cut 350 is curved. In this embodiment the tab cut 350 intersects the edges of the package perimeter 357 at substantially a right angle. Positioning cutting edges at right angles on the die can be desirable since material can sometimes accumulate at acute angles between cutting structures.

[0033] The first seal zone and the second seal zone can have a variety of configurations. In the embodiments disclosed herein, the outer perimeter of the first seal zone has a generally rectangular shape and extends to the edges of the package on three sides. The inner perimeter is also generally rectangular in shape, where the rectangle has curved corners. Many other shapes will be conducive to the technology disclosed herein. For example, the package perimeter and the first seal area could be oval or circular. The second seal zone (and third seal zones, where applicable) can also have a variety of shapes and placements. In the embodiments disclosed herein, the second seal zone extends to at least one edge of the package, although there are a variety of instances where the second seal zone does not extend to an edge of the package. In a variety of embodiments the second seal zone is triangular in shape. In some embodiments the second seal zone is rectangular in shape. In yet other embodiments the second seal zone is circular in shape. Where the second seal zone is formed through heat sealing, a shape can be defined in a die that creates the second seal zone.

[0034] FIG. 5 depicts a front view of another embodiment of a package consistent with the technology disclosed herein. In this embodiment the package 400 has a first layer and a second layer (not visible from the front view of FIG. 5) and defines a first seal zone 430 with an inner perimeter 410 and an outer perimeter 440. An unsealed pouch area 420 is defined

by the inner perimeter 410, where the unsealed pouch area 420 is configured to receive a product 10. A tab cut 450 defined in the first layer defines a tab zone 452 that is distinguished from a package zone 454. The package zone includes the remainder of the package excluding the tab zone. A second seal zone 432 is in the tab zone 452 and is separated from the first seal zone 430 by an unsealed header area 422. In this embodiment the tab cut 450 is also curved and intersects with an edge of the package 400. The tab cut 450 is located at the center of the edge of the unsealed header area 422. The second seal zone 432 is substantially rectangular and is within the tab zone 452. A boundary 412 of the second seal zone 432 separates the second seal zone 432 from the unsealed header area 422. In other embodiments, the tab cut 450 is located at other non-central locations along the edge of the unsealed header area 422.

[0035] FIG. 6 depicts a front view of another embodiment of a package consistent with the technology disclosed herein. In this embodiment the package 500 has a first layer and a second layer (not visible from the front view of FIG. 6) and defines a first seal zone 530 with an inner perimeter 510 and an outer perimeter 540. An unsealed pouch area 520 is defined by the inner perimeter 510 and contains a product 10. In this embodiment, a first tab cut 550 and a second tab cut 554 are present in only the first layer, are curved and are located at the outer perimeter corners of the package in the unsealed header area 522. The first tab cut 550 defines a boundary of a first tab zone 552 while the second tab cut 554 defines a boundary of a second tab zone 556. The first tab zone 552 and the second tab zone 556 are distinguished from the package zone 558. A second seal zone 532 in the first tab zone 552 and a third seal zone 534 in the second tab zone 556 are separated from the first seal zone 530 by an unsealed header area 522. The second seal zone 532 and third seal zone 534 are rectangular and border the corners of the outer perimeter 557 of the package 500. The second and third seal zones 532, 534 could be formed in different shapes and located at other locations. For example, the second and third seal zone could be circular or oval, and could be located at a location offset from the corners. A boundary 512 of the second seal zone 532 separates the second seal zone 532 from the unsealed header area 522. A boundary 513 of the third seal zone 534 separates the third seal zone 534 from the unsealed header area 522.

[0036] FIG. 7 depicts a front view of another embodiment of a package consistent with the technology disclosed herein. In this embodiment the package 600 has a first layer and a second layer and defines a first seal zone 630 with an inner perimeter 610 and an outer perimeter 640. An unsealed pouch area 620 is defined by the inner perimeter 610 and contains a product 10. A tab cut 650 defines a tab zone 652, and the remainder of the package is referred to as the package zone 654. The tab cut 650, is approximately half-circle shaped, is curved and intersects the perimeter 657 of the package at substantially a right angle. The tab cut 650 is located at the center of the outer perimeter edge of the unsealed header area 622. In this embodiment, the first layer of the package 600 within the tab zone 652 is removed, exposing the second layer 670 in the tab zone 652. The first layer in the tab zone 652 can be removed through use of a vacuum in one embodiment or a blower in another embodiment, although other methods can certainly be used as well.

[0037] In another embodiment, the tab cut is a chevron shape located at the center of the outer perimeter edge of the

unsealed header area. This embodiment can have a second seal area within the chevron or may lack a second seal area.

[0038] FIG. 8 depicts a flow chart consistent with one method of manufacturing a package consistent with the technology disclosed herein. Generally, at least two webs are provided 20, product is placed 30 on one web, the webs are sealed 40 to enclose the product within an unsealed area, and then the web is cut 50 into packages and the tab cut is made. FIG. 9 depicts an example combined web 1000 consistent with the method associated with FIG. 8 prior to cutting 50. The packages formed from these components can be for containing and dispensing a product.

[0039] The step of providing webs 20 generally encompasses providing a first layer web and a second layer web, although additional webs can be provided also. The first layer web and second layer web can be a variety of different materials, as described above with regard to FIGS. 1 and 2. Placing a product 30 generally encompasses placing a product on at least one pouch area of the second layer web.

[0040] Now referring to FIG. 9 and the steps of FIG. 8, in a variety of embodiments multiple products 10 are placed on the second layer web in corresponding pouch areas 950 of the second layer web. The webs are sealed at step 40 to form a combined web 1000 by sealing the first layer web to the second layer web at least at a first seal zone 930 so that the first layer is joined to the second layer by a peelable seal. In multiple embodiments, including the embodiment depicted in FIG. 9, forming a combined web also includes sealing the first layer web to the second layer web at a second seal zone 932 which is within a tab zone. The webs are generally sized to create multiple packages, and may be very long, also referred to as continuous, in the machine direction and have a cross-machine direction of one to five packages, or more. Combined web 1000 of FIG. 9 has a width of two packages, and is very long in the machine direction. Very long in the machine direction is used to mean a web that is typically substantially longer than it is wide, such as one-hundred or one-thousand times longer than its width, and is often processed on rolls.

[0041] In at least one example implementation of the method of FIG. 8, sealing the webs 40 is accomplished in line in a continuous motion machine. A seal plate can be used for joining a first layer web and a second layer web with a heat seal at a first seal zone 930 to form the combined web 1000. In such an implementation the seal plate itself defines a first seal zone having an inner perimeter and an outer perimeter, as well. In the web embodiment depicted in FIG. 9, such a seal plate would also define a second seal zone 932 within individual package tab areas.

[0042] The combined web is then cut 50 to produce at least one individual package. The package is cut along center machine-direction cut lines 910, cross-machine direction cut lines 920 and outer machine direction cut lines 925 to separate the individual package 900 from a matrix 936. The use of a matrix allows for some tolerance in the sealing and cutting steps.

[0043] In a variety of embodiments, the step of cutting 50 also includes cutting only the first layer of the package at a tab cut location 940 to define a tab zone in the package 900. As described above, the tab cut location is generally outside of the first seal zone 930 and is within the unsealed header area 922. In a variety of embodiments, each individual package is die cut around its respective outer perimeter and at a tab cut location. In at least one example implementation, the die

cutting **50** is accomplished in a rotary die cutting station. In such an example, the rotary die can cut against an anvil roll, for example. In other embodiments, the packages are knife cut or guillotine cut at their outer perimeters.

[0044] FIG. **10** is a schematic drawing of one embodiment of a package-making equipment system **1010** that can be used to make packages as described herein. The system **1010** includes equipment **1012** for providing the input materials for the package, such as the first layer, second layer and product to be packaged. In one embodiment these materials are provided on rolls. A preliminary rotary die station **1014** may be provided in some embodiments before the heat seal station **1016** in order to perform any preparatory cuts that are desired. In some embodiments, there is no rotary die station **1014** before the heat seal station **1016**, such as where no preparatory cuts are needed.

[0045] The heat seal station **1016** performs the step of sealing the webs to join them together at the seal zones. In one embodiment, the heat seal station includes multiple heat seal plates that are used to form different seal zones. In one embodiment, a first seal plate is used to form a first seal zone, while a second seal plate is used to form a second seal zone.

[0046] A rotary die station **1018** is provided where each package is cut along its exterior perimeter, as discussed in relation to FIG. **9**, to separate the individual package from a matrix. Additional rotary die stations may perform additional cuts, such as to cut the package in one layer at the tab cut location to form the tab zone. Alternatively, a single rotary die station can perform both the exterior perimeter cuts and the tab zone cut through one layer. Output equipment **1020** is also provided for processing the individual packages made in the process. The schematic of FIG. **10** shows basic equipment components, but it will be recognized by one of skill in the art that additional equipment could be provide other processing functionality. It should also be noted that, as used in this specification and the appended claims, the phrase “configured” describes a system, apparatus, or other structure that is constructed or configured to perform a particular task or adopt a particular configuration. The phrase “configured” can be used interchangeably with other similar phrases such as “arranged,” “arranged and configured,” “constructed and arranged,” “constructed,” “manufactured and arranged,” and the like.

[0047] All publications and patent applications in this specification are indicative of the level of ordinary skill in the art to which this invention pertains. All publications and patent applications are herein incorporated by reference to the same extent as if each individual publication or patent application was specifically and individually indicated by reference.

[0048] This application is intended to cover adaptations or variations of the present subject matter. It is to be understood that the above description is intended to be illustrative, and not restrictive.

We claim:

1. A package for containing and dispensing a product, comprising:

a first layer;

a second layer;

at least a first seal zone where the first layer is joined to the second layer by a peelable seal, the first seal zone having an inner perimeter that defines an unsealed pouch area for containing the product and an outer perimeter; and

an unsealed header zone adjacent to the outer perimeter of the first seal zone, wherein the first layer is not joined to the second layer in the unsealed header zone; and

a first tab cut in the first layer within the unsealed header zone, wherein the first tab cut divides the package into a package zone and a first tab zone.

2. The package of claim **1** wherein the first layer is coextensive with the second layer so that the first layer and second layer share a common outer perimeter.

3. The package of claim **1** wherein the unsealed header zone is positioned substantially along one side of the package.

4. The package of claim **1** further comprising a second seal zone where the first layer is joined to the second layer, wherein the second seal zone is within the first tab zone, wherein the second seal zone is separated from the first seal zone by a portion of the unsealed header zone.

5. The package of claim **4**, wherein the first tab zone is located in a corner of the package, further comprising:

a second tab cut in the first layer within the unsealed header zone, wherein the second tab cut defines the boundary of a second tab zone located in a corner of the package; and

a third seal zone where the first layer is joined to the second layer, wherein the third seal zone is within the second tab zone.

6. The package of claim **1** wherein the package is substantially rectangular and wherein the unsealed header zone is positioned substantially along one side of the package.

7. The package of claim **1** wherein there is no cut in the second layer at a location corresponding to the first tab cut on the first layer.

8. The package of claim **1** wherein the product is a sheet product.

9. The package of claim **1** wherein the package is substantially rectangular and the unsealed header zone is substantially rectangular and is located along one side of the package, and wherein the first tab zone is defined at a corner of the package.

10. The package of claim **1** wherein the package is substantially rectangular and the unsealed header zone is substantially rectangular and is located along one side of the package, and wherein the first tab cut is curved.

11. A method of forming a package for containing and dispensing a product comprising:

providing a first layer web and a second layer web;

placing a product on at least one pouch area of one of the first and second layer webs;

forming a combined web by sealing the first layer web to the second layer web at least at a first seal zone so that the first layer is joined to the second layer by a peelable seal surrounding the at least one pouch area, and leaving an unsealed header zone adjacent to an outer perimeter of the first seal zone where the first layer web is not sealed to the second layer web; and

cutting at least one individual package around an outer package perimeter to separate the individual package from the combined web, wherein cutting further comprises cutting the first layer of the package at a first tab cut location within the unsealed header zone to define a boundary of the first tab zone in the package.

12. The method of claim **11** wherein forming a combined web further comprises sealing the first layer web to the second layer web at a second seal zone which is within the tab zone.

13. The method of claim **11** wherein cutting the individual package comprises die cutting.

14. The method of claim **13** wherein cutting the individual package comprises rotary die cutting.

15. The method of claim **11** further comprising forming a second seal zone where the first layer is joined to the second layer, wherein the second seal zone is within the first tab zone, wherein the second seal zone is separated from the first seal zone by a portion of the unsealed header zone.

16. The method of claim **11**, wherein the first tab zone is located in a corner of the package, further comprising:

cutting a second tab cut in the first layer within the unsealed header zone, wherein the second tab cut defines the boundary of a second tab zone located in a corner of the package; and

forming a third seal zone where the first layer is joined to the second layer, wherein the third seal zone is within the second tab zone.

17. The method of claim **11** wherein there is no cut in the second layer at a location corresponding to the first tab cut on the first layer.

18. A device for forming a package for containing and dispensing a sheet product comprising:

a heat seal plate for joining a first layer web and a second layer web with a heat seal at first seal zones to form a combined web, wherein the seal plate defines at least one first seal zone having an inner perimeter and an outer perimeter; and

a cutting die for cutting the combined web to form at least one individual package and for cutting through only the first layer at a tab cut location, where the first tab cut location is not within any of the first seal zones on the combined web.

19. The device of claim **18** wherein the cutting die is a rotary cutting die.

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