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### (54) PACKAGE WITH SECURITY FEATURES

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## Related U.S. Application Data

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Provisional application No. 60/728,456, filed on Oct. 20, 2005, provisional application No. 60/728,497, filed on Oct. 20, 2005, provisional application No. 60/728,612, filed on Oct. 20, 2005, provisional application No. 60/731,918, filed on Oct. 30, 2005, provisional application No. 60/755,458, filed on Dec. 30, 2005, provisional application No. 60/820,693, filed on Jul. 28, 2006.

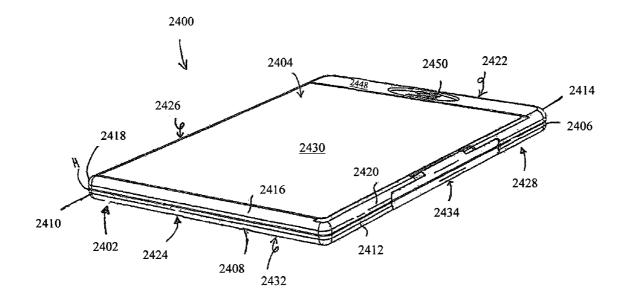
## **Publication Classification**

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#### (57)**ABSTRACT**

Packages that include security features to inhibit tampering or theft are provided. Such packages can include security ribs to prevent tampering or theft. Additionally, such containers can include a novel hinge configuration, which allows an integrally formed hinge to be curved, and a spine of a package to have a generally arcuate cross-sectional contour.



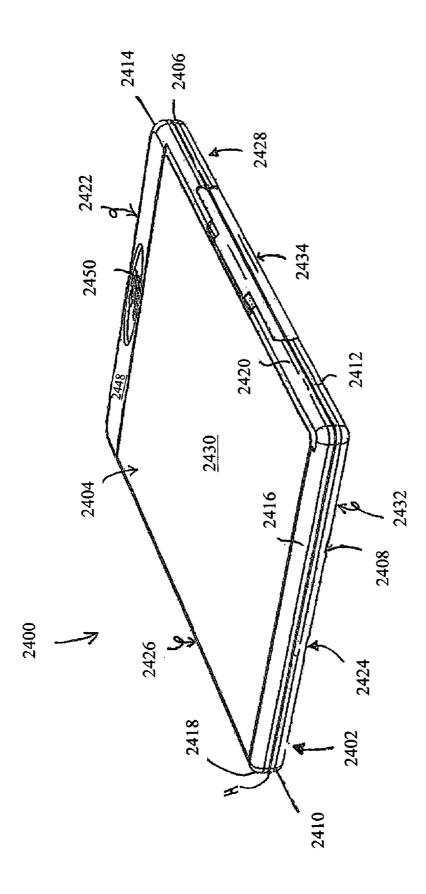


Figure 1

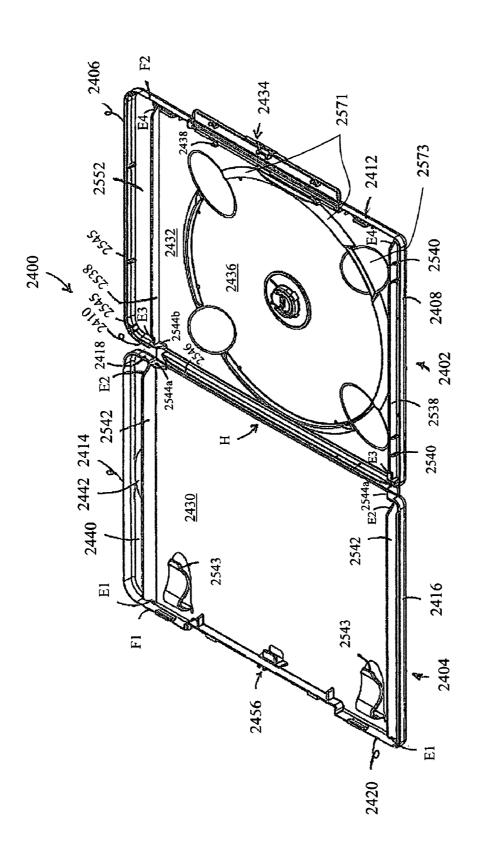


Figure 2

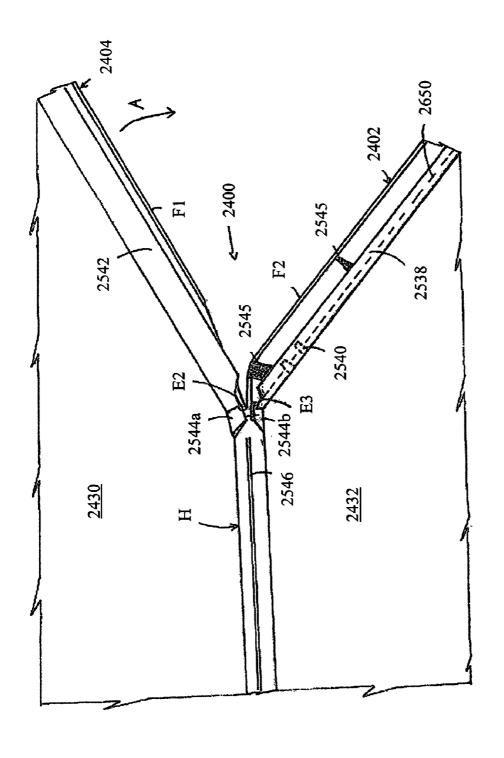
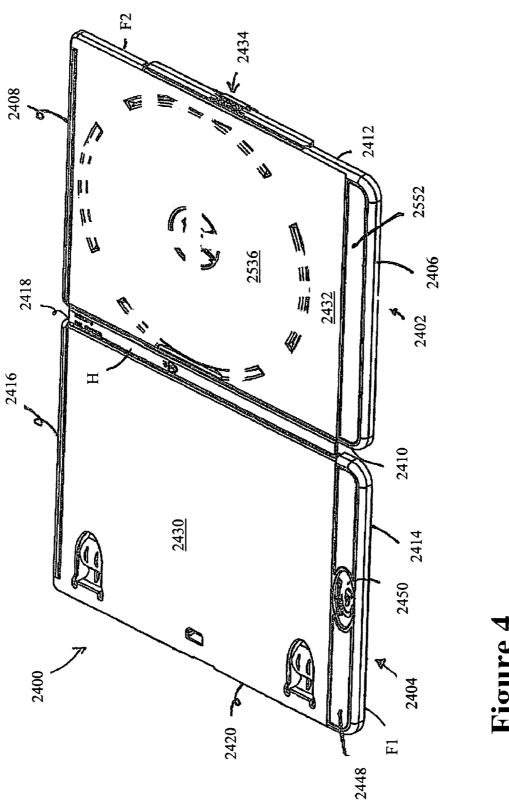


Figure 3



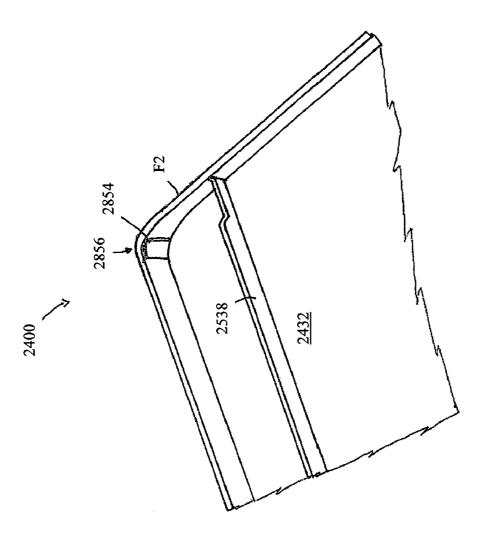


Figure 5

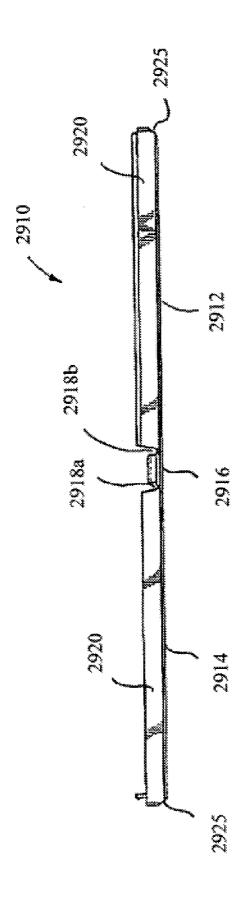


Figure 6 Prior Art

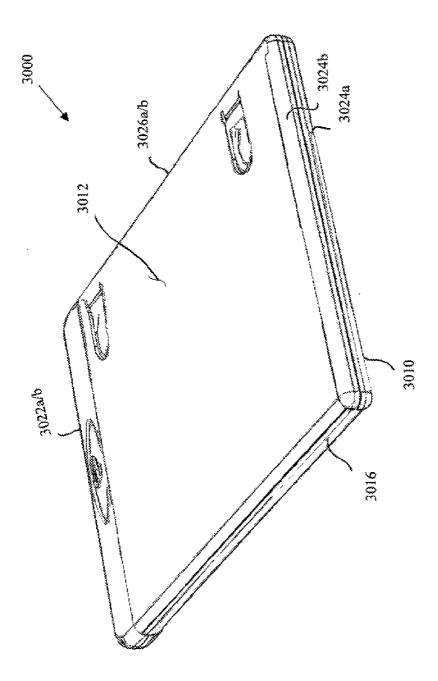


Figure 7

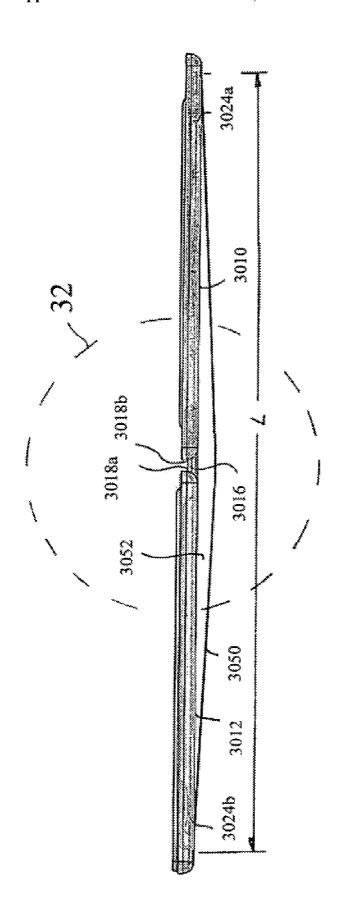


Figure 8

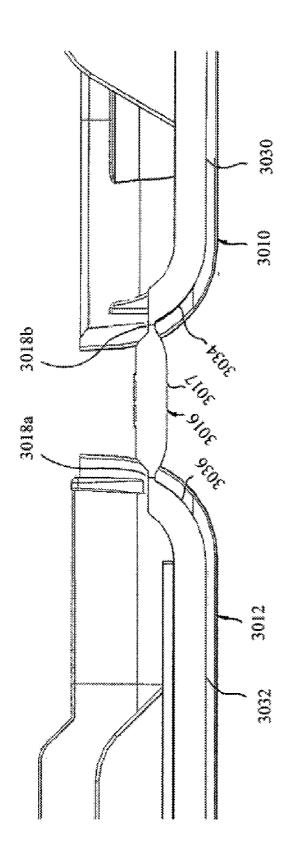


Figure 9

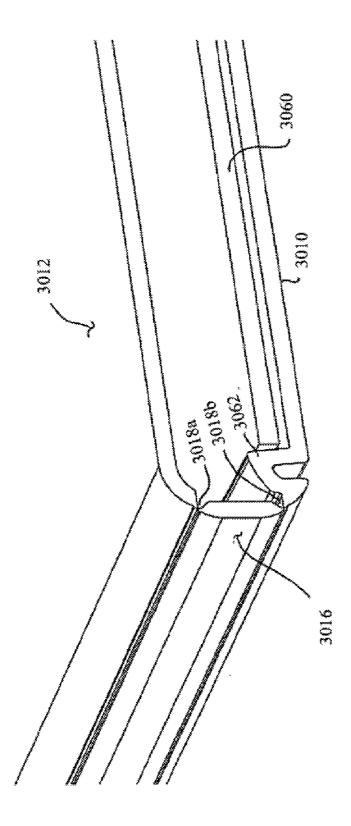
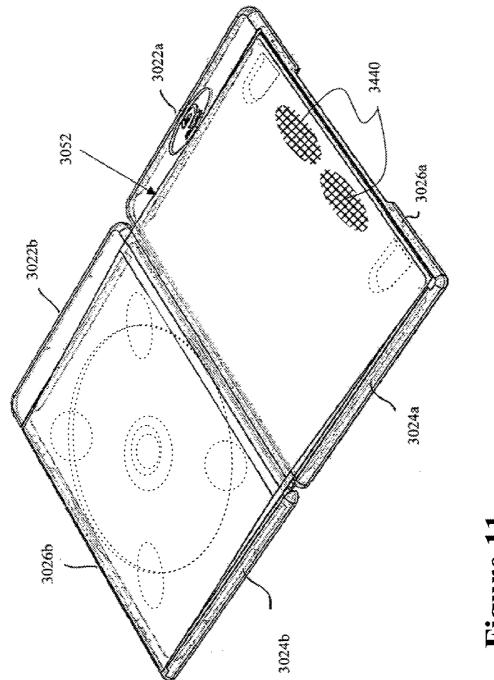


Figure 10



### PACKAGE WITH SECURITY FEATURES

## CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. application Ser. No. 11/584,288, filed Oct. 20, 2006 and now U.S. Pat. No. 7,757,848, which claims the benefit under 35 U.S.C. §119 of U.S. provisional applications 60/728,456, 60/728, 497, and 60/728,612 each filed Oct. 20, 2005, 60/731,918 filed Oct. 30, 2005, 60/755,458 filed Dec. 30, 2005, and 60/820,693 filed Jul. 28, 2006. Each of the foregoing applications is hereby incorporated by reference in its entirety

## BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to packaging for carrying items, particularly merchandise offered for sale. More particularly, the present invention is directed to packaging having security features to prevent or inhibit tampering with or theft of the package contents.

[0004] 2. Description of Related Art

[0005] Packaging, including containers, boxes and cases of all types have been specifically designed for storing items for transport and display for centuries. As society has evolved from small, low traffic general stores to mass market super stores, the ability of the shopkeeper to effectively police their floor has diminished. In response, tamper evident, tamper proof packages and security devices therefor have proliferated in more recent years.

[0006] In a pharmacy setting, package safety measures have become increasingly important in maintaining the integrity of the products sold. For some products, the pharmacist requires the ability to temporarily access the contents of the package and, subsequently, reactivate the tamper mechanisms.

[0007] In response to these needs, many in-store security systems put products in an external case and/or wrap a device around the product. The outer case and wrap visually disrupt the presentation of the product. However, additional cost is associated with such outer cases and wraps, at least in-part due to the labor required for insertion and removal of the product and to wasted material. In many instances the outer cases or wraps are welded shut and require a knife to cut open the security outer case or wrap. In some instances, the outer security device is used with an unlocking device that requires training to use, and time to manipulate. The unlocking of a mechanical outer case and/or electromechanical security system decreases the rate at which a clerk can ring up products at a cash register. Moreover, such outer security cases consume additional space on a retail shelf. Further, known electronic security devices that use cables to wrap around a package or product can damage the package and prevent the package from sitting flat on a shelf.

[0008] One particular segment of the marketplace, which is particularly susceptible to theft, is that of recorded media products, including music, video and video games, for example. Packages for containing such media, such as media recorded on optical discs, can greatly benefit from enhanced security features.

[0009] In view of the foregoing, there is a need for packaging that provides indication of tampering with the package. Also, a need exists for packages that prevent theft, which can optionally facilitate apprehension of a perpetrator. Further,

there is a need for packaging that allows selective access to the contents. The present invention provides a solution for these needs and addresses the main problems with prior technologies.

Dec. 23, 2010

## SUMMARY OF THE INVENTION

[0010] The purpose and advantages of the present invention will be set forth in and apparent from the description that follows. Additional advantages of the invention will be realized and attained by the methods and systems particularly pointed out in the written description and claims hereof, as well as from the appended drawings.

[0011] To achieve these and other advantages and in accordance with the purpose of the invention, as embodied, the invention includes, in one aspect, a package in the form of a case with a base portion including a base first side and a cover portion including a cover first side hingedly connected to the base. The case further includes at least one cover security rib extending from the cover first side to a cover second side. The security rib includes a first edge proximate to the top edge of the cover first side, and a distal second edge proximate to the top edge of the cover second side. At least one base security rib extends from the base first side to a base second side, and at least one stop rib is affixed to the cover portion proximate to the cover security rib, and is substantially aligned with the cover first side.

[0012] In accordance with the invention, the case can include at least one stop rib affixed to the base portion proximate to the cover security rib and substantially aligned with the base first side. The case can include at least one base security rib and/or at least one alignment rib positioned on one of the security ribs. Such alignment rib(s) can be tapered. Additionally or alternatively, the case can include at least one interlock and/or a recessed branding bar on one of the base and cover portions.

[0013] In accordance with a further aspect of the invention, a package is provided, which includes a base portion, a cover portion and at least one pair of security ribs. The base portion includes a base first side. The cover portion includes a cover first side hingedly connected to the base first side. The security ribs extend from at least one of the cover first side and the base first side to at least one of a cover second side and a base second side. The pair of security ribs include a first edge proximate to the top edge of at least one of the cover first side and the base first side, and a distal second edge proximate to the top edge of at least one of the cover second side and the base second side. The case further includes at least one stop rib affixed to at least one of the cover portion and the base portion proximate to the pair of security ribs and substantially aligned with one of the cover first side and the base first side, and at least one item enclosed within the case.

[0014] In accordance with this aspect of the invention, at least one alignment rib can be affixed to a side of the pair of security ribs, which alignment rib can be tapered. The case can additionally or alternatively include at least one interlock and/or a recessed branding bar on one of the base and cover portions.

[0015] The invention also provides, in one aspect, a method of fulfilling a case, including: providing a case, inserting at least one item into the case, rotating a first portion of the case towards a second portion, where the first portion is restricted from rotating to an angle approximately greater than ninety-degrees by at least one of stop rib, and closing the case, such that the case is aligned during closure by the stop rib.

[0016] In accordance with this aspect, the method can include a first portion security rib interfacing with a second portion security rib, having first and second edges, wherein the first edge is proximate to the top edge of the first portion and the second edge proximate to the top edge of the first portion. The method can further include the step of closing being further aided by a second pair of interfacing security ribs. Optionally, at least one alignment rib can be affixed to one of the security ribs. If desired, the alignment rib(s) can be tapered.

[0017] It is to be understood that both the foregoing general description and the following detailed description are exemplary and are intended to provide further explanation of the invention claimed.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0018] The accompanying drawings, which are incorporated in and constitute part of this specification, are included to illustrate and provide a further understanding of the method and system of the invention. Together with the description, the drawings serve to explain the principles of the invention, wherein:

[0019] FIGS. 1-5 are perspective views of a package according to the present invention having tamper-resistant ribs formed therein.

[0020] FIG. 6 is a side view of a prior art compact disc package arranged in the open position;

[0021] FIG. 7 is a perspective view directed at the cover of a further embodiment of a package constructed in accordance with the invention;

[0022] FIG. 8 is a side view of the compact disc package of FIG. 7 arranged in the open position;

[0023] FIG. 9 is an enlarged view illustrating the configuration of the spine and living hinge assembly for the package of FIG. 7;

[0024] FIG. 10 is a cross-sectional view of the package of FIG. 7, illustrating the spine and living hinge assembly for the package and an integrated retainer for the insert tray; and

[0025] FIG. 11 is a perspective view of the package of FIG. 7, illustrating the back and front of the package having a clear film affixed thereto so as to form a pocket.

## DETAILED DESCRIPTION

[0026] Reference will now be made in detail to the present preferred embodiments of the invention, examples of which are illustrated in the accompanying drawings. The method and corresponding steps of the invention will be described in conjunction with the detailed description of the system.

[0027] The devices and methods presented herein may be used for storage, transport and/or display of merchandise. The present invention is particularly suited for merchandise that is susceptible to tampering or theft.

[0028] In accordance with the invention, packages, particularly packages for carrying media discs, such as compact discs, including audio discs, DVDs, Blu-Ray and HD-DVD discs, and the like, include security features for preventing the tampering with or theft of the packages. It should be noted that the packages described herein can be adapted to hold any desired item, and are not limited to holding such media discs. Several security features are provided, which can be used alone or in combination to reduce/eliminate theft and/or tampering.

[0029] FIG. 1 illustrates an exemplary embodiment of a package, particularly a case 2400. The material used to manufacture the case 2400 can be any material known to those skilled in the art. In testing, Applicants utilized a thin thermoplastic polymer, polypropylene. This material is inexpensive, resistant to fatigue, and lightweight. However, in order to sustain a functional case with these properties, the inventor added features to increase rigidity, aid in proper closure of the case 2400, provide additional security, reduce cosmetic damage during fulfillment, and eliminate unwanted particulates from entering the case 2400.

[0030] The case 2400 includes a base portion 2402 and a cover portion 2404. The base portion 2402 and the cover portion 2404 are adapted to mate when the case 2400 is in the closed position, as shown in FIG. 1. More specifically, the base portion 2402 includes a base top end 2406, a base bottom end 2408, a base first side end 2410, and a base second side end 2412, which are adapted to mate with the cover portion 2404 comprising a cover top end 2414, a cover bottom end 2416, a cover first side end 2418, and a cover second side end 2420.

[0031] Further, the base first side end 2410 is hingedly connected to the cover first side end **2418** by a living hinge H. The corresponding ends of the base portion 2402 and the cover portion 2404 form the composite walls of the case 2400 when the case is in the closed position. More specifically, the top ends 2406, 2414 form a composite top wall 2422, the bottom ends 2408, 2416 form a composite bottom wall 2424, the first side ends 2410, 2418 form a composite first side wall 2426, and the second side ends 2412, 2420 form a composite second side wall 2428. The cover portion 2404 includes a cover panel 2430 and the base portion 2402 includes a base panel 2432 of the case 2400. The cover portion 2404 further includes a recessed cover branding bar 2448, on which a logo 2450 is affixed. The recessed cover branding bar 2448 is described in detail with respect to FIG. 4. The case 2400 further includes a locking mechanism 2434.

[0032] Referring now to FIG. 2, the case 2400 is shown in the open position. The inside of the base portion 2402 and the cover portion 2404 can be seen. The inner portion of the base panel 2432 includes a "nest" or recess 2536. The illustrated recess 2536 is designed to house a compact disc (CD), a digital video disc (DVD), Blu-ray disc, or like media, as is known to those skilled in the art. It is contemplated, however, that in alternative embodiments the recess 2536 can be designed to house any portable items such as, but not limited to, cigars, syringes, medicines, makeup, and the like. A base security rib 2538 is affixed to the base panel 2432 above the recess 2536 and proximate to a recessed base branding bar 2552. Another base security rib 2538 is affixed below the recess 2536. The base security ribs 2538 extend from the base first side end 2410 to the base second side end 2412. Further, the base security ribs 2538 are formed such that they are taller than the base edge F2 of the base top end 2406 and the base bottom end 2408. This decreases the likelihood of theft, for example, by prying open the composite top wall 2422 and/or the composite bottom wall 2424 to remove the disc.

[0033] Affixed to the inner portion of the cover panel 2430 are cover security ribs 2542. The cover security ribs 2542 function to increase the rigidity of the case 2400 and to properly align materials that are typically stored beneath clips 2543. The cover security ribs 2542 extend from the cover second side end 2420 to the cover first side end 2418. The edges E1 perpendicularly terminate at the cover second side

end 2420 below the cover edge F1. The edges E2 perpendicularly terminate at the cover first side end 2418 even with the cover edge F1. Edges E1 and E2 aid in eliminating binding and misalignment between the cover portion 2404 and the base portion 2402 when the case 2400 is being closed. The extended cover security ribs 2542 and the tapered edges E1 and E2 also function to eliminate an audible click that was present prior to adding these features, particularly when the cover portion 2404 and the base portion 2402 were misaligned.

[0034] Further, in the illustrated embodiment, the cover security ribs 2542 are positioned so as to be offset to the base security ribs 2538. When the case 2400 is in the closed position, this offset positions the cover security ribs 2542 in contact with tapered alignment ribs 2540, which are affixed to the base security ribs 2538. The illustrated alignment ribs 2540 are positioned on the outer side of the base security ribs 2538; that is, facing the top end 2406 and bottom end 2408, respectively and the cover security ribs 2542 are positioned to interface with the alignment ribs 2540 when the case 2400 is closed. It is contemplated, however, that the alignment ribs 2540 can be positioned on the inner face of the base security ribs 2538, as such the cover security ribs 2542 can be positioned offset towards the interior of case 2400. The alignment ribs 2540 guide the cover security ribs 2542 into the closed position, thus providing further aid in eliminating binding and misalignment between the cover portion 2404 and the base portion 2402. Additional advantages of the alignment ribs 2540 include reducing clearance between the security ribs and providing more accurate alignment while closing.

[0035] It is contemplated that the alignment ribs 2540 can be any size, shape, and positioned in any way such as to achieve a substantially similar result when closing case 2400. The alignment ribs 2540 also function to increase the rigidity of the base security ribs 2538 and consequently the overall rigidity of case 2400. In alternative embodiments the alignment ribs 2540 are positioned adjacent the cover security ribs 2542 so as to interface with the alignment ribs 2538 when the case 2400 is closed.

[0036] The locking mechanism 2434 attaches to cover receiving elements 2436 to secure the base portion 2402 to the cover portion 2404. The locking mechanism 2434 attaches to base receiving elements 2438 so as to stow the locking mechanism 2434 in a passive position.

[0037] Stop ribs 2544a, 2544b are affixed to both the cover and base panels 2430, 2432, respectively, so as to be perpendicular to the security ribs 2538, 2542 and align longitudinally with first side ends 2410, 2418. The stop ribs 2544a, 2544b increase overall rigidity of the case 2400. Further, when case 2400 is in the closed position, the stop ribs 2544a, 2544b are positioned in a face-contacting relationship with living hinge. This prevents dust and other particulates from entering the case 2400.

[0038] During fulfillment, the cover portion 2404 is typically rotated towards the base portion 2402 to close the case 2400. Without the stop ribs 2544a, 2544b the living hinge H typically rotates to an angle approximately greater than ninety-degrees, a condition that caused the cover edge F1 to extend beyond the base edge F2, thus making proper alignment difficult and automated closing problematic. The stop ribs 2544a, 2544b prevent the living hinge H from being rotated to an angle approximately greater than ninety-degrees, thus preventing binding and misalignment of the cover and base edges F1 and F2, respectively.

[0039] The position of the stop ribs 2544a, 2544b during closure is best shown in FIG. 3. As shown, the cover portion 2404 is being rotated towards the base portion 2402 in direction A. The stop rib 2544a is positioned in a face-contacting relationship with living hinge H and as such prevents the living hinge H from being rotated to an angle approximately greater than ninety-degrees, thus preventing the cover edge F1 from being misaligned with the base edge F2. In alternative embodiments, the stop rib 2544b is positioned in a facecontacting relationship with living hinge H and as such prevents the living hinge H from being rotated to an angle approximately greater than ninety-degrees, thus preventing the cover edge F1 from being misaligned with the base edge F2. To further aid in preventing binding and misalignment, the height and thickness of the spine rib 2546 is increased. [0040] In further alternative embodiments, the recessed base branding bar 2552 (not shown) forms a trough 350 that provides a receiving channel for the base security rib 2538.

provides a receiving channer for the base security fib 2538. [0041] Referring now to FIG. 4, a transparent perspective view of the back of the case 2400 and the recessed cover and base branding bars 2448, 2552, respectively, are shown. The cover branding bar 2448 is recessed with respect to the cover panel 2430. Likewise, the base branding bar 2552 is recessed with respect to the base panel 2432. The cover branding bar 2448 includes a logo 2450. The recessed position of the cover branding bar 2448 protects the logo 2450 from cosmetic damage. For example, when multiple closed cases 2400 are positioned in a panel-contacting relationship, the recessed cover branding bar 2448 of one case and the recessed base branding bar 2552 of another case align so as to prevent cosmetic damage to the logo 2450.

[0042] Many of the previously described features increase the torsional rigidity of various portions of the case 2400. The overall rigidity of the case 2400 is further increases by the addition of supports 2545, as best shown in FIG. 2 and FIG. 3. [0043] Referring now to FIG. 5, there is shown the outer top of case 2400. The interior of the outer top corner includes an interlock 2854. The interlock 2854 increases corner rigidity of the case 2400, thus allowing for a thinner, lighter material to be used. The interlock 2854 includes a lip that creates a receiving channel 2856 between the interlock 2854 and the base edge F2. When the case 2400 is in the closed position, the cover edge F1 and the base edge F2 are held in face-contacting position by the receiving channel 2856.

[0044] Referring again to FIGS. 1-5 which illustrate a package 2400 for holding compact discs and the like, the package 2400 includes four arcuate rib structures 2571 (FIG. 25) formed on the surface of base panel 2432, which itself can be a separate insert tray in alternative embodiments. The rib structures 2571 are configured and adapted to visually emulate the design elements of the finger wells at region 2573, but are not, per se, finger wells. The ribs 2571 are positioned to support a disc held in the recess 2536 during drop tests, shipping and handling, thus protecting the rosette 2575 from experiencing the full load of impact. The outer edge of the disc with exception of the four locations of corresponding ribs 2571 is fully accessible, in comparison with a container having only finger wells to enable grasping of a disc.

[0045] The complexity of design of the base panel 2432 is minimized, but as mentioned, the base panel 2432 still includes a visual element (e.g., the impression of finger wells at region 2573) that a consumer may expect to see in a package for holding media discs. The aforementioned configuration also creates minimal visual interruption of graphics that

may be viewed through the surface of the base panel 2432. The aforementioned configuration also allows for better support of the outer cover material—e.g. a printed booklet, because both the cover and base are essentially flat, uninterrupted surfaces (with exception to the center rosette 2575).

[0046] However, with respect to disc packages that have a hinged multi-panel outer cover, a molded base panel 2432 and a molded cover 2430, the alignment rib 2540 details that are formed in the cover and base are particularly advantageous. Such alignment features allow for the cover 2430 and base to be hinged from an open to a closed position without the cover 2430 and base 2432 binding with one another.

[0047] FIG. 6 is a side view of a package 2900 in accordance with the prior art, which is provided herein to serve as a comparison with the package embodiment of FIGS. 7-11. The package 2900, which is particularly suited to containing recorded media, such as CDs or DVDs, includes a back or base portion 2912, a front or cover portion 2914 and a spine section 2916. The base portion 2912 and the cover portion 2914 are attached to the spine section 2916 using two living hinges 2918a, 2918b.

[0048] In conventional CD packages or jewel boxes, such as that shown in FIG. 6, when the package 2910 is in the open position the spine section 16 is positioned in the same plane as the base portion 2912 and the cover portion 2914. This is done so that the pocket that is formed by welding plastic film to the package 2910 can accept a printed slip sheet of a similar dimension to the open package. Normally the spine side wall and spine section of the printed graphic slip sheet are close in dimension. Additionally, the slip sheet length closely matches the linear distance of the un-sealed length of the film. This feature helps prevent the graphics from shifting when the package is opened and closed.

[0049] The base and cover portions 2912, 2914 each include three side walls 2920 which project from common edge radiuses 2925 associate with the edge of the base and cover portions 2912, 1294. When package 2900 is in the closed position (not shown), there exists slightly radiused transitions between the base and cover portions, 2912 and 2914 respectively, and the spine section 2916. These radiuses result from the inwardly formed and bending living hinges 2918b. The slightly radius transition that join the base and the cover portions 2912, 2914 to the spine section 2916 do not closely match the common edge radiuses 2925 of the package 2900 and therefore, package 2900 has three ends with a rounded profile and a forth end with substantially straight profile.

[0050] Consequently, a disadvantage associated with the conventional package design illustrated in FIG. 6 is that the configuration of its spine 2916 and the living hinges 2918a, 2918b will not allow the end of the package 2916 defined by the spine and hinges to be curved or rounded in a similar fashion to the other three ends of the CD package. As a result, the end of the package 2900 defined by the spine 2916 and hinges 2918a, 2918b has a different profile than other three ends.

[0051] Referring now to FIGS. 7-11, there is illustrated a compact disc package constructed in accordance with one embodiment of the present invention and identified generally by reference numeral 3000. The compact disc package 3000 includes a living hinge configuration that allows the spine of the package to be curved or rounded so that all four ends of the package can have the same curved profile.

[0052] Package 3000 includes a base portion 3010, a cover portion 3012 and a spine section 3016. The base and the cover portions 3010, 3012 are joined to the spine section 3016 by living hinges 3018a and 3018b. As best seen in FIGS. 6, 8, and 11, the base and cover portions, 3010 and 3012 respectively, of package 3000, each include three curved end sections which are adapted to mate when package 3000 is in the closed position. More specifically, base portion 3010 includes top end 3022a, bottom end 3024a and side end 3026a which are adapted to mate with top end 3022b, bottom end 3024b and side end 3026b associated with cover portion 3012. Each of these end sections has a curved surface profile so that when the package 3000 is in the closed position (see FIG. 7) the package ends are rounded or curved.

[0053] Unlike the previously described prior art package 2900, wherein the spine section 2916 is positioned in the same plane as the base portion 2912 and the cover portion 2914 when the package 2900 is in the open position, the spine portion 3016 and living hinges 3018a, 3018b of package 3000 are not located in the plane shared by the base and cover portions when the package is in the open position (see FIG. 9). Rather, the spine section 3016 is posited well above the plane shared by the outer surfaces 3030, 3032 of the base and cover portions 3010, 3012 and is located at approximately the midheight of the base and cover portions.

[0054] Referring specifically to FIG. 9, it can be seen that the living hinges 3018a and 3018b are positioned at the end of an arc 3034, 3036 that extends from the outer surfaces 3030, 3032 of the cover and the base. Moreover, spine section 3016 includes a curved outer surface 3017 the has a profile which is configured to give the spine end of package 3000 a curved profile similar to the three other ends of the package 3000 when in the closed position.

[0055] The described living hinge and spine configuration create a package that has a shorter overall open position length than a traditional package, such as package 2900. This means that in certain embodiments, the graphic slip sheet may need to be shorter than the length of the opening of the trap 3052 (designated as "L" in FIG. 8) provided for by the package 3000 and the outer clear film 3050. As a result, however, the slip sheet can shift as the package is opened and closed. [0056] As solution to the aforementioned problem with the slip sheet is shown in FIG. 11. An adhesive is pre-applied to an area 3440 on the inner surface of the slip sheet, preferably at the leading edge. The slip sheet is then inserted into the trap 3052 and located such that its leading edge is in the desired position. Then the adhesive is remotely activated using know techniques, such as for example, heat, UV light or pressure, to allow a portion of the slip sheet, in this example the leading edge, to be adhered to the cover portion 3012 of the package 3000. This will allow the cover section 3012 to have graphics that will not shift, but allow for the spine and back sections of the graphic slip sheet to slide between the cover and film as the package is opened and closed.

[0057] Referring now to FIG. 10, which provides a cross-sectional view of package 3000. Those skilled in the art will readily appreciate that certain embodiments of the presently disclosed compact disc package can include a disc tray 3060, which is inserted into the base portion 3010 and provides a rosette for supporting the compact disc. In such embodiments, it is advantageous for the base section 3010 to further include a rib member 3062 for securing the disc tray 3060.

[0058] One advantage of the configuration of the package 3000 of FIGS. 7-11 is that the package 3000 includes a living

hinge and spine configuration that it allows all of the package side walls, including the spine end, to share angled arced, curved and radiuses edges that are greater than the wall section or thickness of the package. Those skilled in the art will readily appreciate that the disclosed living hinge configuration and spine design can be readily applied to packages of a variety of thicknesses, including the traditional 7 mm to 15 mm packages.

[0059] Another advantage of the configuration of package 3000 is that it includes a cost effective method for securing a portion of the slip sheet to the cover while allowing the remaining portion of the sheet to move freely, as needed, when the package is opened and closed.

[0060] The illustrated embodiments can be understood as providing exemplary features of varying detail of certain embodiments, and therefore, unless otherwise specified, features, components, modules, elements, and/or aspects of the illustrations can be otherwise combined, interconnected, sequenced, separated, interchanged, positioned, and/or rearranged without materially departing from the disclosed systems or methods. Additionally, the shapes and sizes of components are also exemplary and unless otherwise specified, can be altered without materially affecting or limiting the disclosed technology.

[0061] While the invention has been described with respect to preferred embodiments, those skilled in the art will readily appreciate that various changes and/or modifications can be made to the invention without departing from the spirit or scope of the invention.

- A case for storing an optical storage disk comprising: a cover portion having a cover top end, a cover bottom end, a cover first side end, a cover second side end and a cover inner surface;
- a base portion having a base top end, a base bottom end, a base first side end, a base second side end and a base inner surface:
- a hinge connecting said cover portion and said base portion along said cover first side end and said base first side end; means provided on said base inner surface for holding an optical storage disk;
- a base upper security rib disposed on said back inner surface between said disk holding means and said base top end; and
- a cover upper security rib disposed on said cover inner surface so as to be adjacent to and substantially parallel with said base upper security rib when the case is in a closed configuration.
- 2. A case as claimed in claim 1, wherein said base upper security rib extends substantially from said base first side end to said base second side end.
- 3. A case as claimed in claim 2, wherein said cover upper security rib extends substantially from said cover first side end to said cover second side end.
  - 4. A case as claimed in claim 1, further comprising:
  - a base lower security rib disposed on said back inner surface between said disk holding means and said base bottom end; and
  - a cover lower security rib disposed on said cover inner surface so to be adjacent to and substantially parallel with said base lower security rib when the case is in a closed configuration.
- **5**. A case as claimed in claim **4**, wherein said base lower security rib extends substantially from said base first side end to said base second side end.

- **6**. A case as claimed in claim **4**, wherein said cover lower security rib extends substantially from said cover first side end to said cover second side end.
- 7. A case as claimed in claim 1, wherein said base top end, said base bottom end, at least a portion of said base first side end, and said base second side end define a base edge wall for said base portion, and wherein said base upper security rib has a height that is greater than the height of the portion of said base edge wall formed by said base top end.
- **8**. A case as claimed in claim **1**, wherein said cover top end, said cover bottom end, at least a portion of said cover first side end, and said cover second side end define a cover edge wall for said cover portion, and wherein said cover upper security rib has a height that is greater than the height of the portion of said cover edge wall formed by said cover top end.
  - 9. A case for storing an optical storage disk comprising:
  - a cover portion having a cover top end, a cover bottom end, a cover first side end, a cover second side end, a cover outer surface and a cover inner surface;
  - a base portion having a base top end, a base bottom end, a base first side end, a base second side end, a base outer surface and a base inner surface:
  - a hinge connecting said cover portion and said base portion along said cover first side end and said base first side end;
  - means provided on said base inner surface for holding an optical storage disk;
  - at least one of said base portion and said cover portion having formed on its outer surface a band arranged along its respective top end, said band being configured and adapted for display of indicia; and
  - a first upper security rib disposed on the inner surface of the one of said base portion and said cover portion having said band formed thereon, said first upper security rib being positioned proximate to said band.
- 10. A case as claimed in claim 9, further comprising a second upper security rib disposed on the inner surface of the other of said base portion and said cover portion so as to be adjacent to and substantially parallel with said first upper security rib when the case is in a closed configuration.
- 11. A case as claimed in claim 10, wherein said first upper security rib extends substantially from the first side end to the second side end of the one of said base portion and said cover portion on which said first upper security rib is formed.
- 12. A case as claimed in claim 11, wherein said second upper security rib extends substantially from the first side end to the second side end of the one of said base portion and said cover portion on which said second upper security rib is formed.
  - 13. A case as claimed in claim 10, further comprising:
  - a base lower security rib disposed on said back inner surface between said disk holding means and said base bottom end; and
  - a cover lower security rib disposed on said cover inner surface so to be adjacent to and substantially parallel with said base lower security rib when the case is in a closed configuration.
  - 14. A case for storing an optical storage disk comprising: a cover portion having a cover top end, a cover bottom end, a cover first side end, a cover second side end and a cover inner surface;

- a base portion having a base top end, a base bottom end, a base first side end, a base second side end and a base inner surface;
- a hinge connecting said cover portion and said base portion along said cover first side end and said base first side end; means provided on said base inner surface for holding an optical storage disk;
- a base upper security rib disposed on said back inner surface between said disk holding means and said base top end and extending substantially from said base first side end to said base second side end; and
- a cover upper security rib disposed on said cover inner surface so as to be positioned between said disk holding means and said cover top end when the case is in a closed configuration.
- 15. A case as claimed in claim 14, wherein said cover upper security rib extends substantially from said cover first side end to said cover second side end.
- 16. A case as claimed in claim 14, wherein said cover upper security rib is disposed substantially parallel with said base upper security rib when the case is in a closed configuration.

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