



US 20070051651A1

(19) **United States**

(12) **Patent Application Publication**  
**Marom**

(10) **Pub. No.: US 2007/0051651 A1**

(43) **Pub. Date: Mar. 8, 2007**

(54) **ENVIRONMENTAL PACKAGING  
ADVANTAGE**

**Related U.S. Application Data**

(60) Provisional application No. 60/715,554, filed on Sep. 8, 2005.

(75) Inventor: **Guy Marom**, Calabasas, CA (US)

**Publication Classification**

Correspondence Address:  
**RONALD M. GOLDMAN  
ROTH & GOLDMAN  
SUITE 500  
21535 HAWTHORNE BLVD.  
TORRANCE, CA 90503 (US)**

(51) **Int. Cl.**  
**B65D 85/00** (2006.01)  
(52) **U.S. Cl.** ..... **206/459.5**

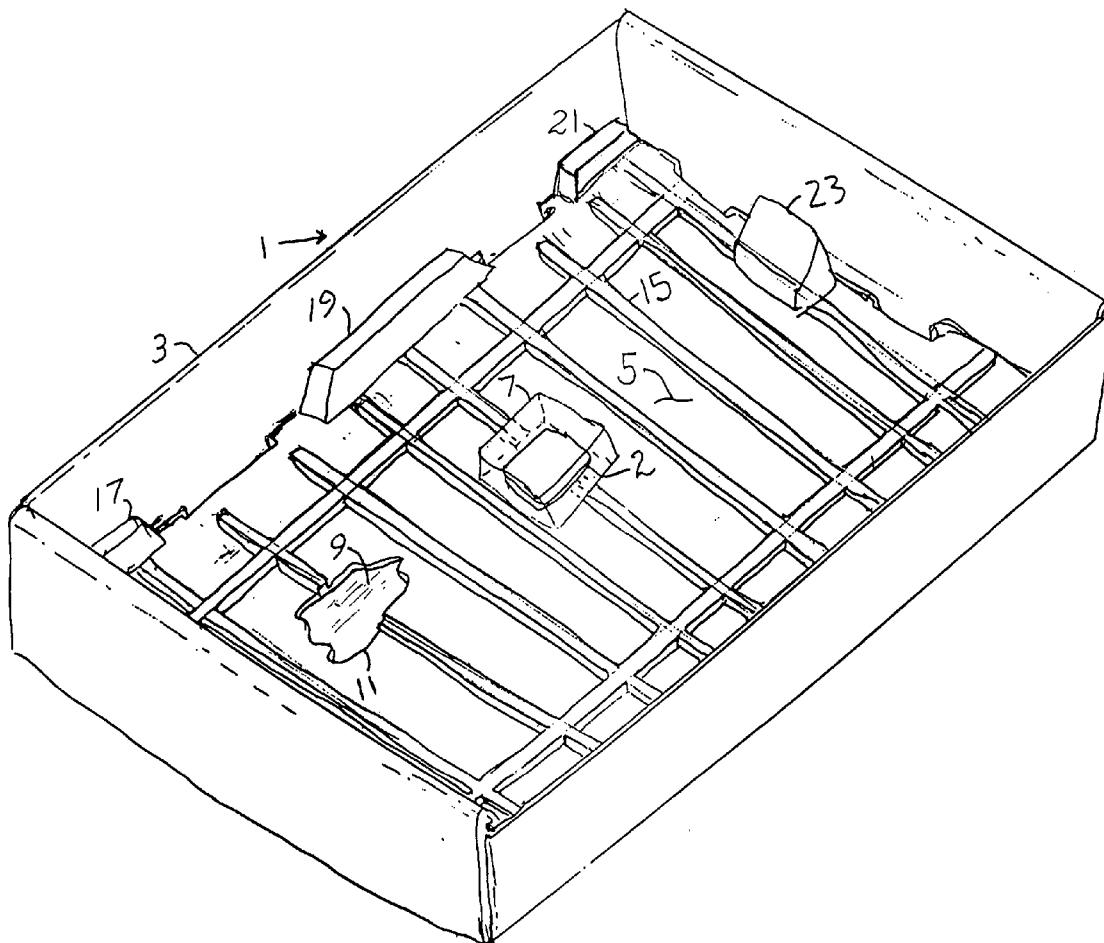
(57) **ABSTRACT**

A recyclable package for retail product contains two major parts: a receptacle section, containing a receptacle for the packaged product, and a tray section. The two sections are assembled and mechanically held together to form the package for the product, but are readily separated by a recycler. The two sections are formed of different kinds of packaging material, such as transparent plastic for one section and corrugated cardboard for the other. Each section may be treated separately for recycling, making recycling of the materials possible.

(73) Assignee: **AVC CORPORATION**

(21) Appl. No.: **11/503,366**

(22) Filed: **Aug. 10, 2006**



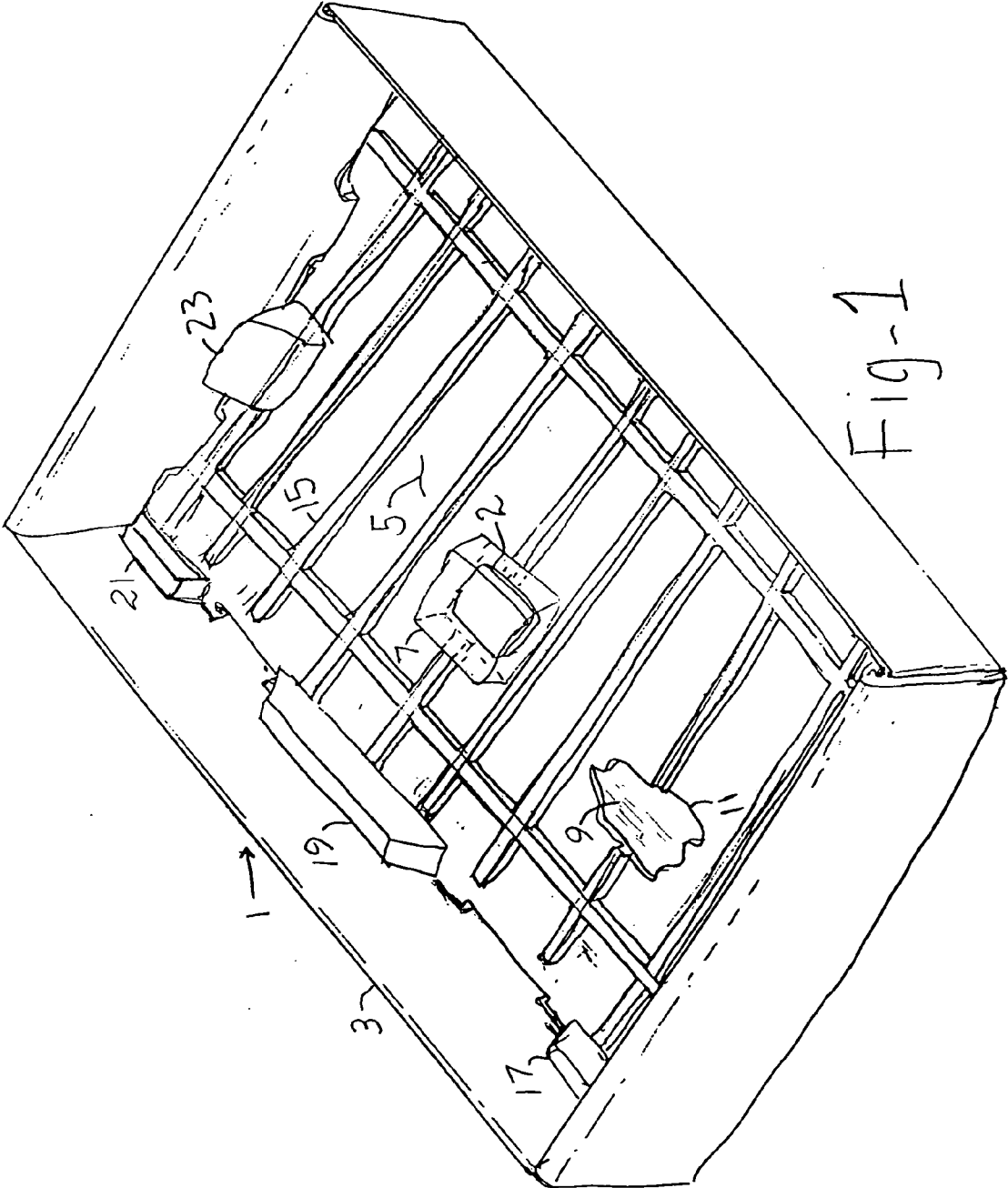


Fig-1

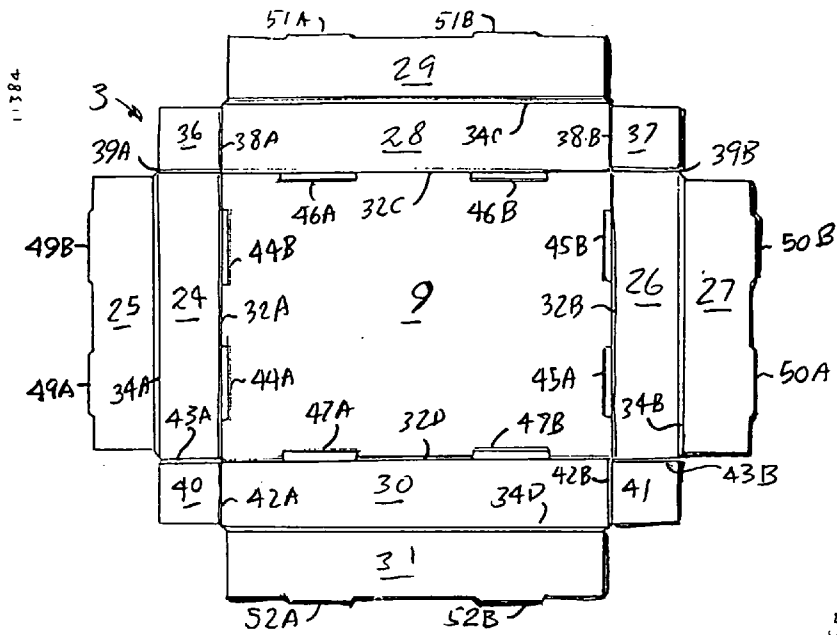


Fig. 2

50%

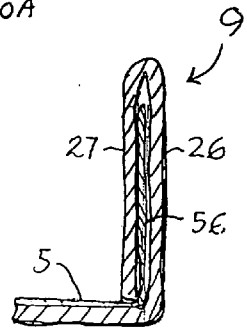


Fig. 5

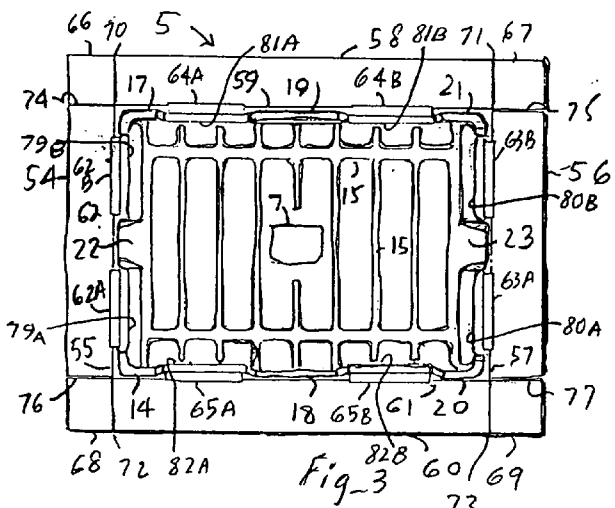


Fig. 3

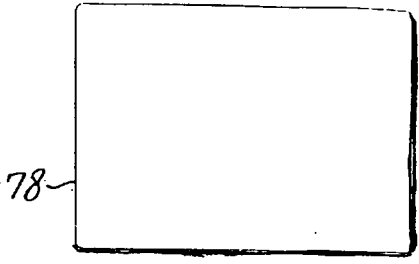


Fig. 4

## ENVIRONMENTAL PACKAGING ADVANTAGE

### CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This non-provisional application for patent is related to an earlier-filed provisional application for patent by the inventor, Ser. No. 60/715,554, filed Sep. 8, 2005, entitled Environmental Packaging Advantage, the entire content of which is incorporated herein in its entirety by reference. Applicant claims the benefit under 35 U.S.C. 119(e) and 35 U.S.C. 120 based on the foregoing provisional application.

### FIELD OF THE INVENTION

[0002] This invention relates to an environmentally friendly package for retail product and, more particularly, a display package for displaying and securely packaging articles of value, such as memory chips, with the constituents that form the package being suitable for recycling.

### BACKGROUND

[0003] The small size high value articles, such as add-on memory chips, have become commodities and are being sold through electronics departments of retail department stores and at discount warehouse superstores. The memory chips are displayed to potential store customers, typically, in a plastic clam shell type package that either hangs from a rack or is set on a shelf. The clam shell package is constructed of a tough transparent plastic material and incorporates printed advertising and related information on the enclosed product. The package permits the customer to view and visually inspect the product and ensure that the product one wishes to purchase is indeed inside the package. However, for reasons of product security (e.g. potential shrinkage), the toughness of the package plastic material prevents the customer from opening the package with the customer's bare hands. So the package cannot be easily opened inside the store.

[0004] Even following the purchase after the packaged product is brought home, opening the package remains difficult. To do so requires the customer to carefully cut away the plastic of the package with a very sharp knife or heavy duty scissors, taking special care so as to avoid injuring oneself. Once the product is removed, the cut-up package debris that formed the clam-shell package is no longer useful and is discarded in the trash.

[0005] Plastic packages deposited in the waste ultimately collect in the sanitation landfills along with other waste material instead of being recycled. Because so many products are available in plastic packages and cannot be recycled, the package debris creates stress on the landfill. From experience one realizes that plastic does not easily decompose, but may remain around forever. That contributes to a landfill that's filled, staying filled, and the problems that a filled landfill creates, one of which is to create a need for more land to use as landfill far from one's neighborhood. A definite need exists to alleviate the stress on the environment and, more specifically, to make plastic packaging more recyclable in nature than heretofore.

[0006] Communities throughout the country recognize a need to recycle waste materials whenever possible, and the

benefits that recycling brings. In many communities, citizens are being asked by their respective municipal officials to separate their waste into separate trashcans so that each trashcan holds a distinct type of waste. A typical example, paper products are deposited in one trashcan, plastics in another and foodstuffs and tin cans in a third. Paper products, such as newspapers, can be collected from the trash by the community services, and sold to a manufacturer of paper products who recycles the newspapers into new paper products. The plastic products can be sold to a recycler who is able to grind the plastic into a powder or beads and that powder is then re-sold to a plastic fabricator. But recycling of the plastic can be accomplished only if the plastic is free of paper or other printed material. If paper is intermingled with the plastic and cannot be easily separated out, then the plastic is effectively non-recyclable. Often that's found to be the case.

[0007] Even with a prior environmentally friendly package of the present assignee, paper and/or cardboard is attached to or held between portions of plastic material. That being the case, the packaging waste is too time consuming to separate into separate components of plastic and cardboard and, hence, is too expensive a procedure. So that discarded package is regarded as non-recyclable.

[0008] The package designer must also consider the security of the packaged product. A major reason the plastic clamshell package is popular with retailers is that a shoplifter cannot easily pilfer the product. The shoplifter cannot open the package in the store, unobserved, and remove the product. That feature effectively saves the store a great deal of money. Any new package design must also take product security into account and, ideally, achieve the same degree of security that is obtained with the clamshell package.

[0009] Accordingly, an object of the present invention is to provide a recyclable package for product sold through retail stores.

[0010] Another object of the invention is to provide a new display package for use at retail that is both reasonably secure and recyclable.

[0011] A related object of the invention is to provide a design for a display package that permits the different materials that form the package to easily be separated for individual recycling processes.

[0012] It is still another object of the invention to provide a display package that is reasonably secure, recyclable, is easily separated into individual components for recycling and is relatively inexpensive to produce.

### BRIEF SUMMARY OF THE INVENTION

[0013] In accordance with the foregoing objects, a recyclable package invention for product sold at retail contains two major pieces or sections: a receptacle section, containing a receptacle for the packaged product, and a tray section. The two sections are assembled together to form the package for the product, but are easily detachable from one another. The two sections are formed of very different kinds of packaging material, such as plastic and corrugated cardboard, respectively. Separation of the sections enables recycling of each section to be handled separately, making recycling of the materials possible as a practical matter.

[0014] Further, in accordance with the invention, the tray section includes a holding device for holding said receptacle section inside the tray section and blocking access to the entrance of the receptacle, thereby inhibiting removal of a product from the receptacle. The holding device is manually releasable to permit said receptacle section to be separated from said tray section.

[0015] In a more specific aspect the receptacle section comprises an open box-like container with a base and side walls bordering and upstanding from the base while the receptacle is inverted with the bottom side elevated above the base and an open entrance on the base underside. Further the tray section is also a slightly larger box-like container, that contains a base, upright side walls, and side-wall extensions, with the side wall extensions extending from the side walls of said tray section and joined by fold lines to the outer edge of respective ones of the side walls of the tray. The side wall extension folds over a respective sidewall of the receptacle section and extends downward along side of the respective side wall to capture the respective side-wall of the receptacle section between the extension and the side-wall of said tray section from which said side-wall extension extends. In that way the package is assembled together with the product confined in the receptacle.

[0016] As an additional feature, an additional sheet of strong plastic material may be placed on the underside of the receptacle section in between that underside and the base of the tray section. Where the tray material is formed of a material that is easily cut through with a knife, the additional sheet prevents the knife user from accessing the receptacle that houses the product.

[0017] The foregoing and additional objects and advantages of the invention, together with the structure characteristic thereof, which were only briefly summarized in the foregoing passages, will become more apparent to those skilled in the art upon reading the detailed description of a preferred embodiment of the invention, which follows in this specification, taken together with the illustrations thereof presented in the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] In the Drawings:

[0019] FIG. 1 illustrates an embodiment of the package invention in a not-to-scale isometric view with an article confined therein;

[0020] FIG. 2 is a layout of a tray section, a constituent element of the package of FIG. 1 as viewed from the top side;

[0021] FIG. 3 is a layout of a receptacle section, another constituent element of the package of FIG. 1, as viewed from the top side;

[0022] FIG. 4 is a layout of the barrier panel optionally included in the package of FIG. 1; and

[0023] FIG. 5 is a not-to-scale section view of a portion of the right side wall of the package of FIG. 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0024] Reference is made to FIG. 1, which illustrates the new package 1. The package includes a tray section 3 and a

receptacle section 5. The tray section 3 is formed of a material, such as cardboard, that is folded, as later herein described, to form a shallow box like structure that resembles the cardboard lid of a cardboard storage box that is positioned upside down. The receptacle section 5 is seated and held inside the tray section. The receptacle section includes a receptacle 7, access to which is through the open underside of the receptacle section. The receptacle section is formed of a stiff transparent plastic material. The receptacle section may optionally include printed or other material. The sides of receptacle 7 at a minimum should remain transparent to permit the contents of that receptacle to be viewed. In this figure a memory chip 2 inside the receptacle can be viewed through the receptacle walls. The open side of receptacle 7 is closed by either the bottom panel 9 of the tray section, that's visible through the window cut-out 11 in the receptacle section or, optionally, by a barrier panel 78, later described, that sits over the bottom panel 9 of the receptacle section.

[0025] Although the foregoing embodiment is designed for a small size article, one that takes up a small percentage of the surface area of the package, as those skilled in the art realize on reading this specification, the invention is not so limited. Larger size articles would necessarily require a larger size receptacle 7 for which there remains ample surface area. In fact in other embodiments the receptacle may be of a surface area that covers almost the entire available surface area inside the tray section.

[0026] Receptacle section 5 additionally contains stiffening ribs 15, only one of which is numbered, and upwardly protruding posts or catches 17, 19, 21 along the far side in the figure and 23 on the right side. Corresponding posts or catches, not visible in the figure, are included in the two opposite walls (and are later shown in FIG. 3). Additional optional features of this section are also later described. Receptacle section 5 is a vacuumformed piece that is formed from a sheet of transparent plastic material using the vacuumforming process. That process employs a mold. Thus, as is known in the art, receptacle 7 is formed in the process by a mold portion that during the process pushes the softened plastic upwardly in the region for the receptacle, producing a bulge or protruding portion on the upper side, as illustrated, and a depressed portion on the underside, which forms a well or receptacle. The same construction holds true for the posts or catches 17, 19, 21, 23, ribs 15 and the like.

[0027] Tray section 3 is formed in a knocked-down condition from a single corrugated paperboard blank shown in FIG. 2 to which reference is made. The blank is a single thickness of conventional corrugated paperboard, having one or more plies of corrugation, depending on the ultimate strength required. A blank assembler apparatus (or person) folds the two-dimensional cardboard blank of the tray section into a three-dimensional rectangular shape. The tray section includes a rectangular bottom panel 9. Four side walls 24, 26, 28 and 30 are respectively connected to four corresponding sides of panel 9 along respective ones of the four fold lines, 32A through 32D. Each of those sidewalls contains a flap extension 25, 27, 29 and 31, respectively, connected to the respective sidewall by a respective one of four additional fold lines 34A through 34D.

[0028] Sidewall 28 includes left and right side flaps 36 and 37 connected to the side wall by respective fold lines 38A

and 38B. Respective cut lines 39A and 39B free respective flaps 36 and 37, respectively, permitting the flaps to be bend upward and positioned at right angles to side wall 28. In like manner sidewall 30 includes left and right side flaps 40 and 41 connected to the sidewall by respective fold lines 42A and 42B. Respective cut lines 43A and 43B free respective flaps 40 and 41, respectively, permitting the flaps to be bend upward and positioned at right angles to side wall 30.

[0029] Bottom panel 9 of the tray section includes eight slots, in pairs located along each of the four sides of the panel. The slots are denominated 44A and 44B, 45A and 45B, 46A and 46B and 47A and 47B. Reference is again made to the flap extensions 25, 27, 29 and 31 attached to associated ones of the side walls. Each of those flaps contains a pair of extending tabs: flap 25 contains tabs 49A and 49B, as example. The height of the flap extension is at least equal to the height of the associated side wall. Therefore, when side wall 24 is bent upward and positioned perpendicular to the plane of flat panel 9, and flap extension 25 is folded over fold line 34A and folded down alongside side wall 24, tabs 49A and 49B extend past the upper surface of panel 9 and extend into respective corresponding slots 44A and 44B to lock the flap extensions in place alongside the connected side wall. As later herein described, a sidewall formed on the receptacle section 5 is sandwiched in-between the flap extension and the adjacent side wall to fix the receptacle layer in place.

[0030] Flap 27 contains tabs 50A and 50B which in like manner engage tabs 45A and 45B, when the side 26 and flap extension 27 are appropriately folded over the respective fold lines 32b and 34B; Flap 29 contains tabs 51A and 51B that engage slots 46A and 46B; and Flap 31 contains tabs 52A and 52B that engage slots 47A and 47B. The slots, cut lines and fold lines are all formed in the blank concurrently when the blank is die-cut from a sheet of corrugated paper-board. The foregoing is routine work to a blank manufacturer.

[0031] Reference is next made to the layout illustration of receptacle section 5 presented in FIG. 3, a section that was vacuumformed to the geometry illustrated. This section includes the receptacle 7 and upstanding posts 17, 19, 21 and 23 earlier noted in FIG. 1. It also includes like posts 14, 18, and 20 along the bottom side and post 22 along the left side, that were not visible in the view of FIG. 1, and includes the upstanding ribs 15. The section is bordered by flat side wall flaps 54, 56, 58 and 60 connected to the central section by fold lines 55, 57, 59 and 61. Side wall 58 contains flap extensions 66 and 67 at each end connected by respective fold lines, 70 and 71, and with flap extension 66 and 67 respectively separated from side walls 54 and 56, respectively, by cut lines 74 and 75. Likewise side wall 60 contains flap extensions 68 and 69 at respective ends that are connected to the wall by respective fold lines, 72 and 73, with flap extension 68 separated from side wall 54 by cut line 76 and flap extension 69 separated from side wall 56 by cut line 77. The fold lines allow the side walls to be bent upward and positioned perpendicular to the central area of the section to form a structure that in this embodiment also resembles a shallow rectangular box. Receptacle 7 is viewed in this figure from the bottom side. The open side of that receptacle is on the opposite side of the section. The side walls when bent up form a shallow container on the closed side of receptacle 7.

[0032] In the assembled package illustrated in FIG. 1, the side walls of this receptacle section were not visible since those walls were covered by the flap extensions, that locked the flap extensions in place sandwiched between the side walls and corresponding flap extension. Continuing with FIG. 3, Slots 62A, 62B, 63A, 63B, 64A, 64B, 65A and 65B are die-cut through the plastic. The slots are positioned so as to align with the slots that were die cut into the tray section 3 and are of like size and shape to those slots. That permits the tabs on the flap extensions of the tray section to extend through the slots in the receptacle section. In that way the tabs further lock the receptacle section to the tray section. The receptacle section is thin and in a practical embodiment is between about 0.015 through 0.030 inches thick.

[0033] As an additional feature, there is positioned adjacent each slot in the receptacle section an elongate rectangular depression that contains a straight edge facing the central portion of the section, depression 79A, as example. On the opposite side of this vacuumformed piece, the depression is in fact a protrusion from the underside (as viewed in this FIG. 3) surface of the section. There are a total of eight of those protrusions (or depressions), two located on each of the four sides. They are identified as 79A and 79B on the left side as viewed in FIGS. 3, 80A and 80B on the right side, 81A and 81B on the rear side, and 82A and 82B at the front side. The straight edges of those protrusions are seen to define a shallow rectangular pocket on the underside of the receptacle section, which may be somewhat difficult to visualize from the figure. That shallow rectangular pocket is recessed from the bottom surface of the receptacle section. That pocket is essentially the same size and shape as the rectangular barrier panel 78 illustrated in FIG. 4, next considered.

[0034] FIG. 4 illustrates a barrier panel 78, which is a preferred option to the package. That element is preferred since the panel enhances the security for the package, as later herein described. The panel is a simple thin rectangular sheet of plastic material, suitably the same material that is used for the receptacle section. The length and width dimensions are sized so that the panel fits in and can be seated in the shallow pocket described in the preceding paragraph formed in the underside of the receptacle section. The sides of the pocket prevent panel 78 from sliding around inside the assembled package and making undesirable noise. If left loose, on shaking the package, the panel would bang into the side of the cardboard in the tray section, producing some noise. Such noise might lead a customer to think that something in the package was broken.

[0035] Assembly of the package commences with the die-cut tray section 3, the vacuumformed and die cut clear plastic receptacle section 5, the barrier panel 78, and the memory chip product that is to be packaged. Preliminarily the side walls of the tray section, 24, 27, 28 and 30, are bent perpendicular to the central area of the section, but without bending over the flap extensions attached to those side walls, which now are also positioned perpendicular to central area 9. The corresponding plastic sidewalls of the receptacle section are bent upwardly, and the tabs tacked in place to form a shallow rectangular shape in that section.

[0036] The receptacle section is then inverted to expose the entry to receptacle 7 and the memory chip or card is inserted inside the accessible receptacle. The plastic barrier

panel 78 is then placed in the shallow pocket on the receptacle section covering receptacle 7 and, holding the section and panel together the subassembly is then deposited inside the tray section. The flap extensions of the tray section, 25, 27, 29 and 31, are then bent over and down, one at a time. The flaps are pushed into the narrow space between the posts and the adjoining cardboard side wall, as example flap extension 29 is pushed in front of posts 17, 19 and 21 adjoining cardboard side wall 28. And the flap extensions are pushed down so that the tabs carried at the end of those extensions through the slots in the receptacle section and into the slots in the tray section, locking the flap extensions in place and thereby locking the receptacle section to the tray section. FIG. 5, to which reference is made, is a section view of a portion of the final relationship of the side wall of the tray section and receptacle section. If necessary, auxiliary presses may be used to force the flap extension ends in place in the corners of the tray section.

[0037] Referring again to FIG. 1, the package gives a wide display for prospective customers and reasonable security, blocking product pilferers. That is, the package is tamper resistant. The ribs 15 in the exposed outer surface of the receptacle layer make it very difficult for a person to inconspicuously draw a knife along the receptacle layer and cut openings through which to extract the memory in receptacle 7. The high and low of the surface interrupts that procedure. Further, with the barrier wall installed, one who's attempting to cut through the backside of the package, namely through the cardboard of the tray layer, soon finds a tough plastic layer beneath the cardboard, frustrating an easy cut into a most difficult one. In addition to a successful function as a package with tamper resistance built in, the package is environmentally sound and is suitable for recycling, a principal advantage.

[0038] As one appreciates, the foregoing package is much easier to open than a plastic clamshell package. The opening can be accomplished by hand, by bending back the sides, one at a time, and uplifting the tab from the slot and pulling the flap extension outwardly. Once the receptacle section is thereby released from the tray section, the tray section may be lifted out and the memory chip is removed. The packaging materials may now be discarded. However, what one has as waste material is at most three separate pieces the tray section, which is cardboard, the receptacle section which is transparent plastic and perhaps, the barrier wall which is also transparent plastic. Unlike the case with the plastic clamshell package, the waste from this package is easily separated and is recyclable.

[0039] In a practical embodiment the tray section is formed of b-flute or e-flute cardboard, the receptacle section is formed from PVC or other stiff plastic packaging material and may range in thickness from 0.015 through 0.030 inches. The barrier panel is formed of same material and thickness as used in the receptacle section. Although not illustrated in the embodiment, either portion of the package components or both may contain printed or lithographed material, if desired, or may be wrapped in printed sheet packaging material. The plastic material may be polyvinylchloride ("PVC") that is vacuumformed to shape. Other plastic materials, which may be more environmentally friendly than PVC, may be substituted, such as polyethylene terephthalate ("PET"), polystyrene, PLA and any other equivalent material that gives the receptacle section a reasonably stiff form and is used for packaging, whether currently existing or which may be developed hereafter. Even polypropylene

("PP") may be used. One may notice a faint similarity of the foregoing package to a regular lidded container, one that's been inverted so that the lid, traditionally located at the top of a container receptacle, is, instead, located at the bottom. And the receptacle, normally on the bottom, is on the top. But such an inverted container doesn't contain a lid that restrains and holds the container.

[0040] The foregoing embodiment is of a rectangular shape. However, the invention is not so limited. As those skilled in the packaging art realize on reading this specification in other embodiments other polygon shapes may be substituted for the rectangular shape used in this embodiment. As example a hexagon, a heptagon or the like, any of which contains straight sides may be used. As one appreciates, it becomes necessary to change the shape of both the tray and receptacle sections, the various fold and cut lines and the like so as to produce a structure in which the tray section holds onto the receptacle section. Although applicant has not as yet developed such an alternative, those skilled in the art may follow the teachings of this application and through trial and error produce useful alternatives.

[0041] If one were to question as to why is such a large area or volume used with a small receptacle that occupies only a fraction of the available area to hold a small article. One seemingly would save a of packaging material. The answer again is security. It's not very easy for a shoplifter to stuff a large package into the pocket of the shoplifter's coat, but it's very easy to do with a box that's so small that it fits in one's hand.

[0042] If that's the case, one might ask why not just display the articles unpackaged in a display case. A store clerk may take the article from the case and hand it to the customer for inspection, much like the practice in a jewelry shop. The person finds the answer to that is economics. Jewelry store clerks are trained in the product and thus are more highly paid, and the stores are smaller in size than a retail store and there are fewer customers to monitor so that the sales personnel can keep track of the customers and the product. The retail store personnel are rarely fully trained in all products handled by the store and are lower paid. The personnel turnover is high. Management wants to keep the overhead down. Shrinkage can also occur through that breed of personnel. The foregoing all leads back to the existing rack held product in clamshell plastic packaging.

[0043] It is believed that the foregoing description of the preferred embodiments of the invention is sufficient in detail to enable one skilled in the art to make and use the invention without undue experimentation. However, it is expressly understood that the detail of the elements comprising the embodiment presented for the foregoing purpose is not intended to limit the scope of the invention in any way, in as much as equivalents to those elements and other modifications thereof, all of which come within the scope of the invention, will become apparent to those skilled in the art upon reading this specification.

1. A package for a product sold at retail comprising:
  - a receptacle section and a tray section;
  - said receptacle section including a receptacle for receiving and housing a product for retail sale, said receptacle including an entrance;
  - said tray section including a holding device for holding said receptacle section inside said tray section whereby access to said entrance of said receptacle is blocked and

removal of product housed in said receptacle is inhibited, said holding device being manually releasable to permit separation of said receptacle section from said tray section.

2. The package for a product sold at retail as defined in claim 1,

wherein said receptacle section comprises an open box-like container comprising a base and side walls bordering and upstanding from said base;

wherein said receptacle is inverted and includes a bottom side that is elevated above said base and an open entrance located on the underside of said base;

wherein said tray section comprises a box-like container, said box-like container including a base and upright side walls bordering said base;

wherein said holding device to said tray section comprises side-wall extensions to said upright side walls;

said side wall extensions extending from respective ones of said side walls of said tray section and joined to the outer edge of said respective ones of said side walls by respective fold lines;

each said side wall extension being folded over a respective side-wall of said receptacle section and extending downwardly along side of said respective side wall to capture said respective side-wall of said receptacle section between a side-wall extension and the side-wall of said tray section from which said side-wall extension extends.

3. The package for a product sold at retail as defined in claim 1,

wherein said tray section consists essentially of a corrugated cardboard material; and

wherein said receptacle section consists essentially of a plastic material.

4. The package for a product sold at retail as defined in claim 3, wherein said plastic material is a member of the group consisting of: polyvinylchloride ("PVC"), polypropylene ("PET"), and polystyrene

5. The package for a product sold at retail as defined in claim 2,

wherein each side wall extension contains at least one tab, said tab extending from an outer edge of the respective side wall extension;

wherein said base of said receptacle section includes at least one slot underlying each said side wall extension and is aligned with said tab of said respective side wall extension;

wherein said base of said tray section includes at least one slot underlying each said side wall extension, said slot in said base underlying a respective side wall extension being aligned with said tab of said respective side wall extension;

each tab in said side wall extension extending through a respective slot in said receptacle section and into a slot in said tray section to hold the side wall extensions in place in the folded-over position and lock the receptacle section to the tray section.

6. The package for a product sold at retail as defined in claim 2,

wherein each side wall extension contains two spaced tabs, said two spaced tabs extending from an outer edge of the respective side wall extension;

wherein said base of said receptacle section includes a pair of spaced slots underlying each said side wall extension, with said two spaced slots being aligned with said two spaced tabs of said respective side wall extension;

wherein said base of said tray section includes a pair of spaced slots underlying each said side wall extension and said spaced slots in said base of said tray section being aligned with said two spaced tabs of said respective side wall extension;

each tab in said side wall extension extending through a respective slot in said base of said receptacle section and into a slot in said base of said tray section to hold said side wall extensions in place in the folded-over position and lock the receptacle section to the tray section.

7. The package for a product sold at retail as defined in claim 6,

wherein said tray section consists solely of a corrugated cardboard material; and

wherein said receptacle section consists solely of a plastic material.

8. The package for a product sold at retail as defined in claim 6,

wherein said tray section consists essentially of a first packaging material;

wherein said receptacle section consists essentially of a second packaging material;

each of said first and second packaging materials being of sufficient rigidity in characteristic to maintain a shape in which formed; and wherein said second packaging material is sufficiently different in physical properties from that said first packaging material to require separate recycling to reclaim the respective packaging materials.

9. The package for a product sold at retail as defined in claim 6,

wherein said base of receptacle section includes a plurality of upwardly extending posts, each said post being adjacent and in such proximity to a downwardly extending side wall extension sufficient to require said side wall extension to be forced into place in front of said post to attain said folded-over position.

10. The package for a product sold at retail as defined in claim 6,

wherein said underside of said base of said receptacle section includes a plurality of spaced strips downwardly projecting from said underside and defining an area underlying a shallow region on the underside of said base, said shallow region, including said entrance to said receptacle;

a cover member, said cover member positioned between said base of said tray section and said bottom of said



receptacle section and being sized to fit in said defined area and serve as a barrier to said entrance to said receptacle.

11. The package for a product sold at retail as defined in claim 9,

wherein said underside of said base of said receptacle section includes a plurality of spaced strips downwardly projecting from said underside and defining an area underlying a shallow region on the underside of said base, said shallow region, including said entrance to said receptacle;

a cover member, said cover member positioned between said base of said tray section and said bottom of said receptacle section and being sized to fit in said defined area and serve as a barrier to said entrance to said receptacle.

12. The package for a product sold at retail as defined in claim 11, wherein said base, side walls, fold lines, posts, strips and receptacle of said receptacle section are vacuum formed from a single piece of plastic material to produce a unitary one-piece structure.

13. The package for a product sold at retail as defined in claim 11,

wherein said tray section consists essentially of a corrugated cardboard material; and

wherein each of said receptacle section and said cover member consists essentially of a plastic material.

14. The package for a product sold at retail as defined in claim 13,

wherein said receptacle section and said cover member consists essentially of a plastic material and wherein said plastic material of said receptacle section is transparent.

15. The package for a product sold at retail as defined in claim 3,

wherein said said plastic material of said receptacle section is transparent.

16. The package for a product sold at retail as defined in claim 13, wherein said plastic material is a member of the group consisting of: polyvinylchloride ("PVC"), polyethylene terephthalate ("PET"), polypropylene ("PP"), and polystyrene.

17. A package for a product sold at retail comprising:

a receptacle section, said receptacle section comprising an open box-like container comprising a rectangular base and four side walls bordering and upstanding from said base and said rectangular base including a receptacle for receiving and housing a product for retail sale, said receptacle being inverted with a bottom side that is elevated above said base and an open entrance located on the underside of said base;

a tray section, said tray section comprising a four sided rectangular box-like container, said rectangular box-like container including a rectangular base, four upright side walls bordering said base, each of said four upright side walls being joined to said base by a respective fold line, and a holding device for holding said receptacle section inside said tray section to block access to said entrance of said receptacle and thereby inhibit removal of a product housed in said receptacle, said holding

device being manually releasable to permit said receptacle section to be separated from said tray section;

said holding device further comprising four side-wall extensions, each of said side-wall extensions extending from an outer edge of a respective one of said four upright side walls and joined thereto by a fold line;

each said side wall extension being folded over a respective side-wall of said receptacle section and extending downwardly along side of said respective side wall to capture said respective side-wall of said receptacle section between a side-wall extension and the side-wall of said tray section from which said side-wall extension extends;

each side wall extension including two spaced tabs, said two spaced tabs extending from an outer edge of the respective side wall extension;

said base of said tray section further including a pair of spaced slots underlying each said side wall extension and each of said slots in said base underlying a respective side wall extension being aligned with a respective one of said two spaced tabs of said respective side wall extension;

said base of said receptacle section further including a pair of spaced slots underlying each said side wall extension and each of said slots in said base of said receptacle section underlying a respective side wall extension being aligned with a respective one of said two spaced tabs of said respective side wall extension;

each tab in said side wall extensions extending through a respective slot in said receptacle section and into a slot in said tray section to hold the side wall extensions in place in the folded-over position and lock the receptacle section to the tray section for preventing access to the entrance of said receptacle and confining any product received within said receptacle;

wherein said base of receptacle section further comprises a plurality of upwardly extending posts, each said post being adjacent and in close proximity to a downwardly extending side wall extension sufficient to require said side wall extension to be squeezed into place in front of said post to attain a folded-over position;

wherein said underside of said receptacle section includes a plurality of spaced strips downwardly projecting from said underside and defining an area underlying a shallow region on the underside of said base of said receptacle section, said shallow region, including said entrance to said receptacle; and

a cover member, said cover member positioned between said base of said tray section and said bottom of said receptacle section and being sized to fit in said defined area and serve as a barrier to said entrance to said receptacle.

18. The package for a product sold at retail as defined in claim 17, wherein

said tray section consists essentially of a one-piece unitary assembly formed from a single piece of corrugated cardboard material, said receptacle section consists essentially of a one-piece unitary assembly formed from a single piece of plastic material, and said cover

member consists essentially of the same plastic material used in said receptacle section.

19. The package for a product sold at retail as defined in claim 17,

wherein said tray section consists essentially of a corrugated cardboard material; and

wherein each of said receptacle section and said cover member consists essentially of a plastic material.

20. The package for a product sold at retail as defined in claim 17, wherein said receptacle section is transparent.

21. A recyclable package for a product sold at retail comprising:

a receptacle section and a tray section;

said receptacle section including a transparent sheet of plastic material vacuformed into a panel and a receptacle integrally formed in said panel, said receptacle

being of a size for receiving and holding an article packaged for sale in said recyclable package, said receptacle having an entrance on an underside of said panel for inserting said article therewithin, said panel portion containing side walls bordering the periphery of said panel, said side walls folded up perpendicular to said panel;

said tray section comprising a folded sheet of corrugated cardboard material, said sheet comprising a base portion underlying said panel portion, said base portion being slightly larger in size (length and width dimension) than said panel portion, a plurality of fold-up side walls bordering the periphery of said base portion, each of said side walls being integrally attached to said base portion by a fold line;

\* \* \* \* \*