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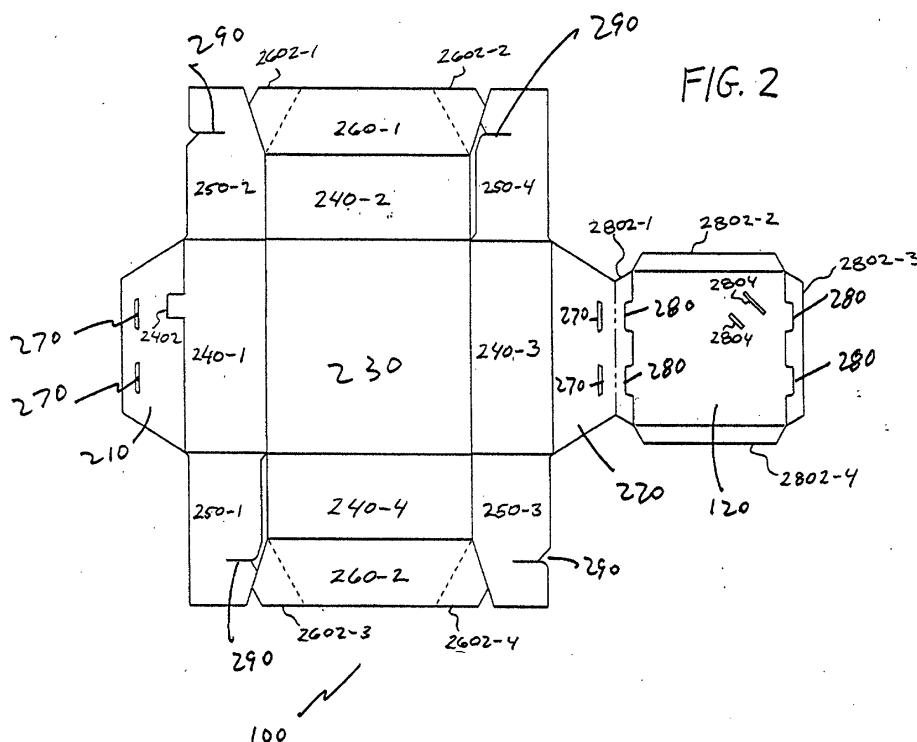
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(54) **Display packaging technique**

(57) A display package and display packaging technique implemented by forming a shadow box (100) in which an item (130) to be displayed and items (110) to be hidden that are associated with the item to be displayed are packaged. The shadow box (100) is formed having four side portions and a bottom portion. A flap (120) integral with a portion of the shadow box (100) is disposed between the four side portions to form a hidden compartment (115) between the flap (120) and the

bottom portion within which the associated items (110) are hidden and a display compartment (135) above the flap (120) within which the item (130) to be displayed is displayed by disposing the item (130) on the flap (120). The shadow box (100) and flap (120) are formed of a single piece of sheet material. A transparent protective material wrap is provided to cover the shadow box entirely when assembled so as to provide protection and enclose the display compartment.



## Description

### Background of the Invention:

#### Field of the Invention

[0001] The present invention relates to display packaging techniques and more particularly, the present invention relates to a display package and display packaging technique in which an item to be displayed is packaged in a shadow box and flap arrangement with an item to be displayed disposed in a display compartment and items associated with the item to be displayed disposed in a hidden compartment separated from the display compartment by the flap, the shadow box and flap being formed of a single piece of sheet material and being protected by a transparent material which covers the entire shadow box.

#### Description of the Related Art

[0002] Earlier disadvantageous display packaging techniques normally displayed an item to be displayed contained within a package as well as displaying associated items. Oftentimes, it was desirable to not display the associated items within the package. For example, if a CD player or headset was to be displayed in a package, the associated items, such as cables, batteries, carrying case, need not be displayed and in fact should probably not be displayed since it draws attention away from the CD player or headset.

[0003] Blister packs are sometimes used as a display package to display an item. However, the associated items invariably are also displayed even though the packager may wish not to display the associated items. Furthermore, blister packs do not protect the item are items contained therein from being damaged to the same extent as a rigid box.

#### Summary of the Invention

[0004] The present invention provides a display package and display packaging technique implemented by forming a shadow box in which items to be displayed are disposed within a display compartment while items associated with the items to be displayed that are not to be displayed are disposed in a hidden compartment beneath the items to be displayed. The display compartment is separated from the hidden compartment by the flap integral with the shadow box. The shadow box and flap are formed of a single piece of sheet material. The shadow box can be protected by a transparent protective material wrap, which covers the entire shadow box and encloses the display compartment.

#### Brief Description of the Drawings

[0005] The foregoing and a better understanding of

the present invention will become apparent from the following detailed description of example embodiments and the claims when read in connection with the accompanying drawings, all forming a part of the disclosure of this invention. While the foregoing and following written and illustrated disclosure focuses on disclosing example embodiments of the invention, it should be understood that the same is by way of illustration and example only and that the invention is not limited thereto. The scope of the present invention are limited only by the terms of the appended claims.

[0006] The following represents brief descriptions of the drawings, wherein:

[0007] Fig. 1A is a top view illustrating an example of a shadow box and flap in accordance with an embodiment of the present invention, a portion of the shadow box being partially open to show the associated items which are not to be displayed being disposed in a hidden compartment;

[0008] Fig. 1B is a top view illustrating the example of Fig. 1A with the shadow box being closed by the flap to show the item to be displayed being visible while the associated items are hidden from view;

[0009] Fig. 1C is a perspective view of the shadow box of Fig. 1B;

[0010] Fig. 2 illustrates an example of a single piece of sheet material used to form the shadow box and flap in accordance with a first embodiment of the present invention; and

[0011] Fig. 3 illustrates an example of a transparent protective material wrap which may be used to cover the shadow box of Fig. 1C, the transparent protective material wrap being completely unfolded.

#### Detailed Description of the Invention

[0012] Figs. 1A-1C illustrate an example of a display package in accordance with an embodiment of the present invention.

[0013] As shown in Fig. 1A, the display package is formed by a shadow box 100 which is partially open so as to show the associated items 110 which are not to be displayed being disposed in a hidden compartment 115 and a flap 120. As shown in Figs. 1B-1C, when the hidden compartment 115 of the shadow box 100 is closed, the flap 120 is folded down and the associated items 110 are hidden from view by the flap 120 in the hidden compartment 115. The item to be displayed 130 is then disposed on top of the flap 120 in a display compartment 135 so as to be easily seen by a buyer. A transparent protective material wrap, not shown in Figs. 1A-1C, is then used to cover the entire shadow box 100, thereby protecting both the shadow box 100 and its contents 110 and 130, while allowing a buyer to see the item to be displayed 130 in the display compartment 135.

[0014] Fig. 2 illustrates an example of a shadow box 100 and flap 120 in accordance with a first embodiment of the present invention, the shadow box 100 and

flap 120 being completely unfolded. While the shadow box 100 and flap 120 as illustrated in Fig. 2 has been illustrated as being formed of a single piece of sheet material, such as cardboard or corrugated paper, it is of course understood that the present invention is not limited thereto.

**[0015]** The single piece of sheet material forming the shadow box 100 and flap portion 120 as illustrated in Fig. 2 includes a bottom portion 230 having a rectangular shape, four side portions 240-1 through 240-4 each being integral with a different side of the bottom portion 230, two first end portions 260-1 and 260-2 each being integral with an end of one of a first pair of side portions 240-2 and 240-4, the first pair of side portions 240-2 and 240-4 being on opposite sides of the bottom portion 230, two second end portions 210 and 220 each being integral with an end of one of a second pair of side portions 240-1 and 240-3, the second pair of side portions 240-1 and 240-3 being on opposite sides of the bottom portion 230, four locking portions 250-1 through 250-4, a first pair of locking portions 250-1 and 250-2 being integral with opposite sides of one of the second pair of side portions 240-1, a second pair of locking portions 250-3 and 250-4 being integral with opposite sides of the other of the second pair of side portions 240-3, and the flap portion 120 being integral with an end of one of the second end portions 220.

**[0016]** Note that the second end portions 210 and 220 each have slots 270 disposed therein so as to mate with corresponding tabs 280 of the flap portion 120 when the shadow box 100 is assembled. It is of course understood that the present invention is not limited to this tab/slot arrangement. Similarly, each locking portion 250-1, 250-2, 250-3 and 250-4 has a slit 290 which mates with the slit 290 of a corresponding locking portion when the shadow box 100 is assembled. It should be noted that the slits 290 of corresponding locking portions are oriented in opposing directions to permit them to mate with one another. It is understood that the present invention is not limited to this fastening arrangement.

**[0017]** Each of the corners of the two first end portions 260-1 and 260-2 are each provided with a tab portion 2602-1, 2602-2, 2602-3 and 2602-4. The tab portions 2602-1 through 2602-4 when folded aid in forming continuous sides of the display compartment 135. Each of the tab portions 2602-1 through 2602-4 as illustrated in Fig. 2 generally has a triangular shape.

**[0018]** The flap portion 120 has four side portions 2802-1 through 2802-4 each being integral with a different side of the flap portion 120. One of the side portions 2802-1 is integral with one of the sides of the flap portion 120 and one of the second end portions 220, thereby connecting the flap portion 120 to the rest of the single piece of material used to form the shadow box arrangement. The four side portions 2802-1 through 2802-4 of the flap portion 120 when folded in a downward direction aid in forming a stable platform upon which the item to be displayed sits and aid in enclosing and separating

the hidden compartment 115 from the display compartment 135.

**[0019]** The flap portion 120 also includes cutouts 2804 which allow for portions of the associated items 110 to pass through and be connected to the item to be displayed 130. The cutouts 2804 can also serve as attaching points to which the item to be displayed 130 is attached using a fastener to prevent undesired movement thereof.

**[0020]** One or both of the second end portions 210 and 220 includes a marking tab portion 2402, which can remain in a vertical position when the second end portion 210, 220 is folded over. The marking tab portion 2402 could for example include product marking information or a trademark associated with the item to be displayed 130 in the display compartment 135.

**[0021]** To assemble the shadow box 100 and flap portion 120 as illustrated in Fig. 2 in accordance with the display packaging technique of the present invention the following procedure is conducted. First, each of the first pair of locking portions 250-1 and 250-2 and the second pair of locking portions 250-3 and 250-4 is folded over so that their slits 290 interlock. Second, each of the side portions 240-1 through 240-4 is folded over. Third, each of the first end portions 260-1 and 260-2 is folded over and each of the tab portions 2602-1 through 2602-4 of each first end portion 260-1, 260-2 is folded to approximately a 90 degree angle. Fourth, each of the second end portions 210 and 220 is folded over. When at least one of the second end portions 210 and 220 is folded over the marking tab portion 2402 is allowed to remain in vertical state to permit its viewing in the display compartment 135. Upon performing the above-described first through fourth steps a shadow box arrangement is formed with the bottom portion 230 being exposed, thereby forming the hidden compartment 115.

**[0022]** The procedure continues as follows. Fifth, the associated items 110 are then placed in the hidden compartment 115. Sixth, the flap portion 120 is folded over so that its tabs 280 mate with the corresponding slots 270 of each of the second end portions 210 and 220, thereby providing support to the flap portion 120 and hiding the associated items 110 from view. Thus, the hidden compartment 115 is enclosed and separated from the display compartment 135. Seventh, the item to be displayed 130 is then placed on top of the flap 120. Eighth, the assembled shadow box 100 is covered by a transparent protective material wrap 300 such as that shown in Fig. 3. The transparent protective material wrap 300 encloses the display compartment 135 and serves as protection for the shadow box 100.

**[0023]** As shown in Fig. 3, the transparent protective material wrap 300 includes four side portions 310 which are folded over from a bottom portion 320.

The resultant assembly is then placed over the shadow box 100 and then the two end portions 330 are folded over so that they are on the bottom of the shadow box 100 and then the two end portions 340 folded over so

that a tab 350 mate with a slot 360 fastening the two end portions 340 together. It is of course understood that the present invention is not limited to this particular transparent protective material wrap arrangement. Other arrangements, such as shrink-wrapped transparent protective materials may also be used.

**[0024]** This concludes the description of the example embodiments. Although the present invention has been described with reference to an illustrative embodiment thereof, it should be understood that numerous other modifications and embodiments can be devised by those skilled in the art that will fall within the spirit and scope of the principles of this invention. More particularly, reasonable variations and modifications are possible in the component parts and/or arrangements of the subject combination arrangement within the scope of the foregoing disclosure, drawings, and the appended claims without departing from the spirit of the invention. In addition to variations and modifications in the component parts and/or arrangements, alternative uses will also be apparent to those skilled in the art.

## Claims

### 1. A display package comprising:

a shadow box having four side portions and a bottom portion;  
a flap disposed between the four side portions to form a hidden portion between the flap and the bottom portion; and  
a transparent protective material wrap disposed so as to cover the shadow box entirely;

wherein an item to be displayed is disposed on top of the flap and associated items which are to be hidden from view are disposed in the hidden portion formed by the flap and bottom portion.

### 2. A display package according to claim 1, wherein said shadow box is formed by a single piece of sheet material comprising:

a bottom portion having a rectangular shape;  
four side portions each being integral with a different side of said bottom portion;  
two first end portions each being integral with an end of one of a first pair of side portions of said four side portions, said first pair of side portions being on opposite sides of said bottom portion;  
two second end portions each being integral with an end of one of a second pair of side portions of said four side portions, said second pair of side portions being on opposite sides of said bottom portion;  
four locking portions,

wherein a first pair of locking portions of said four locking portions being integral with opposite sides of one of said second pair of side portions and a second pair of locking portions of said four locking portions being integral with opposite sides of the other of said second pair of side portions, and

wherein said flap is integral with an end of one of said second end portions.

3. A display package according to claim 2, wherein each of said four locking portions includes a slit which mates with the slit of a corresponding locking portion when the shadow box is assembled.

4. A display package according to claim 2, wherein each of said second end portions have slots disposed therein,

wherein said flap includes tabs, and

wherein each of said slots of said second end portions mates with a corresponding tab of said flap when said shadow box is assembled.

5. A display package according to claim 2, wherein each of the corners of each of said first end portions is provided with a tab which aids in forming continuous sides of said shadow box when assembled.

6. A display package according to claim 2, wherein said flap comprises:

four side portions each being integral with a different side of said flap,

wherein one of said side portions of said flap is integral with a side of said flap and one of said second end portions,

wherein said side portions of said flap are folded in a downward direction when said display package is assembled to aid in forming a stable platform on which the item to be displayed sits.

7. A display package according to claim 2, wherein said flap includes cutouts which allow for portions of the associated items to pass through said flap.

8. A display package according to claim 2, wherein at least one of said second end portions includes a marking tab portion which remains in a vertical position when the display package is assembled.

9. A display package according to claim 8, wherein said marking tab portion includes information concerning the item and the associated item.

10. A method of displaying an item to be displayed while hiding associated items from view, the method comprising:

providing a shadow box having four side portions and a bottom portion;  
 providing a flap disposed between the four side portions to form a hidden portion between the flap and the bottom portion;  
 providing a transparent protective material wrap disposed so as to cover the shadow box entirely;  
 disposing the item to be displayed on top of the flap; and  
 disposing the associated items to be hidden in the hidden portion formed by the flap and bottom portion so as to be hidden from view.

11. A method according to claim 11, wherein said shadow box is formed by a single piece of sheet material comprising:

a bottom portion having a rectangular shape;  
 four side portions each being integral with a different side of said bottom portion;  
 two first end portions each being integral with an end of one of a first pair of side portions of said four side portions, said first pair of side portions being on opposite sides of said bottom portion;  
 two second end portions each being integral with an end of one of a second pair of side portions of said four side portions, said second pair of side portions being on opposite sides of said bottom portion;  
 four locking portions,

wherein a first pair of locking portions of said four locking portions being integral with opposite sides of one of said second pair of side portions and a second pair of locking portions of said four locking portions being integral with opposite sides of the other of said second pair of side portions, and  
 wherein said flap is integral with an end of one of said second end portions.

12. A method according to claim 12, wherein each of said four locking portions includes a slit which mates with the slit of a corresponding locking portion when the shadow box is assembled.
13. A method according to claim 12, wherein each of said second end portions have slots disposed therein,  
 wherein said flap includes tabs, and  
 wherein each of said slots of said second end portions mates with a corresponding tab of said flap when said shadow box is assembled.
14. A method according to claim 12, wherein each of the corners of each of said first end portions is provided with a tab which aids in forming continuous

sides of said shadow box when assembled.

15. A method according to claim 12, wherein said flap comprises:

four side portions each being integral with a different side of said flap,

wherein one of said side portions of said flap is integral with a side of said flap and one of said second end portions,

wherein said side portions of said flap when folded in a downward direction when said display package is assembled aid in forming a stable platform on which the item to be displayed sits.

16. A method according to claim 12, wherein said flap includes cutouts which allow for portions of the associated items to pass through said flap.

17. A method according to claim 12, wherein at least one of said second end portions includes a marking tab portion which remains in a vertical position when the display package is assembled.

18. A method according to claim 18, wherein said marking tab portion includes information concerning the item and the associated item.

19. A single piece of sheet material which can be folded into a shadow box for displaying an item and hiding items associated with said item, said single sheet of material comprising:

a bottom portion having a rectangular shape;  
 four side portions each being integral with a different side of said bottom portion;  
 two first end portions each being integral with an end of one of a first pair of side portions of said four side portions, said first pair of side portions being on opposite sides of said bottom portion;  
 two second end portions each being integral with an end of one of a second pair of side portions of said four side portions, said second pair of side portions being on opposite sides of said bottom portion;  
 four locking portions,

wherein a first pair of locking portions of said four locking portions being integral with opposite sides of one of said second pair of side portions and a second pair of locking portions of said four locking portions being integral with opposite sides of the other of said second pair of side portions, and

wherein said bottom portion, four side portions, two first end portions, two second end portions and four locking portions when assembled

form a shadow box; and item.

a flap being integral with an end of one of said second end portions,

wherein said shadow box and said flap when assembled forms a part of a display package such that said items to be displayed are displayed in a display portion and said associated items to be hidden are hidden in a hidden portion separated from said display portion by said flap.

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- 20.** A single piece of sheet material according to claim 20, wherein each of said four locking portions includes a slit which mates with the slit of a corresponding locking portion when the shadow box is assembled.

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- 21.** A single piece of sheet material according to claim 20, wherein each of said second end portions have slots disposed therein,  
wherein said flap includes tabs, and  
wherein each of said slots of said second end portions mates with a corresponding tab of said flap when said shadow box is assembled.

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- 22.** A single piece of sheet material according to claim 20, wherein each of the corners of each of said first end portions is provided with a tab which aids in forming continuous sides of said shadow box when assembled.

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- 23.** A single piece of sheet material according to claim 20, wherein said flap comprises:

four side portions each being integral with a different side of said flap,

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wherein one of said side portions of said flap is integral with a side of said flap and one of said second end portions,

wherein said side portions of said flap are folded in a downward direction when said shadow box is assembled to aid in forming a stable platform on which the item to be displayed sits.

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- 24.** A single piece of sheet material according to claim 20, wherein said flap includes cutouts which allow for portions of the associated items to pass through said flap.

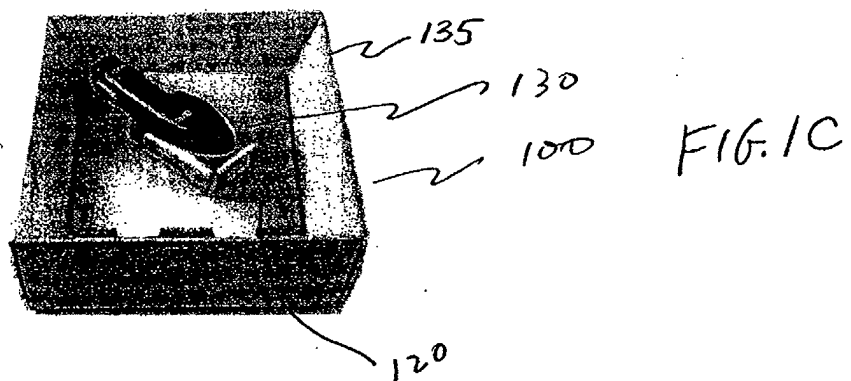
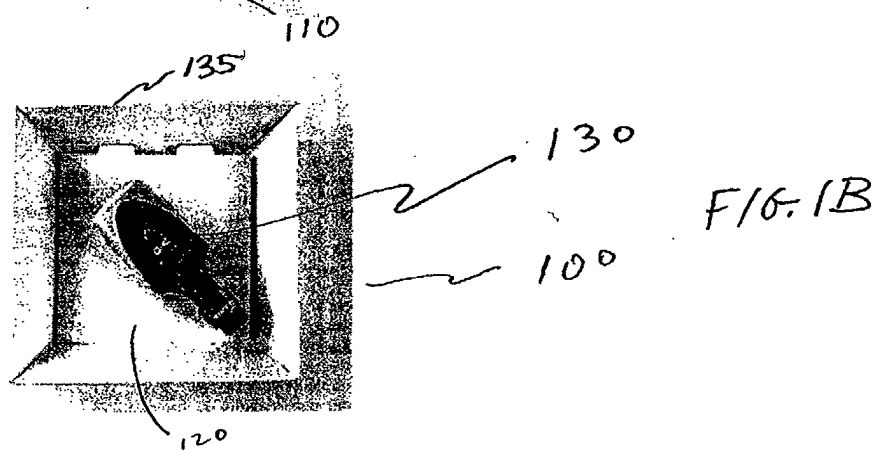
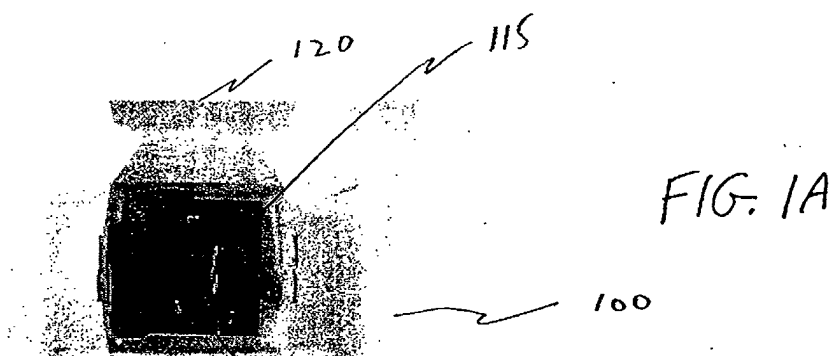
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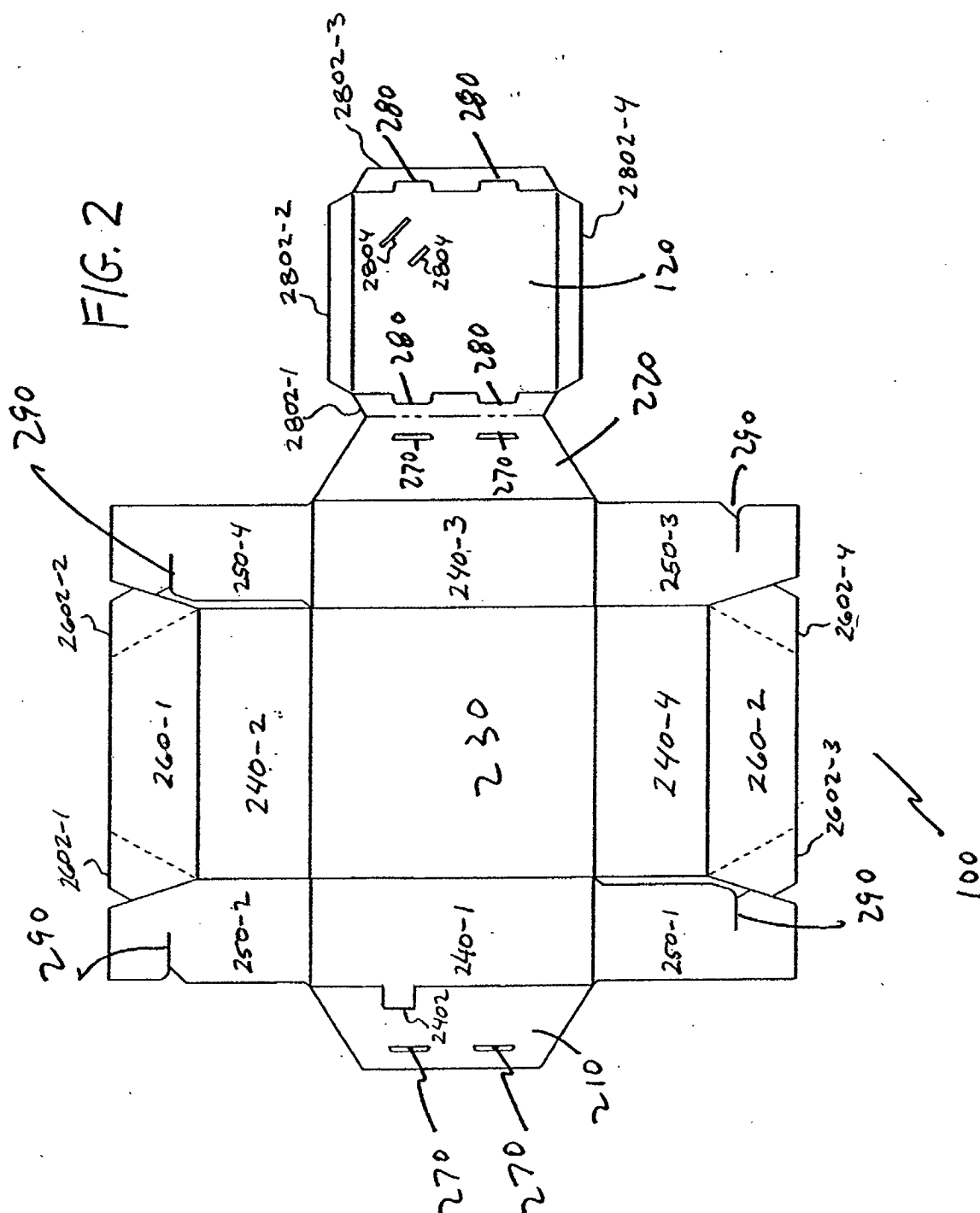
- 25.** A single piece of sheet material according to claim 20, wherein at least one of said second end portions includes a marking tab portion which remains in a vertical position when the shadow box is assembled.

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- 26.** A single piece of sheet material according to claim 26, wherein said marking tab portion includes information concerning the item and the associated







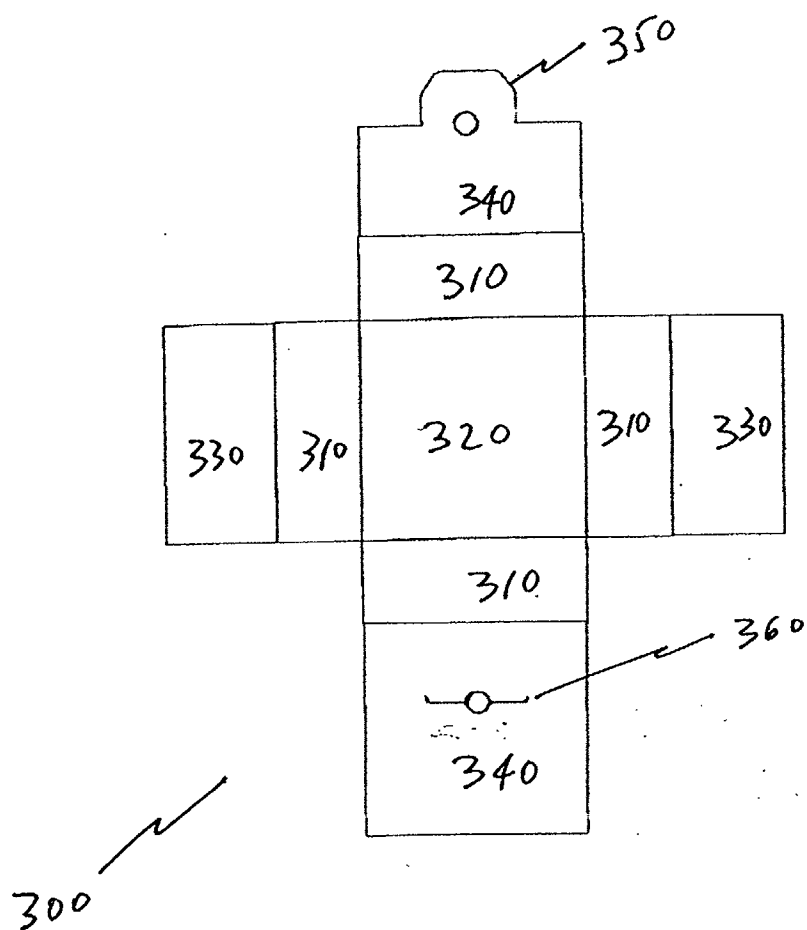


FIG. 3