

[54] COMPOSITE CARRYING CASE

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[51] Int. Cl. ....B65d 5/46, B65d 15/12

[58] Field of Search ....229/32, 52 B, 52 BC, 23 R, 229/43; 220/73

[56]

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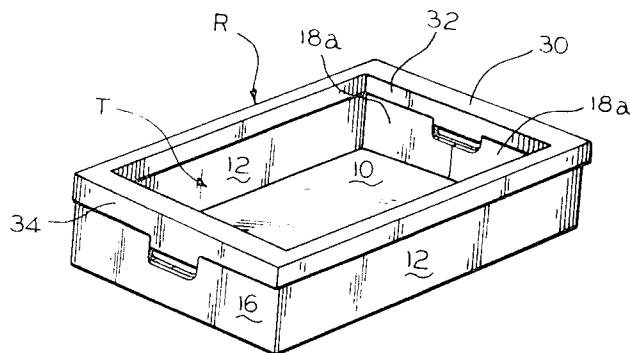
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[57]

ABSTRACT

A composite carrying case comprising a paperboard tray and a plastic rim adapted to fit over the upper edge of the tray in interlocking engagement therewith.

2 Claims, 8 Drawing Figures



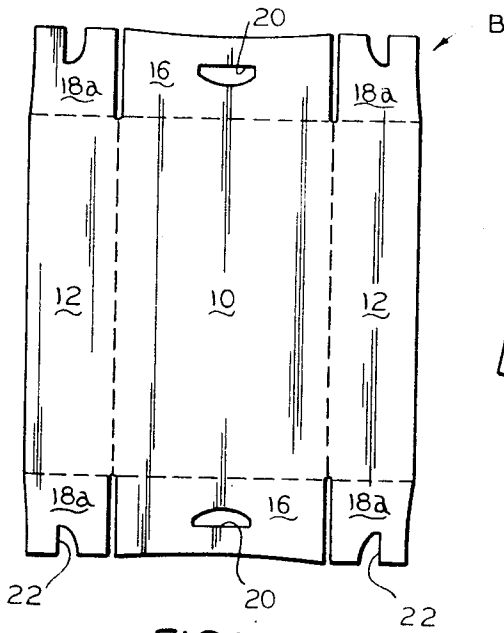


FIG. 1

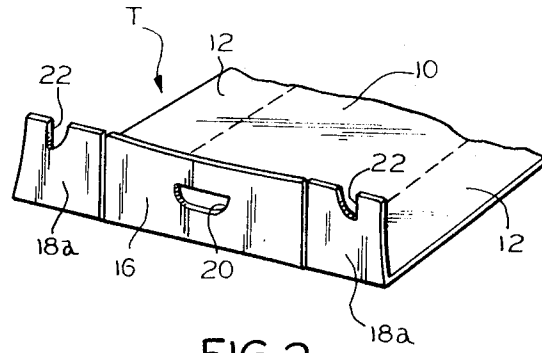


FIG. 2

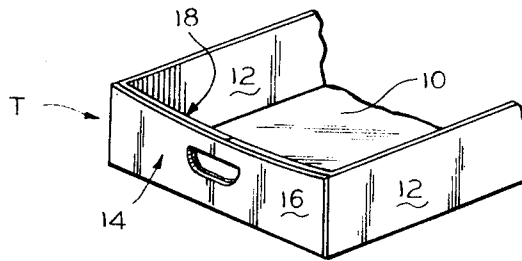


FIG. 3

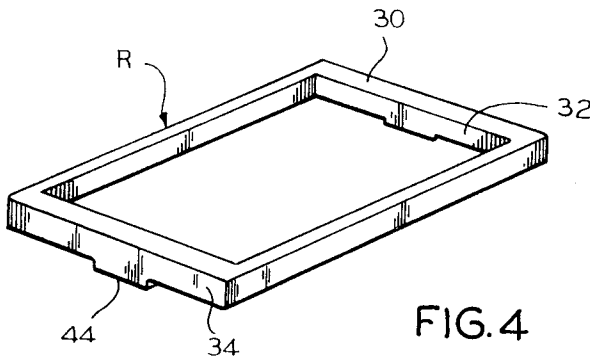


FIG. 4

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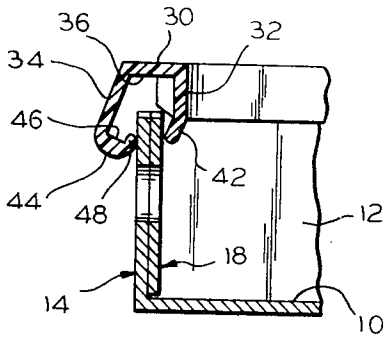


FIG. 5

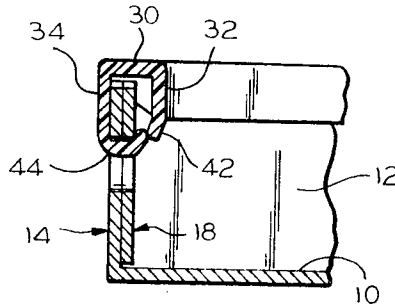


FIG. 6

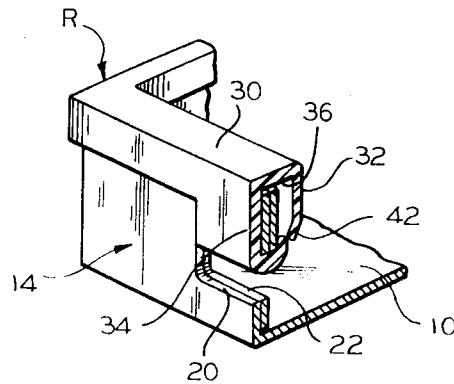


FIG. 7

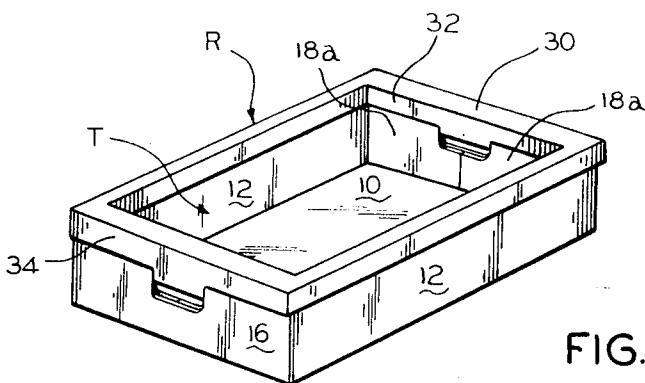


FIG. 8

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**COMPOSITE CARRYING CASE**

It is a primary object of this invention to provide an improved type of carrying case, such as the type used for carrying bottles of beer or soft beverages, which is relatively inexpensive compared to conventional wood or molded plastic cases and yet may be reused several times in the same manner as a conventional reusable carrying case.

A more specific object of the invention is the provision of composite carrying case comprising a paperboard tray having a detachably interconnectable rim affixed to the upper edge thereof to provide rigidity and also to make the case more attractive and provide a more pleasing or aesthetic appearance.

These and other objects of the invention will be apparent from an examination of the following description and drawings; wherein:

FIG. 1 is a plan view of the paperboard blank from which the tray of the composite case may be formed;

FIGS. 2 and 3 are perspective views illustrating the manner in which the tray is assembled;

FIG. 4 is a perspective view of the separate rim of the composite case;

FIGS. 5 and 6 are vertical, longitudinal sections through the end wall of the composite carrying case and illustrate the manner in which the rim is attached to the tray;

FIG. 7 is a perspective view, partially in section, of the composite tray with the rim secured in place on the tray; and

FIG. 8 is a perspective view of the completely assembled composite carrying case.

It will be understood that for purposes of clarity certain elements have been intentionally omitted from certain views, where they are illustrated to better advantage in other views.

Referring now to FIGS. 1 through 3 of the drawings, it will be seen that the tray, indicated generally at T, which may be formed from the unitary blank B of foldable paperboard, includes a preferably rectangular bottom wall 10 and opposed pairs of side and end walls 12 and 14, respectively, which are hingedly attached to opposite side and end edges of the bottom wall and upstand therefrom to form a generally box-like structure open at the top.

It will be seen that end walls 14 include outer end wall panels 16, which are hingedly attached to the end edges of bottom wall 10, and inner end wall panels 18, which are formed from flaps 18a hingedly attached to the end edges of side wall panels 12 and folded at right angles thereto. Outer and inner end wall panels 16 and 18 may be attached to each other in any desired manner (not shown) such as by stitching or gluing.

Outer end wall panels 16 are formed with hand holes 20, and flaps 18a are each provided with openings 22 which are aligned with hand holes 20 when the case is assembled, as best seen in FIG. 5, to provide hand openings extending completely through end walls 14.

Referring to FIGS. 5-7, it will be seen that rim R is preferably rectangular and includes a top wall 30 having a pair of inner and outer walls 32 and 34 depending from the inner and outer edges thereof to form therewith a generally rectangular channel 36 which is adapted to receive upper edges of the side and end walls of the tray when the rim is applied to the tray.

It will be understood the rim and tray are separate units, with the rim preferably being formed of a different material such as moldable plastic, so that it may be readily cleaned, sterilized and reapplied to another paperboard tray when the first tray becomes worn out or damaged.

One advantage of the composite case is the manner of attachment of the rim to the case which provides for a simple detachable, yet positive interlocking connection therebetween.

The rim is provided in the area of the hand holes of the tray with an attaching member 44 which is in the nature of a tongue formed integrally with and projecting inwardly from the lower edge of outer rim wall 34. Tongue 44 is adapted to extend through the hand hole in the end wall of the tray, as shown in FIGS. 6 and 7 and has projecting upwardly from its

free inner extremity a locking lip 48 which extends above the tongue 44 to define with the tongue and with the outer rim wall 34 a groove or recess 46 adapted to engage the end wall of the tray at the upper edge of the hand hole. Also rim inner wall 32 may be provided at its lower end in the area of the tray hand hole with an inwardly extending projection 42 which is adapted to butt up against or overlap the tongue 44 or lip 48 to provide a releasable connection to prevent the tongue from slipping out of the hand hole in the end wall of the tray when the tray is lifted.

It will be understood that the tray rim is made of a resilient material which will permit flexing or deformation of the attaching member or tongue 44 to permit its insertion through the hand hole in the end wall of the tray as well as removal therefrom.

In order to further facilitate attachment of the rim to the tray and engagement of tongue 44 and lip 48 with the upper edge of hand hole 20, end wall panel 16 and flaps 18a may be provided at their upper edges with contours which, when the tray is assembled as seen in FIG. 3, afford a concave contour for each end wall 18.

The purpose of the cavity formed by such contour is to permit end walls of rim R to be deflected downwardly a slight amount to better accommodate engagement between the rim and tray.

This operation is shown in FIGS. 5 through 7, and it will be understood that it is a simple matter to deflect the end or outer wall 34 of the rim outwardly as the rim is slipped over the tray and then permit the locking members to slip through the tray end wall hand holes and lock themselves into position. The process may be reversed when it's desired to remove the rim from the tray.

It will also be understood that one of the advantages of the composite case is that as the tray becomes worn out or soaked with moisture so as to be no longer fit for service the rim may be removed and snapped over a new tray to provide a New composite carrying case without the expense of replacing both portions of the carrying case. Thus, a simple and economical composite carrying case is provided by this arrangement which has most of the advantages of permanent wood or molded plastic carrying cases but yet approaches the economy of a paperboard carrying case.

I claim:

1. A composite carrying case, comprising, in combination:

- a. a tray, formed from a blank of foldable paperboard including a bottom wall and opposed pairs of side and end walls upstanding therefrom to define a box-like structure open at the top;
- b. the end walls of said tray having hand holes extending therethrough;
- c. a separate, generally rectangular rim including a top wall and opposed side walls depending therefrom to define a channel for receiving upper portions of said tray walls when the rim is placed over the tray;
- d. said rim including integral means for detachable, interlocking attachment to said tray at said hand holes;
- e. the end walls of said tray including upper edges having concave contours to permit downward deflection of certain of said rim walls thereby facilitating attachment of said rim to said tray.

2. A composite carrying case, comprising, in combination:

- a. a tray, formed from a blank of foldable paperboard, including a bottom wall and opposed pairs of side and end walls upstanding therefrom to define a box-like structure open at the top;
- b. the end walls of said tray having hand holes extending therethrough;
- c. a separate, generally rectangular rim including a top wall and opposed side walls depending therefrom to define a channel for receiving upper portions of said tray walls when the rim is placed over the tray;
- d. said rim including an integral attaching member extending from one of the walls of said rim through a hand hole

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in a related end wall of said tray for detachable, interlocking attachment to said tray at said hand hole;  
e. said attaching member comprising a tongue formed on said one rim wall and disposed to extend through said tray end wall hand hole from one side of said tray end wall and having projecting from the free end thereof a lip for en-

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gagement with the other side of said tray end wall;  
f. an element projecting from the other of said rim walls for contact with said attaching member to prevent accidental withdrawal of said member from said tray hand hole when said tray is lifted.

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