

July 24, 1956

T. VANDER LUGT, JR

2,755,982

PACKAGING CARTONS WHICH ARE PARTICULARLY DESIRABLE
FOR PACKAGING ARTICLES WHICH MAY BE
EASILY BROKEN OR DAMAGED
Filed Oct. 5, 1953

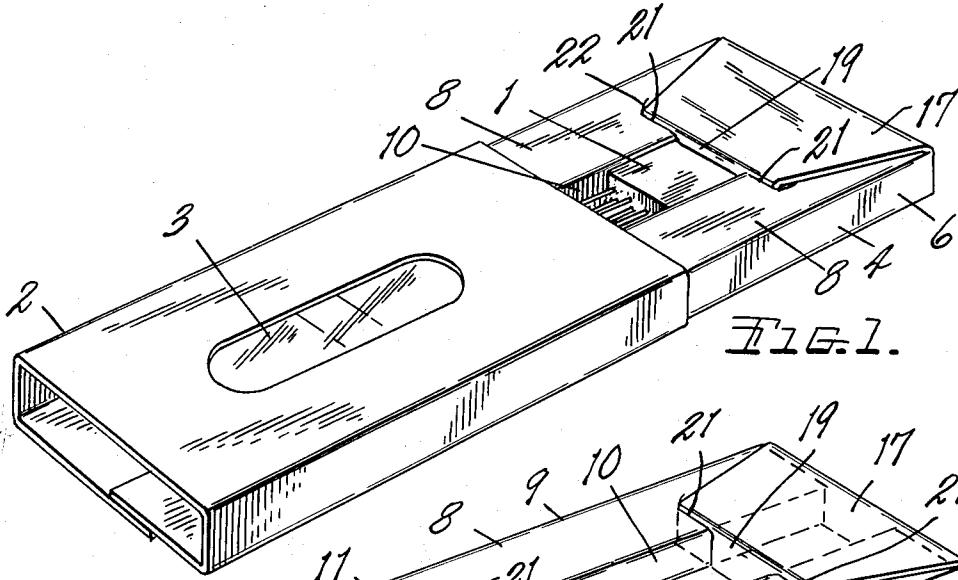


FIG. 1.

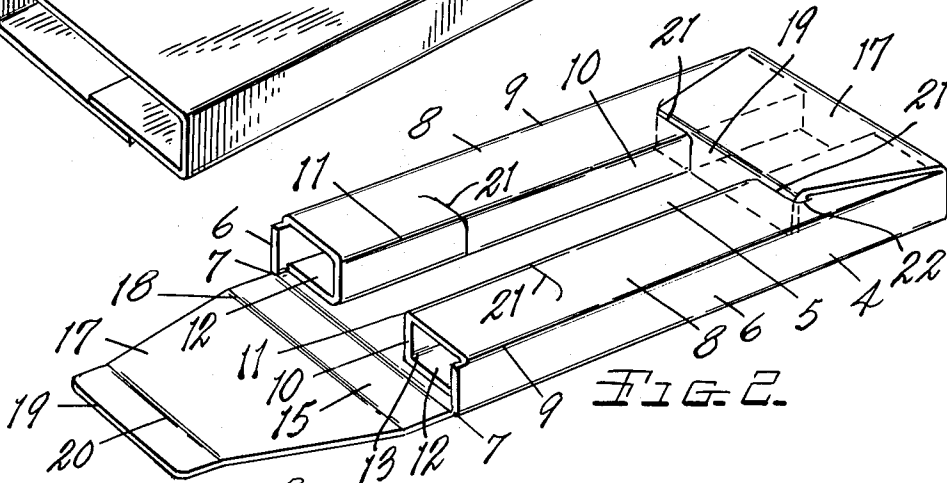


FIG. 2.

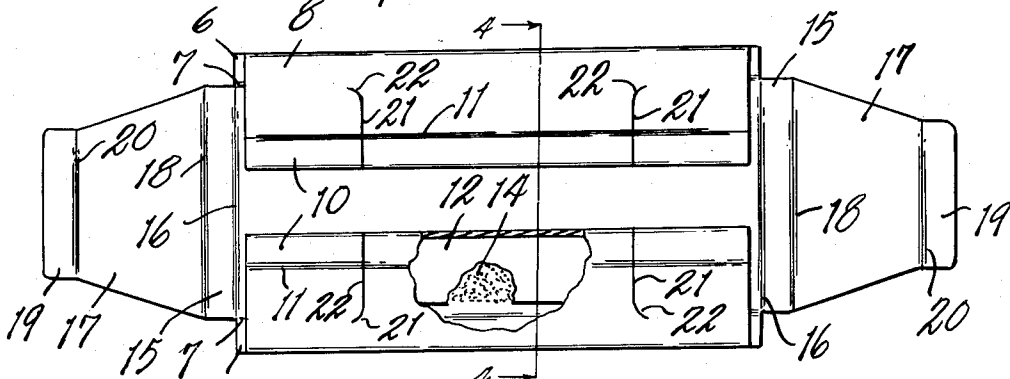


FIG. 3.

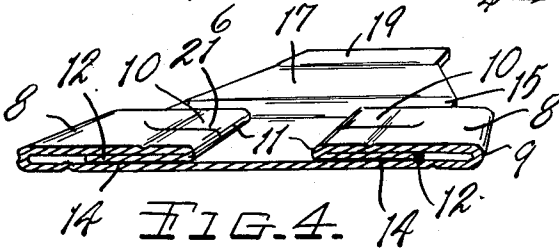


FIG. 4.

INVENTOR.

Thomas Vander Lugt Jr.

BY

O. A. Earl
Attorney.

1

2,755,982

PACKAGING CARTONS WHICH ARE PARTICULARLY DESIRABLE FOR PACKAGING ARTICLES WHICH MAY BE EASILY BROKEN OR DAMAGED

Thomas Vander Lugt, Jr., Kalamazoo, Mich., assignor to Sutherland Paper Company, Kalamazoo, Mich.

Application October 5, 1953, Serial No. 384,057

4 Claims. (Cl. 229—19)

This invention relates to packaging cartons which are particularly desirable for packaging articles which may be easily broken or damaged.

The main objects of this invention are:

First, to provide a packaging carton comprising a tubular shell and a collapsible holder member adapted to be telescoped into the shell and one in which the article packaged is supported so that it is not likely to be broken or damaged in the handling of the package.

Second, to provide a packaging carton of this type which may be formed of relatively light stock and is collapsible and at the same time when set up is strong and rigid.

Objects relating to details and economies of the invention will appear from the description to follow. The invention is defined and pointed out in the claims.

A preferred embodiment of the invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of a carton embodying my invention with the holder member partially withdrawn from the shell and a packaged article illustrated in the holder member.

Fig. 2 is a perspective view of the holder member in partially erected position.

Fig. 3 is a plan view of the collapsed holder member partially broken away to show structural details.

Fig. 4 is an enlarged perspective view in transverse section on a line corresponding to line 4—4 of Fig. 3.

In the accompanying drawing I use the terms "side" and "end" for convenience in description but it will be understood that although the carton illustrated is elongated it might be square, the shape and dimensions depending upon the article to be packaged.

One of the objects which are obtained with the structure of my invention is that even when formed of light gauge paperboard stock the carton is very rigid and affords effective protection for the article packaged. It should be understood that while the size may be varied as desired Figs. 1 and 2 are somewhat enlarged as compared to packages designed for packaging an item such as the transistor indicated at 1 in Fig. 1.

The embodiment of my invention illustrated comprises a tubular shell 2 of rectangular section open at its ends and provided with a window 3. The holder member designated generally by the numeral 4 is adapted to telescope within the shell.

The holder member comprises a bottom 5, outer side walls 6 hingedly connected to the side edges of the bottom at 7, side top walls or spacers 8 hingedly connected at 9 to the upper edges of the outer side walls 6, inner side walls 10 which are hingedly connected at 11 to the inner edges of the side top members and attaching flaps 12 hingedly connected at 13 to the bottom edges of the inner side walls. The flaps 12 are desirably of the width of the top side walls 8 and are fixedly secured desirably by adhesive, indicated at 14, to the bottom. The inner and outer walls are in parallel relation when

2

erected so that they may be collapsed as shown in Fig. 4.

The outer end walls 15 are hingedly connected at 16 to the ends of the bottom. The end top walls 17 are hingedly connected to the upper edges of the outer end walls at 18. The inner end walls 19 are hingedly secured to the inner edges of the top walls at 20. With this arrangement the end top walls may be folded inwardly upon the erected side walls as shown in Fig. 2 and the inner end walls 19 engaged with slits 21 positioned in the side top walls and the inner side walls.

The end top walls in the embodiment illustrated are tapered inwardly, the inner end walls 19 being of substantially less width than the outer end walls. The slits 21 have angled extensions 22 at the ends thereof which facilitate the engagement of the inner end walls in the slit and at the same time provides gripping engagement for the edges of the slits with the inner end walls.

When erected the end edges of the inner end walls are in thrust engagement with the top side walls so that the holder is effectively held in erected position and the side and end walls cannot be collapsed inwardly upon the article packaged.

While I have indicated an article such as a transistor as the packaged article it will be appreciated that the carton is desirable for use in packaging various fragile articles or articles which need protection to prevent the parts thereof from being accidentally broken or displaced.

I have not illustrated certain modifications which might be desirable for different articles in the matter of relative dimensions as it is believed that with the disclosure made my invention may be adapted for various uses as desired.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A packaging carton comprising in combination, a tubular shell of rectangular section, and a collapsible holder member adapted to telescope within the shell and formed integrally of a cut and scored blank and comprising a bottom, outer side walls hingedly connected to the side edges of the bottom, side top walls hingedly connected to the upper edges of the outer side walls, inner side walls hingedly connected to the inner edges of the side top walls, attaching flaps hingedly connected to the bottom edges of the inner side walls and disposed outwardly upon the bottom beneath the top side walls and fixedly secured to the bottom, said attaching flaps being of approximately the width of the side top walls, the inner side walls being in parallel relation to the outer side walls permitting outward collapsing of the outer side wall and inward collapsing of the side top and inner side walls upon the collapsed outer side wall and bottom, outer end walls hingedly connected to the ends of the bottom, inwardly tapered end top walls hingedly connected to the upper edges of the outer end walls and disposed above and in overlapping relation to the side top walls, and inner end walls hingedly connected to the inner edges of the end top walls, the inner side walls and the side top walls having registering slits therein with which said inner end walls are retainingly engaged when the holder is erected with the end top walls disposed above and in overlapping relation to the side top walls, the outer ends of the slits being spaced from the outer side walls and the end edges of the inner end walls being in end thrust engagement with the side top walls at the outer ends of said slits therein, said inner side and end walls when the holder member is erected defining a carton open at the top.

2. A packaging carton comprising in combination, a tubular shell of rectangular section, and a holder member adapted to telescope within the shell and formed integrally of a cut and scored blank and comprising a bottom, outer side walls hingedly connected to the side edges of the bottom, side top walls hingedly connected to the upper

3

edges of the outer side walls, inner side walls hingedly connected to the inner edges of the side top walls, attaching flaps hingedly connected to the bottom edges of the inner side walls and disposed outwardly upon the bottom beneath the top side walls and fixedly secured to the bottom, outer end walls hingedly connected to the ends of the bottom, end top walls hingedly connected to the upper edges of the outer end walls and disposed above and in overlapping relation to the side top walls, and inner end walls hingedly connected to the inner edges of the end top walls, the inner side walls and the side top walls having registering slits therein with which said inner end walls are retainingly engaged when the holder is erected with the end top walls disposed above and in overlapping relation to the side top walls, said inner side and inner end walls when the holder member is erected defining a compartment open at the top.

3. A holder member formed integrally and comprising a bottom, outer side walls hingedly connected to the side edges of the bottom, side top walls hingedly connected to the upper edges of the outer side walls, inner side walls hingedly connected to the inner edges of the side top walls, attaching flaps hingedly connected to the bottom edges of the inner side walls and disposed outwardly upon the bottom beneath the top side walls and fixedly secured to the bottom, said attaching flaps being of approximately the width of the side top walls, the inner side walls being in parallel relation to the outer side walls permitting outward collapsing of the outer side wall and inward collapsing of the side top and inner side walls upon the bottom, outer end walls hingedly connected to the ends of the collapsed outer side wall and bottom, inwardly tapered end top walls hingedly connected to the upper edges of the outer end walls and disposed above and in overlapping relation to the side top walls, and inner end walls hingedly connected to the inner edges of the end top walls, the inner side walls and the side top walls having registering slits therein with which said inner end walls are retainingly engaged when the holder is erected

4

with the end top walls disposed above and in overlapping relation to the side top walls, the outer ends of the slits being spaced from the outer side walls and the end edges of the inner end walls being in end thrust engagement with the side top walls at the outer ends of said slits therein, said inner side and end walls when the holder member is erected defining a carton open at the top.

4. A holder member formed integrally and comprising a bottom, outer side walls hingedly connected to the side edges of the bottom, side top walls hingedly connected to the upper edges of the outer side walls, inner side walls hingedly connected to the inner edges of the side top walls, attaching flaps hingedly connected to the bottom edges of the inner side walls and disposed outwardly upon the bottom beneath the top side walls and fixedly secured to the bottom, outer end walls hingedly connected to the ends of the bottom, end top walls hingedly connected to the upper edges of the outer end walls, and inner end walls hingedly connected to the inner edges of the end top walls and disposed above and in overlapping relation to the side top walls, the inner side walls and the side top walls having registering slits therein with which said inner end walls are retainingly engaged when the holder is erected with the end top walls disposed above and in overlapping relation to the side top walls, said inner side and inner end walls when the holder member is erected defining a compartment open at the top.

References Cited in the file of this patent

UNITED STATES PATENTS

557,371	Ferguson	Mar. 31, 1896
2,130,602	Smith	Sept. 20, 1938
2,171,309	Luce et al.	Aug. 29, 1939
2,308,818	Levkoff	Jan. 19, 1943
2,345,716	Smith	Apr. 4, 1944
2,628,012	Goldsholl	Feb. 10, 1953

FOREIGN PATENTS

959,494	France	Oct. 3, 1949
---------	--------	--------------