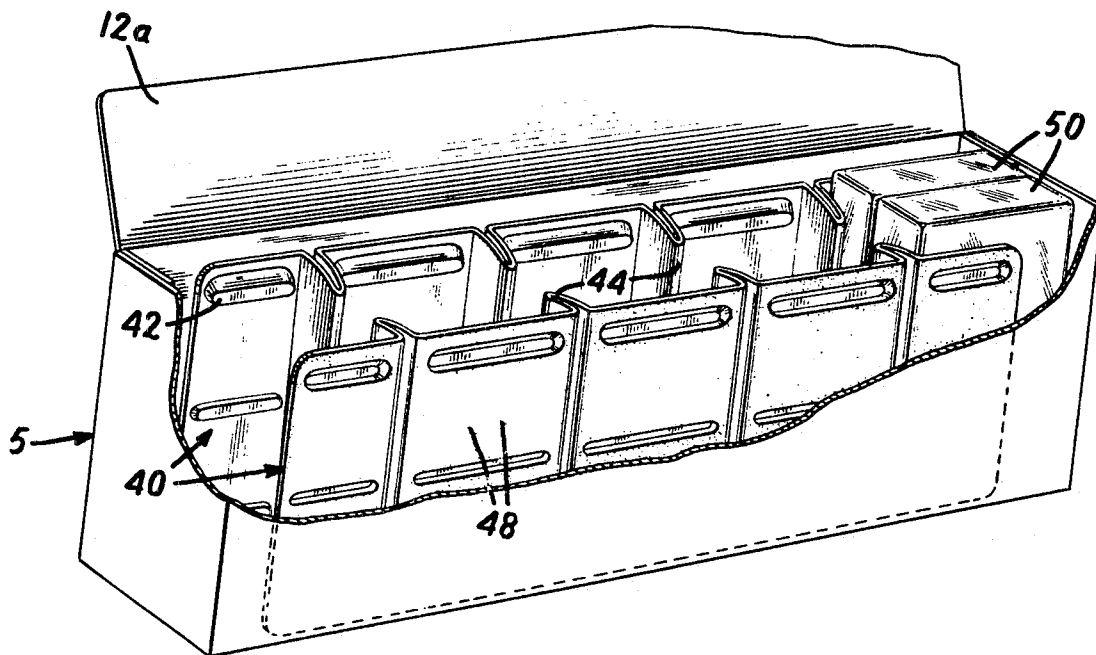


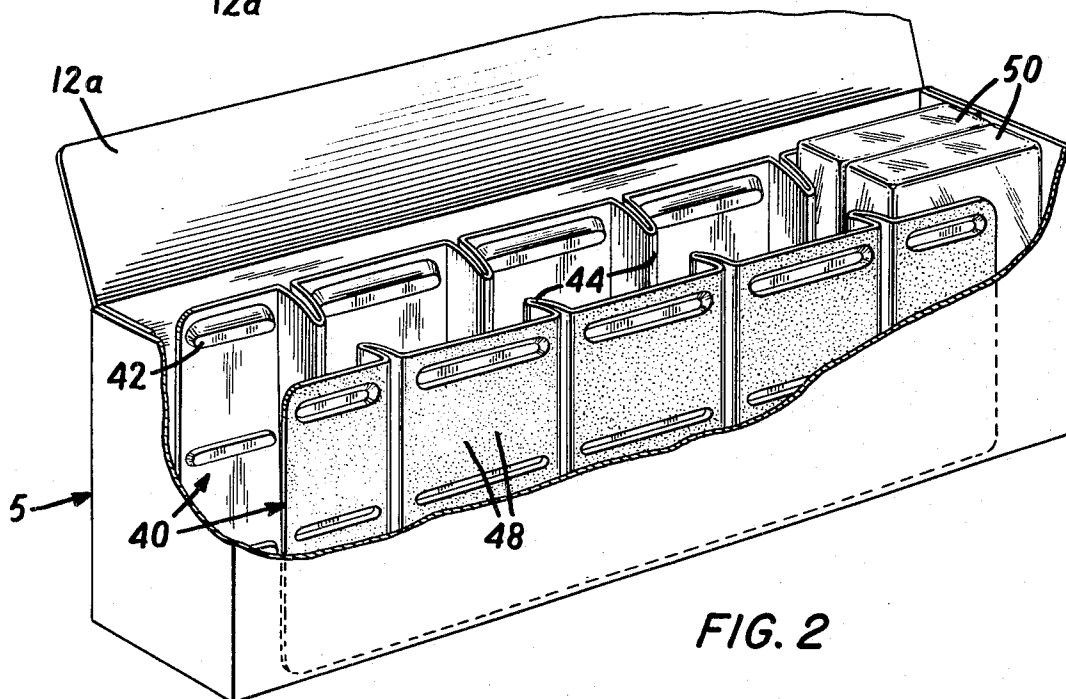
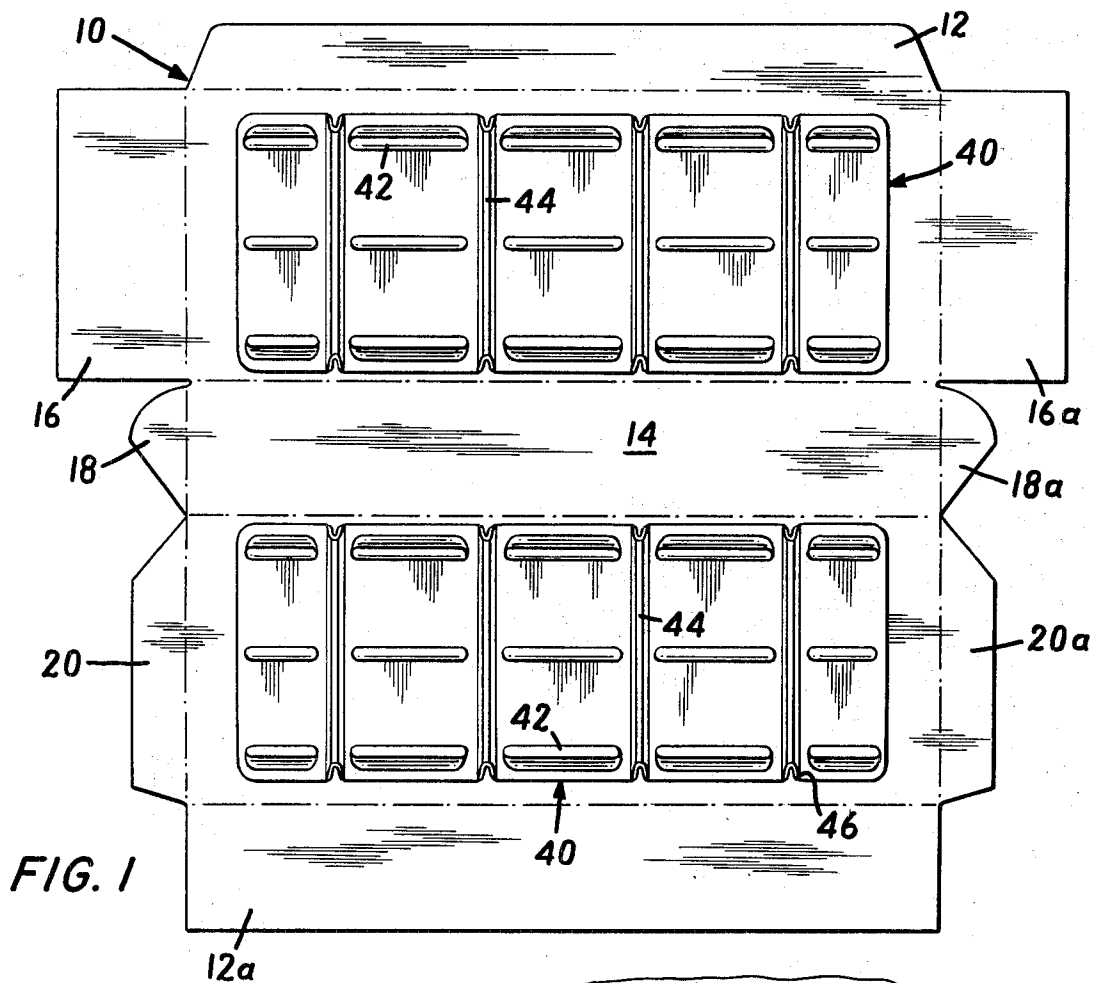
[72] Inventor **Shy Rosen**
New York, New York
[21] Appl. No. **775,380**
[22] Filed **Nov. 13, 1968**
[45] Patented **Oct. 27, 1970**
[73] Assignee **Philip Morris Incorporated**
New York, New York
a corporation

[56] **References Cited**
UNITED STATES PATENTS
2,430,755 11/1947 Bergstein..... 229/16
3,249,445 5/1966 Hackett..... 229/14
Primary Examiner—David M. Bockenek
Attorney—Watson, Levenworth and Kelton

[54] **CARTON FOR HOLDING CIGARETTE PACKAGES**
1 Claim, 2 Drawing Figs.
[52] U.S. Cl. 229/16,
229/15, 206/65
[51] Int. Cl. B65d 5/00
[50] Field of Search..... 229/16, 14,
15, 28, 206/65

ABSTRACT: A cigarette carton is provided which has a number of divider partitions therein extending laterally of the carton side walls to thereby define separate package receiving spaces in the carton. The partitions also serve to position and hold the packages in predetermined longitudinal positionings within the carton with spacing ribs being provided within the carton to position and hold laterally the cigarette packages within the carton. The partitions and ribs desirably are formed as integral parts of elongated panels fixedly secured to the inner surfaces of the carton side walls with the panels serving further to enhance the structural character of the carton thereby improving the degree of protection against damage given the cigarette packages contained within the carton.





CARTON FOR HOLDING CIGARETTE PACKAGES

BACKGROUND OF THE INVENTION

Cigarette packages both of the soft and hard wrapper type are most commonly packed in cardboard or paper cartons being arranged in the carton in two side-by-side rows of five packages each. Furthermore, the carton is usually formed from a flat blank which when erected into an enclosure structure snugly surrounds the cigarette packages leaving little or no spacing between the packages and the inner surfaces of the carton walls. Since most cigarettes have a circumferential dimension of about 25 mm. irrespective of cigarette length, the packages in which they are wrapped and hence the carton have a generally standard length/width dimension. Accordingly, it is not possible to utilize the standard size carton per se for packing a like quantity of smaller than standard-size packages of cigarettes, such as cigarettes having a circumference of about 22.8 mm., inasmuch as the smaller packages are susceptible to movements within the carton from certain predetermined positionings therein. Such movements are undesirable, among other reasons, because they prevent proper tax marking of the packages with marking devices designed to print indicia on standard-size cigarette packages contained within standard-size cartons and held snugly therein.

Conventional cigarette cartons have little if any structural rigidity and as such provide but minimum protection for the cigarette packages contained therein. Thus, a crushing force accidentally applied against the carton, as may occur during the course of shipment of cigarettes to a wholesaler or to a retail outlet, can damage the carton and hence the cigarettes, rendering them unsuitable for smoking.

SUMMARY OF THE INVENTION

The present invention has for an important purpose the provision of a carton for packing smaller than standard-size packages of cigarettes but which is formed from a blank normally used for making a carton designed and sized to receive standard-size cigarette packages. Thus it is possible to utilize in connection with the packing of the smaller cigarette packages, the carton erecting and folding equipment as well as tax marking machinery designed for packaging standard-size packages in standard-size cartons.

In accordance with the present invention, the flat paper or cardboard blank normally used for making a standard-size carton has fixedly secured thereto on the side wall parts of the blank, a panel which also can be made from the same material as the blank. The panel is provided with a number of partitions which extend generally perpendicularly of the plane of the blank and are such that when the blank is folded to form the carton enclosure, the partitions extend laterally or transversely of the carton at the inside thereof to provide a number of separate cigarette package receiving spaces in the carton. The carton is provided with a panel at each carton side wall in association with each row of five cigarettes to be contained in the carton, the panels being arranged in opposed alignment with each other. The partitions serve to longitudinally position the smaller than standard-size cigarette packages placed in the carton and ribs provided on the panels and extending outwardly from the plane of the latter, laterally position the cigarette packages. In addition to its function as a spacing means, the panel functions to increase the rigidity of the carton enclosure, thereby offering greater protection to the packages contained therein against damage from crushing forces, etc. which may occur during shipment to the ultimate user.

The invention, accordingly, comprises the features of construction, combination of elements, and arrangement of parts, which will be exemplified in the construction hereinafter set forth and the scope of the invention will be indicated in the claims.

BRIEF DESCRIPTION OF THE DRAWING

A fuller understanding of the nature and objects of the present invention will be had from the following detailed description taken in conjunction with the accompanying drawing showing by way of example a preferred embodiment of the inventive concept and in which:

FIG. 1 is a top plan view of standard-size cigarette carton blank in which has been embodied a pair of panels with which the standard-size carton is adopted for holding smaller than standard-size cigarette packages.

FIG. 2 is a perspective view of a cigarette carton erected from the blank shown in FIG. 1 with portions of the carton side wall nearest the viewer being broken away for purposes of clarity.

Throughout the following description, like reference numerals are used to denote like parts in the drawing.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The cigarette carton 5 of the present invention is shown in an erected condition in FIG. 2 with the carton inverted and partly filled with two smaller than standard-size cigarette packages, the bottom of the carton being shown in an open condition. It will be understood, of course, that the carton 5 is intended to receive the same number of smaller cigarette packages as standard-size packages normally are received in the carton. As will be noted, carton 5 has as major components, an erected enclosure structure formed from a standard-size carton blank 10 and a pair of reinforcing and spacing panels 40 fixedly secured to the blank in the manner to be described. A description of the construction of the several components will be given now.

The blank 10, which is shown in plan view FIG. 1, is a standard-size carton blank which can be formed into a carton enclosure adapted to receive snugly therein ten standard-size packages of cigarettes. The blank 10 is of a construction widely used in the cigarette packing art and can be made from paper, cardboard, plastic and like inexpensive materials. The blank includes parts thereon corresponding to the ends, sides, top and bottom of the carton enclosure, the parts being defined in the blank by the score or fold lines shown in long and short dash lines in FIG. 1. Thus, the blank has a part 14 corresponding to the top of the carton, a pair of flap parts 12 and 12a which overlappingly fold together to comprise the bottom of the carton, parts 16, 18 and 20 which form one end wall of the carton, like parts 16a, 18a and 20a which form the opposite end wall of the carton, and the two largest rectangular parts (undesignated in the drawing) which comprise the two side walls of the carton. Those skilled in the art will understand readily the manner in which the blank 10 is folded along the respective score lines as well as the adhesive applications required during the process of erecting the blank to form the carton enclosure 5 shown in FIG. 2. The other major components of the carton are the panels 40, which are provided in the carton one each in association with the two side walls of the carton. The panels 40 preferably are made of the same paper or cardboard material of which the blank 10 is made, the panels being provided with a number of partitions 44 extending transversely of the panel and perpendicular to the plane thereof with the spacing between adjacent panels being substantially uniform and only slightly larger than the length of the smaller than standard-size cigarette packages 50 to be received in the carton. The panels 40 also have ribs 42 formed therein, the ribs extending longitudinally of the panel at both sides of said partitions and being outstanding from the plane of the panel in the same direction as the partitions. The ribs are adapted when the carton is erected to extend inwardly laterally of the carton side walls. As will be discerned, the panels can be made from a single sheet of stock which can be subjected to a corrugating, folding or similar procedure to form the partitions 44 in the structure thereof. The panels 40 are fixedly secured to the blank 10 in any one of several convenient ways. For example, a coating of adhesive 48 can be

printed across the undersurface of the panel before positioning the panels on top of the side wall parts of the blank in the manner shown in FIG. 1. The panels thus become a permanent part of the blank.

It will be understood that when the carton 5 is erected from blank 10, the partitions 44 of one panel will be arranged in opposed orientation with the partitions in the other panel so that the partitions define a package receiving space therebetween in both the transverse and longitudinal directions of the carton. When the smaller than standard-size cigarette packages 50 are inserted in the carton, the partitions 44 will maintain the positioning of the packages longitudinally and the ribs 42 will maintain laterally the package positionings to thereby insure that the cigarette packages 50 will remain in these positionings to enable proper marking of the bottoms of the cigarette packages by tax marking devices of known construction.

In addition to providing holding means, the panels 40 increase to a considerable degree the strength of the carton structure to correspondingly increase the degree of protection provided the packaged cigarettes during the interim from first packaging to ultimate use by the smoker. It will be understood that each of the partitions 44 functions as a stiffening member for the carton side wall structure and is of somewhat wider dimension at the base as at 46 than at the tip end.

It will be seen that the carton of the present invention is an important contribution to the cigarette packaging art. The carton can be made with very little additional cost over that involved in making prior art cartons and it enables smaller than standard-size cigarette packages to be packed in standard-size cartons. Moreover, existing carton folding and erecting devices in the cigarette production line can be retained and existing tax marking machinery need not be modified for marking smaller than standard-size cigarette packages.

While there is above disclosed but one embodiment of the cigarette carton of the present invention, it is possible to

produce still other embodiments without departing from the scope of the inventive concept herein disclosed and accordingly it should be understood that all matter obtained in the above description and in the accompanying drawing should be interpreted as illustrative and not in a limiting sense.

I claim:

A cigarette carton formed from a single blank of material having parts thereof defining a pair of carton end walls, a pair of carton side walls, a carton bottom and a carton top, said parts being joined along fold lines in said blank, said blank being erectable by folding the parts along said fold lines to form a box-like enclosure, a plurality of cigarette packages received in said box-like enclosure and arranged upright therein two coextensive rows with the packages in each row extending in side-by-side alignment, and a pair of generally flat panels fixedly secured one to each of the side wall parts of said blank to form a unitary structure therewith and being provided with partitions extending transversely thereof and substantially perpendicular to the plane of said panel, said panels being positioned on said side walls such that said partitions are disposed in opposed alignment with each other within said carton when said blank is erected, adjacent ones of said partitions on each panel being spaced longitudinally of the panel at distances only slightly greater than the length of the cigarette packages received in said carton to thereby effectively position said cigarette packages longitudinally within said carton, said panel further including ribs outstanding from the plane of said panel and extending longitudinally thereof at each side of said partitions, said ribs extending inwardly within said carton and engaging said cigarette packages for positioning them laterally within said carton, said partitions being formed integral with the flat portions of said panels extending the full width of said flat portions whereby said panels constitute stiffening members for rigidizing said carton side wall structure.

40

45

50

55

60

65

70

75