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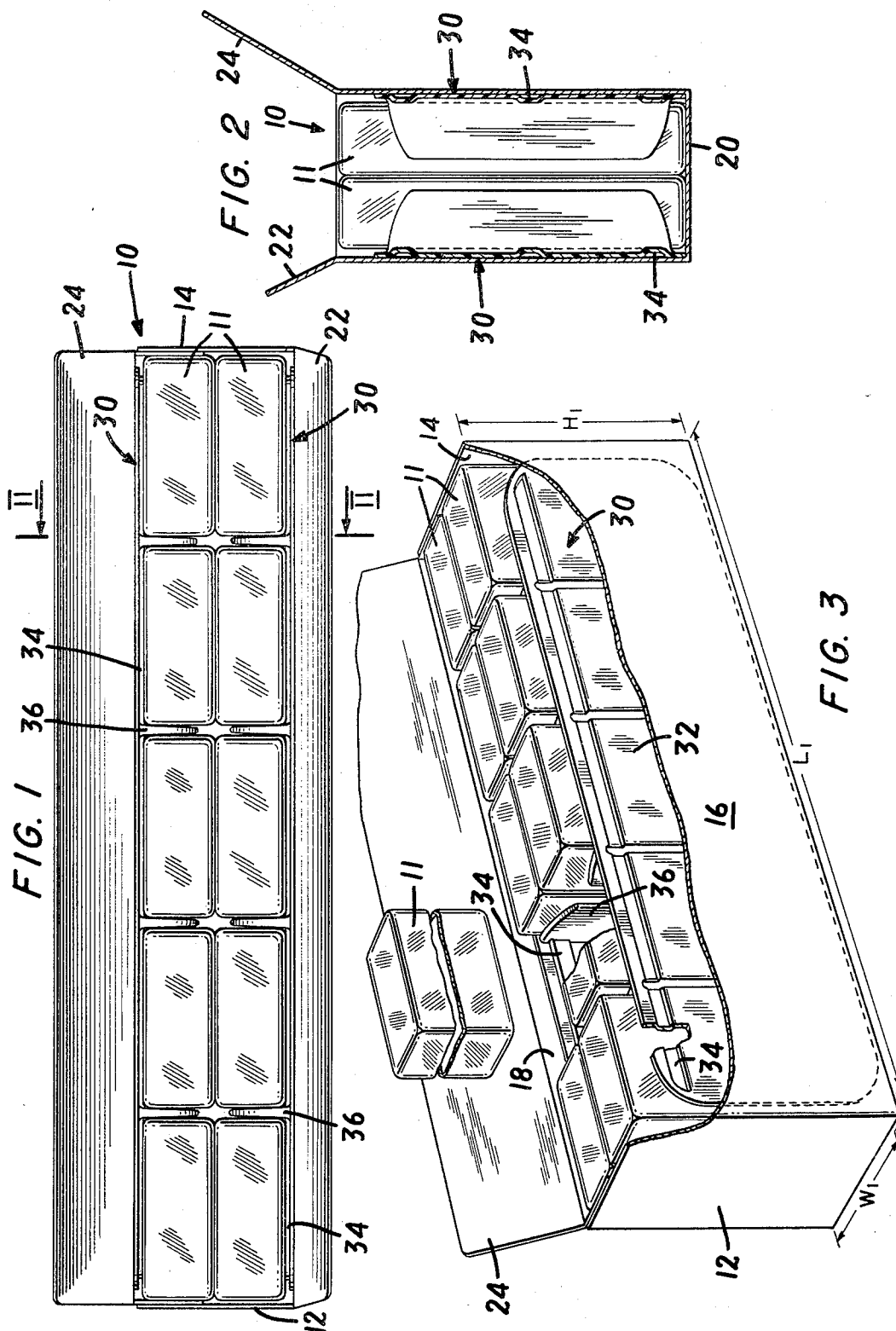
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CIGARETTE CARTON

Filed Nov. 13, 1968

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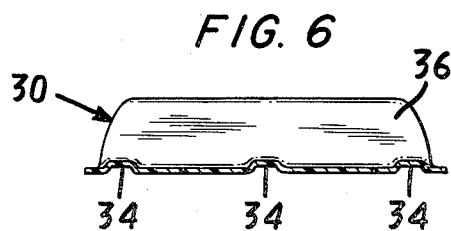
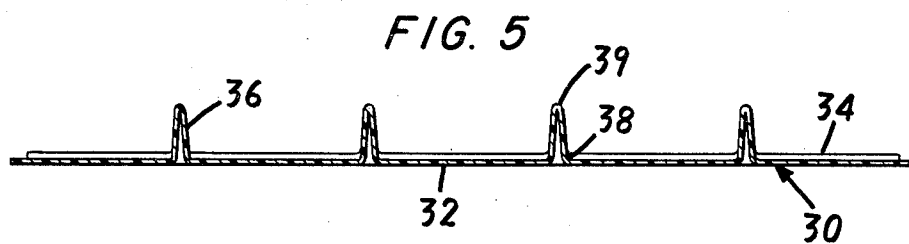
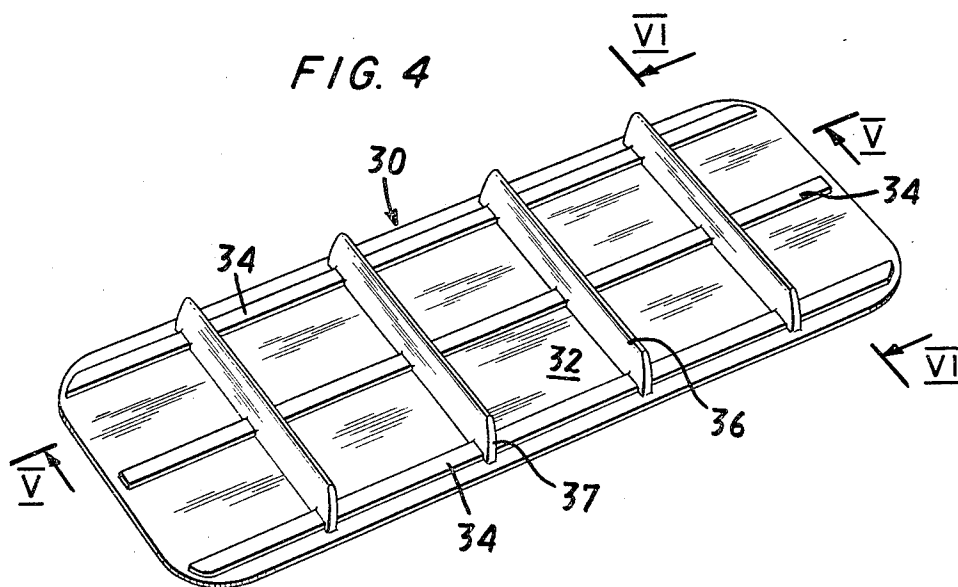
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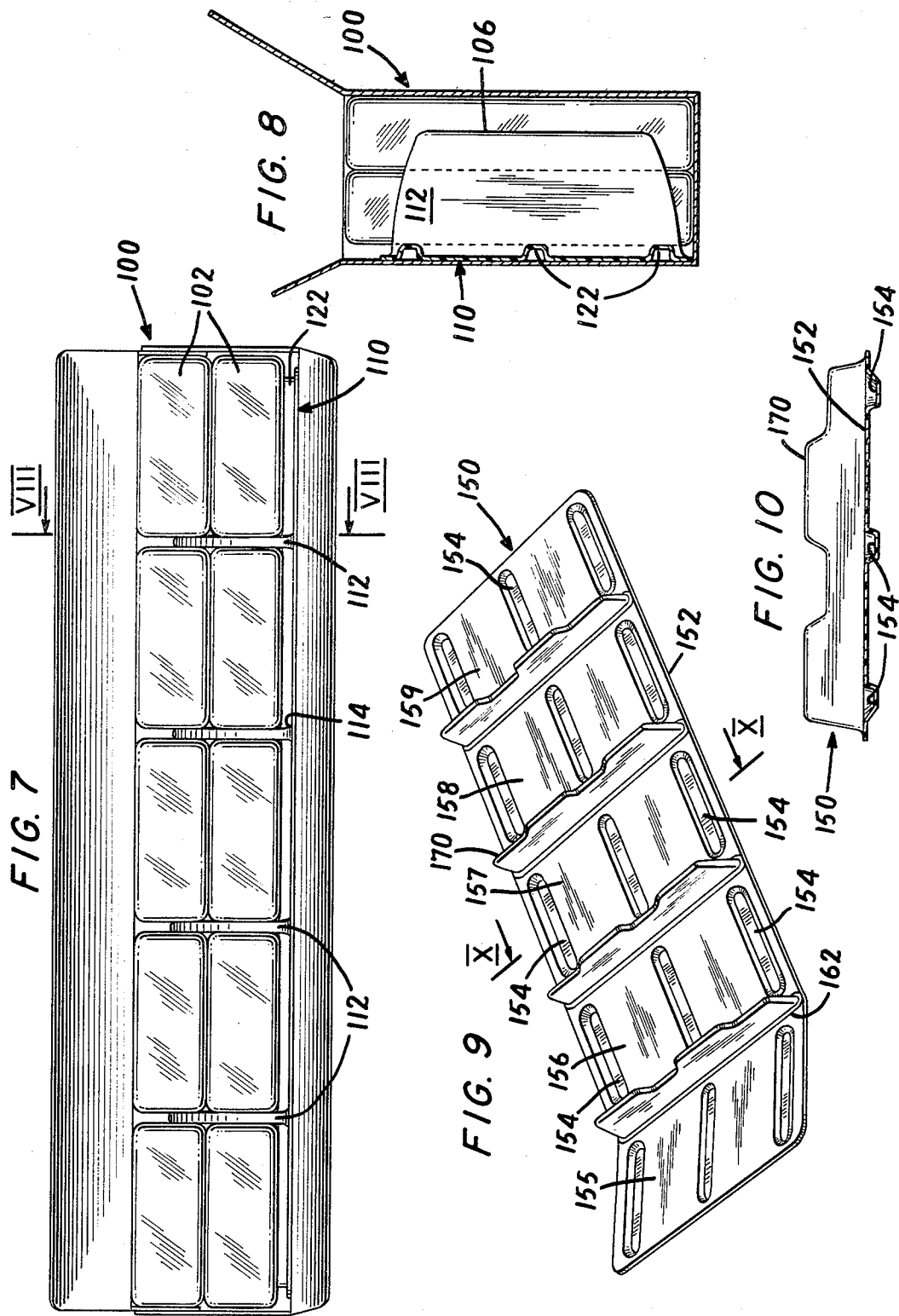
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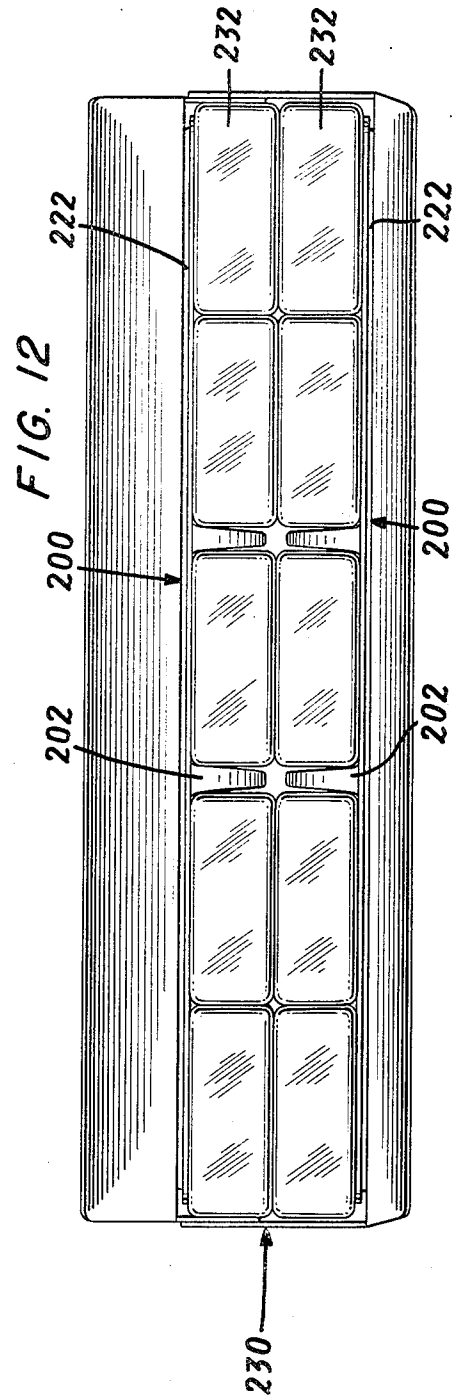
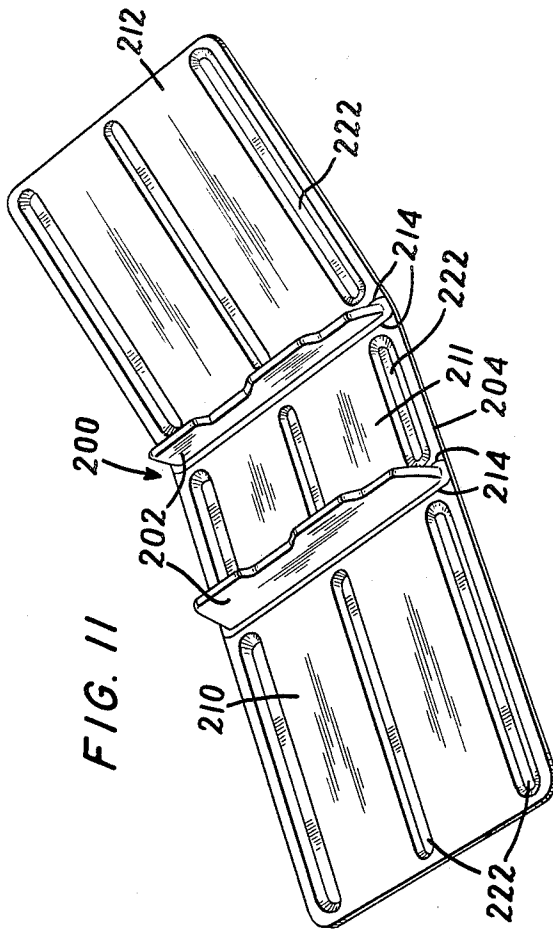
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CIGARETTE CARTON

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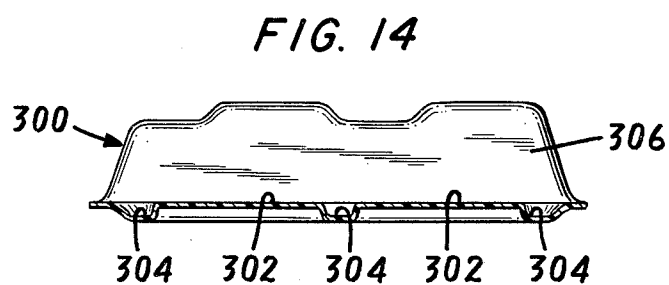
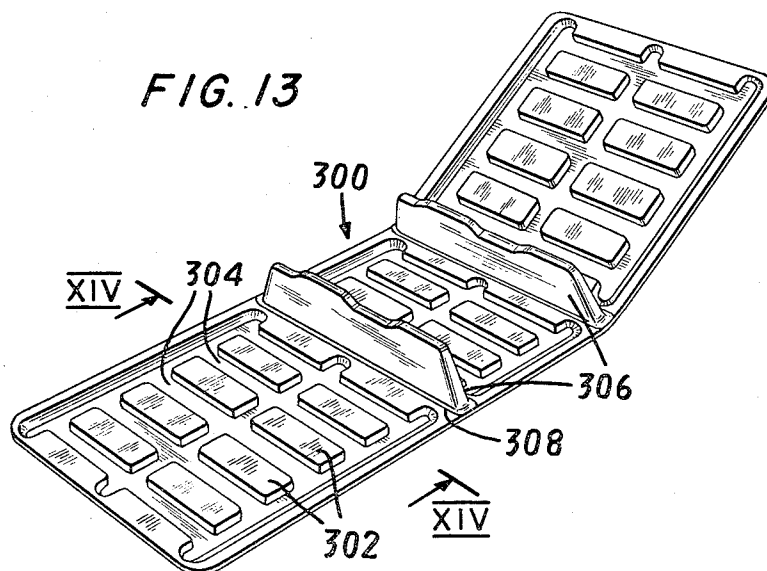
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CIGARETTE CARTON

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Filed Nov. 13, 1968, Ser. No. 775,368

Int. Cl. B65d 85/10, 71/00, 1/36

U.S. Cl. 206—48.5

10 Claims

ABSTRACT OF THE DISCLOSURE

A cigarette carton designed to receive standard-size packages of cigarettes is modified to receive packages of smaller than standard-size packages and hold them snugly in predetermined positionings therein and against any post packing movement of the packages in the carton either longitudinally or laterally from said positionings. This is accomplished by utilizing panels which are removably inserted in the carton between the inner surface of the carton side walls and the cigarette packages, the panels having partitions extending laterally therefrom and between the ends of adjacent ones of the smaller than standard-size packages and in engagement with the latter to hold them longitudinally in said predetermined positionings. The panels also have ribs formed therein which maintain laterally the positionings of the cigarette packages.

BACKGROUND OF THE INVENTION

Cigarettes, both of the non-filter or filter types, generally have a fairly standard circumferential dimension of about 25 mm. the cigarette being thusly circumferentially dimensioned irrespective of the overall cigarette length. Furthermore, the cartons in which packages containing cigarettes of this circumferential dimension are packed have generally standard length and width, there being possibility of some variation in carton length and width depending on whether the cigarette bundles of twenty cigarettes are contained in a soft or hard wrapper package. Also, it is usual that standard-size soft pack cigarette packages be packed in a cardboard or paper carton the packages being arranged therein in two rows of five packages each with the packages being disposed in longitudinally extending pairs with the packages in each pair being in side surface-to-side surface abutment. The carton generally has an enclosure length of substantially 10 $\frac{1}{2}$ " and a width of substantially 1 $\frac{1}{16}$ " as measured from the opposed end and side walls of the carton respectively. The ten standard-size cigarette packages fit in the carton snugly, there being little if any spacing between the packages and the inner surfaces of the respective carton walls.

As part of the overall process of supplying cigarettes to the ultimate user, it is required that the cigarette packages be subjected to special packaging operations. For example, revenue stamps and/or other markings must be affixed to the individual cigarette packages to comply with laws and regulations of certain of the governmental localities in which the cigarettes are to be sold. Moreover, the location on the bottom of the cigarette packages at which the indicia can be affixed is usually and quite strictly specified by the laws and regulations of the taxing authorities. The fixing of these indicia to the cigarette packages is usually done by the wholesaler supplying the particular locality and with special equipment which opens the bottom of an inverted carton, passes it beneath a marking device such as a printing wheel of a tax-stamping machine which stamps the bottom of each of the respective cigarette packages with the required markings and then reseals the carton.

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Smokers' preferences can, from time to time, change not only with respect to the type of cigarette or blend of tobacco used therein, but also with respect to size of a cigarette. For example, women smokers recently have demonstrated a measure of preference for a cigarette having a somewhat smaller circumferential dimension than that of the standard-size cigarette and more particularly a cigarette having a circumferential dimension of about 22.9 mm. The packages in which such cigarettes are packaged accordingly will be smaller than standard-size packages so that if packed in a cigarette carton designed to receive snugly standard-size cigarette packages, such smaller packages will occupy lesser space than the equal quantity of standard-size packages. While a carton of requisite size can be provided for packing the smaller size packages and holding them snugly, use of such smaller size carton can present a problem to the wholesaler in that the marking means described above is designed and sized to mark packages contained in standard-size cartons and the marking elements accordingly make registration properly only with respect to standard-size cigarette packages and the positionings occupied by the latter within the standard-size carton. Such marking means, generally will not register properly with the smaller than standard-size packages packed in the smaller than standard-size carton. To surmount this problem, it is proposed to pack the smaller than standard-size cigarette packages in the larger standard-size carton by inserting and holding them in the carton at predetermined positionings in correspondence to the positions normally occupied by the standard-size packages, such predetermined positionings being ones that allow proper package marking with the existing marking equipment.

SUMMARY OF THE INVENTION

The present invention has for an important purpose the adaptation of a standard-size cigarette carton for use in packing therein packages containing smaller than standard-size cigarettes. According to the invention, the smaller cigarette packages are held in the larger-size carton in predetermined positionings corresponding with the positionings which would normally be occupied by standard-size packages by employing in the carton one or more removably insertable panels having ribs and partitions thereon which engage the smaller cigarette packages to position and hold them within the carton securely against any longitudinal or lateral movement from said predetermined positionings at any time, thereby insuring proper marking of the packages and further serving to safeguard the cigarette packages from crushing or like incidents of damage during shipment and before ultimate use.

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 DRAWINGS

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

FIGURE 1 is a top plan view of a standard-size cigarette carton, as adapted in accordance with the principles of the present invention for receiving and holding therein smaller than standard-size cigarette packages by using two insertable panels in the carton to hold the packages in predetermined positions therein, the carton being shown in an inverted position with the bottom thereof being in an open condition;

FIGURE 2 is a sectional view of the cigarette carton shown in FIGURE 1 as taken along the line II—II in FIGURE 1;

FIGURE 3 is a perspective view of the cigarette carton shown in FIGURES 1 and 2, with portions of the side wall nearest the viewer being broken away in order that certain constructional details of the insertable panels can be more readily perceived, one of the smaller than standard-size cigarette packages received in the carton being raised above a distance above its normally received position in the carton;

FIGURE 4 is a perspective view showing with greater clarity the constructional details of the form of insertable panel which is utilized in the carton shown in FIGURES 1-3 to hold the cigarette packages therein;

FIGURES 5 and 6 are sectional views as taken along the lines V—V and VI—VI respectively in FIGURE 4;

FIGURE 7 is a top plan view very similar to FIGURE 1 except showing an alternate carton arrangement wherein a single insertable panel having an extra long partition thereon is used to position and hold all the cigarette packages in the carton;

FIGURE 8 is a sectional view of the cigarette carton shown in FIGURE 7 as taken along the line VIII—VIII in FIGURE 7;

FIGURE 9 is a perspective view of still another form of insertable panel which can be used in a standard-size cigarette carton in accordance with the teaching of the present invention to adapt it for receiving smaller than standard-size packages;

FIGURE 10 is a sectional view as taken along the line X—X of FIGURE 9;

FIGURE 11 is a perspective view of a still further different form of insertable panel;

FIGURE 12 is a top plan view of a cigarette carton filled with smaller than standard-size cigarette packages with the packages being positioned therein by means of panels of the construction shown in FIGURE 11;

FIGURE 13 is a perspective view of still another form of insertable panel; and

FIGURE 14 is a sectional view of the panel shown in FIGURE 13 as taken along the line XIII—XIII therein.

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

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The present invention is concerned with adapting a standard-size cigarette carton for use with packages containing smaller than standard-size cigarettes. While it is so described herein in relation to that particular use, it will be understood that in the broader aspects of its teaching, the present invention is applicable to the modification of standard-size containers of a wide range of description for holding articles other than cigarette packages wherein it is sought to adapt such container for holding articles of smaller than standard-size.

Referring now to the drawings, the cigarette carton 10 shown in FIGURES 1-3 is of conventional construction and is designed to hold standard-size cigarette packages and more specifically soft packs of twenty cigarettes each, the circumferential dimensions of the cigarettes being about 24.7 mm. The carton has an enclosure length L_1 of substantially $10\frac{5}{8}$ " and a width W_1 of substantially $1\frac{3}{16}$ " and a height H_1 of substantially $4\frac{1}{16}$ ", the latter thus indicating that the carton is used for the packing of cigarette packages containing 100 mm. length cigarettes. As will be noted, the carton which is shown in an inverted position, with the bottom being in open condition, is comprised of a pair of opposed end walls 12 and 14, a pair of opposed side walls 16 and 18, a top wall 20 and bottom wall means of overlapping flaps 22 and 24 which can be adhesively secured together for closing the carton. Normally, the carton serves to receive a quantity and more specifically, ten standard-size cigarette packages, ar-

ranged in two rows of five aligned packages each, the packages in each row being paired with a corresponding package in the other row, the packages being arranged in the carton in upright position so that with respect to FIGURE 1, wherein the carton is inverted, it is the bottoms of the respective packages which are visible, such bottoms being the package surface to which is affixed the tax marking or like indicia. By way of clarification, it is pointed out that the term "length" as employed herein with respect to the cigarette packages refers to the major dimension in the horizontal direction in FIGURE 1 looking at the end of the package, and the term "width" refers to the transverse minor dimension sometimes called the thickness of the package. For the carton length and width dimensions given above, ten standard-size packages which normally are received in the carton and which each have a length, width dimension of about $2\frac{3}{8}$ " and $\frac{7}{8}$ " respectively, are encircled snugly by the end walls 12, 14 and the side walls 16 and 18 to the extent that no consequential longitudinal and lateral spacing exists between the standard-size packages and the inner surfaces of the aforementioned walls. On the other hand, when the carton 10 is utilized for packing a like quantity of smaller than standard-size cigarette packages 11, which have a package length and width of approximately 2" and $1\frac{3}{16}$ " respectively, such packages do not completely occupy the enclosure space of the carton there being left unoccupied, spaces of up to about $\frac{7}{16}$ " in the lengthwise direction and about $\frac{1}{8}$ " in the widthwise direction within the carton in which spaces the smaller packages can move a distance from desired or predetermined positionings within the carton unless constrained in the manner to be described shortly. Such movements could affect the procedure of affixing tax stamp marking to the cigarette packages, since the smaller than standard-size packages, if merely placed in the standard-size carton, would be difficult to maintain in alignment with each of the others for a number of reasons including displacements occasioned by carton movement along the conveyor line transfer from one station to another, etc. Thus, when the open carton is advanced beneath a tax stamp printing machine to fix such indicia to the packages, unless the packages in the two rows are properly aligned and spaced in the carton in general correspondence to those positions which normally would be occupied by standard-size packages, the printing means which is designed to imprint packages with that arrangement of package spacing may affix the markings to the smaller than standard-size packages in an irregular pattern. Such irregularities can include one stamp marking bridging two packages, a widthwise portion of the marking being omitted, etc.

In order to position properly smaller than standard-size packages in predetermined locations within the carton 10, the present invention provides that one or more removably insertable panel members 30 be placed in the package as shown in FIGURES 1-3, the panel members serving to engage with and hold the smaller than standard-size packages in the carton in desired predetermined positionings. It will be understood that "desired predetermined positionings" of the packages can vary depending on the particular purpose for which spacing compensation is made. However, with respect to positioning the smaller than standard-size packages 11 it is intended to mean positioning such packages in the carton with the central transverse axis of each package located substantially coincident with that location at which the central transverse axis of the corresponding standard-size package would be disposed if such standard-size package was received in the carton. Additionally, the predetermined positioning of the smaller packages is intended to mean such positioning as involves abutment of the inner sides of the respective packages in each pair as occurring at the longitudinal central axis of the carton. Referring again to the drawings, the panels 30 are inserted upright in the open carton desirably being disposed intermediate the carton side walls

and the outer sides of the packages 11 in the adjacent row in the manner shown in FIGURE 1, with each row of five smaller than standard-size packages 11 of cigarettes desirably having one panel associated therewith, although as will appear later herein, a single panel also can be employed as a positioning device for maintaining the positionings of the two rows of cigarette packages within the carton. The structural character of the panel members can be varied to some extent depending on the particular need. The panel 30, constructional features of which are best seen in FIGURE 4, is comprised of a relatively thin, elongated flat strip 32, preferably made of a plastics material such as polyethylene, polystyrene or the like and having a thickness on the order of about .010-.015". Various known manufacturing techniques including thermoforming can be used for making the panel. To provide rigidity and strength to the panel member 30, it can be formed with a number of portions or areas laterally offset from the general plane of the panel which in the form of FIGURES 1 to 6 comprise longitudinally directed ribs 34, desirably formed as integral channels in the strip and outstanding from the plane of the strip 32 to one side or the other. In addition to providing rigidity to the strip 32, the ribs 34 function to take up a certain amount of the excess lateral space within the filled carton to compensate for the differential between the overall enclosure width of the carton 10 and the width of the cigarette packages 11 and thereby maintain laterally the predetermined positionings of the packages 11. Depending on which side of the strip 32 the ribs 34 stand out from, they will engage either one of the carton side walls 16, 18 or the outer sides of the packages 11 in the row adjacent thereto.

The panel members 30 also are provided at spaced locations along the length thereof, with partitions 36 which extend substantially normally to the plane of the strip 32 so that when the panels are inserted in the carton, the partitions will extend generally laterally of the carton 10 and in between the ends of adjacent ones of the smaller than standard-size cigarette packages 11 to engage with and hold the packages 11 longitudinally in the predetermined positionings. In the carton arrangement shown in FIGURES 1-6, two panels 30 are used in the carton, one panel in association with each row of five cigarette packages 11. Also each panel 30 is provided with four partitions 36, the spacing between adjacent partitions being only slightly greater than the length of each cigarette package. As will appear later herein a lesser number of partitions may be used under other circumstances and depending on the ultimate purposes for providing a certain pattern of predetermined positionings of the packages. As can be seen in FIGURES 1 and 2, the overall length and height of the strip 32 is somewhat less than the corresponding dimensions of the side walls 16, 18 of the carton 10 being so dimensioned for facilitating insertion of the panels in a carton already filled with the cigarette packages 11. Additionally, the plan outline of the partitions 36 is of slightly tapered character, i.e. the partitions diminish in thickness from the base end as at 38 toward the tip end as at 39. This feature also facilitates the insertion of the partitions into the already cigarette-package filled carton as does the fact that the end edges of the ribs are slightly rounded as at 37. The height of the partitions from base end to tip end in this form of panel 30 is slightly less than the width of the cigarette packages 11.

The panels 30 used in the carton 10 in addition to providing holding of the cigarette packages in predetermined positionings, serve to give additional strength to the overall carton structure which is particularly advantageous with respect to the degree of protection provided to the packaged cigarettes in the course of further packaging procedures and in transit to the ultimate user. Additionally, the panels 30 can be used as trays on which the cigarette packages can be displayed at a vending counter, or which can be utilized for removing a whole row of

packages from the carton as when the carton is opened from an end thereof as is commonly practiced by many smokers.

In the manufacturing of cigarette and subsequent packaging procedures it will be understood that the standard size cartons 10 will be formed from flat carton blanks in the usual manner at an appropriate station on the production line. The erected carton then enters upon and is advanced on the line in the inverted position shown in FIGURE 3 and having its bottom flap members 22, 24 in open condition. The unfilled carton is then advanced to a packing station at which ten smaller than standard-size packages 11 of cigarettes are inserted in the carton in two rows of five packages each in the conventional manner. In the alternative, the carton blank can be erected around ten packages of cigarettes in a mode of packaging well known in the art. The positioning of packages 11 at this point is not necessarily the exact predetermined position required so that proper marking of the bottoms of the packages 11 will occur when the carton is advanced through a tax marking unit at a wholesaling facility. However, after packing the carton 10 but before sealing of same, two panels 30 are inserted in the carton either manually or by employing suitable machine means. In inserting the panels 30 they are advanced into the carton in upright condition intermediate the inner surface of the carton sidewalls 16 and 18 and the juxtaposed side faces of the smaller than standard-size cigarette packages 11 with the partitions 36 on the panels locating between the ends of adjacent ones of the cigarette packages 11 in each row, so that when the panel is fully inserted as shown in FIGURE 3, the packages in each row will be substantially uniformly spaced one from another and in general correspondence to the positions which would normally be occupied by regular size cigarette packages when inserted in the carton. Maintenance of the predetermined positionings of the packages 11 in a longitudinal direction is effected by the partitions 36 with the thickness of the partitions 36 compensating for the differential between the overall longitudinal dimension of the carton enclosure, and the aggregate of the lengths of the packages in each row, insuring that the full longitudinal space within the carton is occupied so that no longitudinal movement of the packages 11 can occur thereafter. Similarly, the differential between the widths of the cigarette packages 11 and the enclosure width of the carton 10 is compensated for by the ribs 34 on the panels which ribs engage either the outer side faces of the packages in the respective rows or the carton side walls to force the inner faces of the packages into abutment as shown in FIGURE 1 and thereby maintain laterally the cigarette packages in their predetermined positionings within the carton. Thus, when the carton is thereafter shipped to a wholesaler and reopened preliminary to affixing tax markings thereto, the cigarette packages 11 are and remain properly positioned to enable proper registration of the marking means with the bottoms of the packages.

As was indicated earlier herein, a single positioning panel may in some circumstances be used in a carton to position and hold all of the cigarette packages in the carton in predetermined positionings, such carton arrangement being illustrated in FIGURES 7 and 8. As will be noted, carton 100 is intended to receive ten packages 102 of smaller than standard-size cigarettes, the predetermined positionings of which are maintained by panel member 110. Panel 110 is provided with a number of partitions 112 for maintaining longitudinally the predetermined positions of the packages and which in contrast to the panels 30 described previously have an overall height from the base end as at 114 in the direction of the tip end 106, which is greater than the width of the packages of cigarettes 102 in the row adjacent the panel and which is sufficient to extend some distance alongside the ends of the packages in the row of packages remote from the panel. In this form of panel construction, it is preferred

that the partitions 112 have only a very slight taper to avoid the partition effecting any longitudinal displacement of the packages in the outer or remote row of packages with respect to the packages in the row adjacent the panel when the latter is inserted in the carton, thereby insuring that the packages remain in paired alignment as the carton passes beneath the tax marking means. Holding the packages 102 laterally is achieved by ribs 122 formed on the panel 110 in the same manner as described earlier for the panels 30.

FIGURES 9 and 10 show still another form of molded plastic panel 150 which may be used in a cigarette carton in the manner of the panels previously described. This panel 150 has a strip-like body 152 of a thickness of about .010-.015 inch thick and made in a number of flat longitudinally arranged sections 155-159 with each section being provided with a number of individual laterally offset portions in the form of ribs 154 extending longitudinally of the sections with which they are associated. The ribs 154 serve to provide rigidity to the sections of the strip as well as to provide transverse space compensating structure to hold the cigarette packages laterally in the carton when the panel is inserted in the latter. The strip is preferably formed with the sections 155-159 joined as integral elements along with the partitions 170, which are located at the juncture of each strip section with another, the partitions providing the structure for holding the packages longitudinally in their predetermined positionings in the carton. As can be seen in FIGURE 9, by reason of the upwardly directed positioning of panel section 155, the structure of the panel is such that each section 155-159 can be articulated with respect to the adjacent section to allow a certain degree of flexure or bending of the panel to facilitate inserting it in the carton, the juncture of the panel sections and partitions being along hinge lines as at 162.

In the forms of the panels thus far described, the panels are shown as having four partitions thereon to allow positive positioning of each cigarette packages in a row of packages by means of at least one partition being in engagement therewith. However, in some instances and depending on the pattern of registration of the marking means, it is not necessary that four partitions be used if a lesser number will provide longitudinal positioning of the cigarette packages within the carton to achieve satisfactory marking. In this case, the panel 200 shown in FIGURES 11 and 12 can be employed. As will be noted, panel 200 has only two partitions 202, which extend transversely of the strip 204 and which are intended to gird only the middle or center package in each row of cigarette packages. However, to provide lengthwise space compensation, the partitions 202 are made with about twice the thickness of the partitions earlier described. Strip 204 is made up of a number of separate strip sections 210-212 with the partitions 204 being desirably integrally joined to the ends of adjacent sections with actual juncture occurring along a hinge line as at 214. Because of the hinge line connection, the adjacent strip sections can be pivoted relative to each other, for example, in the manner in which section 212 has been pivoted with respect to section 211. As indicated earlier this pivoting capability facilitates inserting the panels 200 in an already filled carton. The panel 200 also is provided with ribs 222 which function to provide lateral positioning of the cigarette packages with each separate section 210-212 having separate ribs 222 associated therewith.

The manner in which the panel 200 is used is illustrated in FIGURE 12 wherein it will be noted, the carton 230 which has been filled with ten packages of cigarettes 232 has inserted therein two panels in the same manner as heretofore described in connection with the other forms of panel construction. When so inserted, the partitions 202 gird only the center packages of cigarettes in each row. The positionings thereby produced for the remaining cigarette packages in the rows is satisfactory to give proper

registration with the indicia markings means. As will be noted, the lateral positioning of the packages in each row is provided by the ribs 222.

FIGURE 13 shows a still further form of panel 300 which is very similar to that shown in FIGURE 11, the essential difference between it and the panel 200 being that the rib means 302 provided in each strip section is oriented transversely of the strip instead of longitudinally. In this manner, the recessed portion of the strip sections as at 304 around the respective ribs 302, projects at the underside of the panel to engage with the carton side wall for lateral positioning of the cigarette packages. The panel 300 is provided with two partitions 306 joined along hinge lines as at 308 with the strip sections in the manner earlier described in connection with the panel 200.

From the foregoing, it will be appreciated that the present invention is of considerable advantage in that it enables existing standard size cartons to be used for packing smaller than standard-size cigarette packages as well as allowing for continued utilization of existing cigarette package marking machinery which was designed to be used in conjunction with standard-size cartons. Furthermore, the utilization of the panels in the cartons adds protection to the overall package carton preventing crushing or other like damage to the cigarettes. The panels are generally attractive in appearance and are easily formed from a plastics material with known forming techniques including thermoforming.

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 contained in the above description, and in the accompanying drawings, should be interpreted as illustrated and not in a limited sense.

What is claimed is:

1. A cigarette carton comprised of opposed pairs of end walls and side walls, and a bottom wall, said walls together defining an elongated enclosure in which normally can be received a quantity of standard-size cigarette packages, arranged upright therein in two co-extensive rows with the packages in each row extending in side-by-side alignment and being paired with a corresponding package in the other row, the packages in each pair being in side surface-to-side surface abutment, said end walls and said side walls being dimensioned such as to encircle snugly said quantity of standard-size packages when received in said carton, in combination with
 - a relatively thin, elongate flat strip positioned upright in said carton alongside one of said carton side walls and embodying
 - laterally offset portions in said strip adapted to provide an overall thickened spacer means between one of said one carton side wall and the sides of the cigarette packages in the row adjacent thereto to maintain laterally the predetermined positionings of at least the packages in said one row, said strip further having partitions thereon at pre-selected locations along the length of said strip and which extend generally transverse of said strip and substantially normal to the plane of said strip for extension between the ends of adjacent ones of said smaller than standard-size cigarette packages in at least said one

row to hold same longitudinally in said predetermined positionings.

2. A cigarette carton in accordance with claim 1 in which the laterally offset portions in said panel are provided as channels in said strip extending generally longitudinally thereof.

3. A cigarette carton in accordance with claim 1 wherein said flat strip is comprised of a plurality of separate longitudinally disposed, flat strip sections, said partitions being joined to the ends of adjacent sections, the juncture of said partitions with said strip sections being along a hinge line extending transversely of said strip whereby said strip sections can be pivoted relative to each other.

4. A cigarette carton in accordance with claim 3 wherein the laterally offset portions are provided as separate structure in and associated with each one of the respective separate strip sections.

5. A cigarette carton in accordance with claim 2 wherein said channels and said partitions are joined as integral elements with said flat strip.

6. A cigarette carton in accordance with claim 1 wherein said partitions taper diminishingly in width in a direction away from said strip and toward the tip ends of said partitions.

7. A cigarette carton in accordance with claim 1 wherein the spacing between adjacent partitions on said strip is only slightly greater than the length of each of said smaller than standard-size cigarette packages.

8. A cigarette carton in accordance with claim 1 wherein the end edge surfaces of said partitions are rounded to facilitate insertion of said panel into the carton.

9. A cigarette carton comprised of opposed pairs of end walls and side walls, and a bottom wall, said walls together defining an elongated enclosure in which normally can be received a quantity of standard-size cigarette packages arranged upright therein in two coextensive rows with the packages in each row extending in side-by-side alignment and being paired with a corresponding package in the other row, the packages in each pair being in side surface-to-side surface abutment,

said end walls and said side walls being dimensioned such as to encircle snugly said quantity of standard-size packages when received in said carton, in combination with

an equal quantity of smaller than standard-size cigarette packages received in said carton in predetermined positionings therein

and means for holding said smaller than standard-size cigarette packages snugly within said carton and to prevent longitudinal and lateral movement of said smaller than standard-size packages from said positionings, said means including separate positioning panels associated with each row of packages and removably received in said carton, said positioning panels each including

a relatively thin, elongate flat strip positioned upright in said carton intermediate one of said carton side walls and the row of cigarette packages adjacent thereto, said flat strip having raised channels therein defining ribs extending longitudinally thereof and outstanding from the surface of said strip for engagement between the said one of said carton side walls and the sides of the packages in said adjacent row of packages thereby to maintain laterally the predetermined positionings of the packages in said one row, said strip further embodying

partitions thereon at spaced apart locations along the length of said strip, said partitions extending substantially normal to the plane of said strip and extending between the ends of adjacent ones of said packages in the associated row of packages to maintain longitudinally the predetermined positionings of said packages, said partitions extending outwardly from said flat strip a distance less than the width of one of said cigarette packages.

10. A cigarette carton comprised of opposed pairs of end walls and side walls, and a bottom wall, said walls together defining an elongated enclosure in which normally can be received a quantity of standard-size cigarette packages arranged upright therein in two co-extensive rows with the packages in each row extending in side-by-side alignment and being paired with a corresponding package in the other row, the packages in each pair being in side surface-to-side surface abutment,

said end walls and said side walls being dimensioned such as to encircle snugly said quantity of standard-size packages when received in said carton, in combination with

an equal quantity of smaller than standard-size cigarette packages received in said carton in predetermined positionings therein

and means for holding said smaller than standard-size cigarette packages snugly within said carton and to prevent longitudinal and lateral movement of said smaller than standard-size packages from said positionings, said means including a positioning panel removably received in said carton, said positioning panel including

a relatively thin, elongate flat strip positioned upright in said carton intermediate one of said carton side walls and the row of cigarette packages adjacent thereto, said flat strip having raised channels therein defining ribs extending longitudinally thereof and outstanding from the surface of said strip for engagement between one of said carton one side wall and the sides of the packages in said adjacent row of packages thereby to maintain laterally the predetermined positionings of the packages in both said rows, said strip further embodying

partitions thereon at spaced apart locations along the length of said strip, said partitions extending substantially normal to the plane of said strip and extending between the ends of adjacent ones of said packages in both said rows of packages to maintain longitudinally the predetermined positionings of said package, said ribs having a height from base to tip end at least in excess of the width of one of said cigarette packages.

References Cited

UNITED STATES PATENTS

Re. 18,245	11/1931	Boeye	229—15
2,124,808	7/1938	White et al.	229—15 X
2,747,787	5/1956	Davidson	229—15 X
2,783,929	3/1957	Delaney	206—48.5 X
2,808,189	10/1957	Williams	229—14
3,249,445	5/1966	Hacket	229—15 X

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U.S. Cl. X.R.

229—15; 206—65