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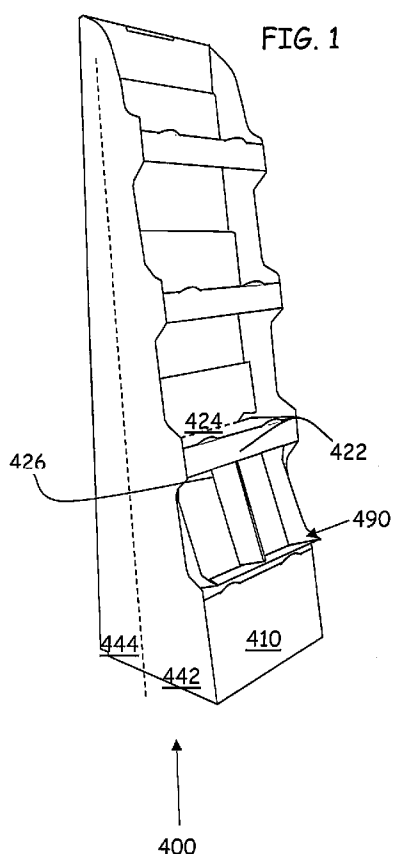
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[Continued on next page]

(54) Title: SHELF-READY POINT OF SALE DISPLAY

(57) Abstract: Display structures are disclosed for point of sale (POS) displays, wherein the structures may be foldably converted from a shipping state to a service state. Items to be placed in the display structures may be shipped in cartons which themselves fit into the display structure.



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SHELF-READY POINT OF SALE DISPLAY**REFERENCE TO RELATED APPLICATIONS**

5 [0001] This application claims the benefit of priority under 35 U.S.C. §119(e) of U.S. provisional application serial number 60/910402, filed on April 5, 2007, which is hereby incorporated by reference in its entirety.

BACKGROUND

10 [0002] This invention relates generally to point of sale (POS) display structures formed of sheet material such as cardboard or paperboard, where the POS is designed so that merchandise to fill the POS display is shipped along with the POS.

[0003] Point of sale display structures are known in the art, typically being temporary, self-supported cardboard structures usually with some printed graphics, and capable of holding a number of product items such as promotional or seasonal items.

15 [0004] POS displays are usually shipped unassembled as several panels, usually in a relatively flat configuration. Typically these unassembled POS displays are shipped separately from the merchandise they will hold. This increases to shipping expense. Upon receipt by a retailer, the merchandise for the POS display must be located and loaded into the POS display.

20 [0005] It is desirable to have a POS display fixture that in a shipping configuration at least partially packages the intended merchandise contents, such that material costs are reduced and assembly is simplified.

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SUMMARY

[0006] The present invention is directed to a POS display structure made from several cardboard or paperboard blanks, designed so that merchandise intended for sale via the POS display is packaged and shipped along with the POS display.

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BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1 shows a perspective view of a bin display in accordance with the present invention;

[0008] FIG. 2 is a top plan view of a blank from which the bin display of FIG. 1 may formed;

10

[0009] FIG. 3 is a top plan view of a blank from which an internal brace for the bin display of FIG. 1 may formed;

[0010] FIG. 4 is a perspective view of the internal brace of FIG. 3 being attached to the bin display blank of FIG. 2 in a first step;

15

[0011] FIG. 5 is a perspective view of the internal brace of FIG. 3 being attached to the bin display blank of FIG. 2 in a second step;

[0012] FIG. 6 is a perspective view of the bin display being folded with the internal brace into a collapsed columnar state suitable for shipping;

[0013] FIG. 7 is a perspective front view of the bin display in a collapsed state suitable for shipping;

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[0014] FIG. 8 is a perspective rear view of the bin display in a collapsed state suitable for shipping;

[0015] FIG. 9 is a perspective rear view of the bin display in an assembly stage at the point of sale;

5 [0016] FIG. 10 is a perspective front view of the display in another assembly stage at the point of sale;

[0017] FIG. 11 is a plan view of a blank from which a merchandise shipping carton may be formed that is suitable for placement into the bin display;

10 [0018] FIG. 12 is a perspective front view of an assembled merchandise shipping carton made from the blank of FIG. 11, in a closed state;

[0019] FIG. 13 is a perspective front view of an assembled merchandise shipping carton made from the blank of FIG. 11, in an open state;

[0020] FIG. 14 is a perspective view of the merchandise carton of FIG. 13 being placed into the display bin; and

15 [0021] FIG. 15 is a perspective view of a fully-assembled display bin.

DETAILED DESCRIPTION

[0022] FIG. 1 shows a perspective view of a bin display 400 in accordance with the present invention. Such a display may have a space or volume for holding items for storage or display. In the illustrative example, there are four rows of storage spaces or
20 bins. The elements of the bin display will be explained in further detail below, but as

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shown in FIG. 1, the rows of storage bins generally include a shelf floor 422, a shelf back 424, and a shelf front 426. Depending on the row, the shelf front 426 may take a different form, such as bottom front 410. Into each row may be placed a merchandise carton 490, which in the illustrative example includes two bins. The number of rows and bins is not intended to be limiting. The bin display 400 may be collapsible for shipping, as suggested by the side panels 442 and 444 which between them have a fold crease.

[0023] FIG. 2 is a plan view of a blank 401 from which the major part of the bin display may be assembled. The central part of the blank, from the bottom upward, includes a front bottom flap 412, a front bottom panel 410, and then a series of shelves each having a shelf floor 422 and a shelf back 424. The upper shelves each have a shelf front 426. A pair of cutouts 427 is associated with each shelf. Near the front of each shelf floor 422 may be provided stop tabs 429, and at the back of each shelf floor may be provided support tabs 428.

[0024] Adjoining the center of the blank along score lines 441 are the sides of the blank which include side forward panel 442 and side rear panel 444, with a score line 443 between them. The sides also include side bottom flaps 440.

[0025] Attached to one of the sides along score line 451 is back panel 452, which includes a lower back edge 458 and an upper back edge 459. The back panel also includes a bracing flap 454 with an engagement tab 456. Attached to the opposite side along another score line 451 is vertical glue tab 446, which may include a clearance cutout 448 to avoid interfering with bracing flap 451.

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[0026] FIG. 3 is a plan view of a blank 460 from which an internal brace for the bin display may be assembled. The bottom of the blank is shown at the top of FIG. 3, to correspond with FIG. 4 in which a first assembly step is illustrated. The central part of the blank includes a brace bottom flap 462, a brace floor rear panel 464, a brace floor front panel 466, and a brace central panel 468. Attached to the brace center panel 468 are brace side panels 470. The brace center panel also includes shelf support slots 476, and an engagement slot 478 to receive engagement tab 456 of bracing flap 454. The upper portion of brace center panel 468 includes a brace top flap 472, and a slot feature 474 to locate a header card (not shown) at the back of the bin display

[0027] FIG. 4 shows a first step in the assembly of the brace blank 460 onto blank 401. The brace top flap 472 is attached to the upper back edge 459 of back panel 452, for example by adhesive. The brace side panels 470 are folded over onto brace center panel 468. The brace floor rear panel 464 is folded over on brace floor front panel 466 (hidden in FIG. 4).

[0028] From the assembly step in FIG. 4, the brace 460 is folded onto back panel 452, so that brace bottom flap 462 may be attached to the lower back edge 458 of back panel 452, for example by adhesive. The assembly then will appear as shown in FIG. 5, which shows a second assembly step, where brace floor front panel 466 and brace floor rear panel 464 extend out from the assembly. The brace floor front panel 466 and brace floor rear panel 464 may then be pushed inward along their mutual score line to place them between brace center panel 468 and back panel 452.

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[0029] The combined blanks may then be formed into a collapsed columnar structure, suitable for shipping, as follows. Referring to FIG. 5, the side rear panel 444 proximate to brace center panel 468 is then folded over onto brace center panel 468, at the same time forming a fold along the score line between side rear panel 444 and side forward panel 442, bringing the assembly to the stage shown in FIG. 6. Continuing from the form shown in FIG. 6, the center part of the display bin, as generally denoted by front bottom panel 410, is then folded over onto brace center panel 468. The other side rear panel 444 and side forward panel 442 are then folded in inward like their counterparts, between the center part of the display bin, and the brace center panel 468. The assembly then appears as seen in the front perspective view of FIG. 7, or the rear perspective view of FIG. 8. As shown on FIG. 8, vertical glue tab 446 is then attached to back panel 452, for example by adhesive.

[0030] The assembly shown in FIGS. 7 and 8 is a collapsed tubular form that is compact and flat and suitable for shipping. Upon receipt at its destination, the assembly may be expanded into a standing form as shown in FIG. 9. The bracing flap 454 on back panel 452 is pushed inward so that engagement tab 456 fits into engagement slot 478 (not shown in FIG. 9) in brace center panel 468. At the same time, side rear panel 444 and side forward panel 442 on each side are expanded outward about their mutual score line to form the sides of the display bin.

[0031] FIG. 10 shows a perspective view of the front of the display bin as the shelves are formed. This may be done by pulling forward on shelf back 424 and folding it downward along score line 423, then pushing inward on shelf bottom 422 to hinge it back

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along score line 421 into the display bin until shelf support tabs 428 engage shelf support slots 476. Shelf support wings 425 may also be used to help support the shelf.

[0032] FIG. 11 is a plan view of a blank 481 from which a merchandise shipping carton 480 may be formed that is suitable for placement into the bin display. The
5 exemplary carton includes two bins, but it could be made with one bin or with more than two bins. Each bin has a bin bottom panel 486, bin front panel 489, bin back panel 487, and bin top panel 492. The carton also includes bin side panels 488, and bin divider panels 482, 484. The top of the carton includes bin top side flaps 494 and bin top front flaps 496, and for one of the bins, bin top overlap flap 497.

10 [0033] To assemble carton blank 481, the bin divider panels are folded upward and together, with bin divider tab 485 fitting into bin divider slot 483. Bin front panels 489 and bin back panels 487 are folded upward. Bin side panels 488 are folded upward and bin glue flaps 490 are attached to the front and back panels. A carton with two bins is thus assembled, and may be filled with merchandise. The bin top panels 492 may then be
15 folded over the top of the carton, and bin top side flaps 494 and bin top front flaps 496 inserted into the carton to hold it closed. Preferably bin top overlay flap 497 is on the outside of the carton.

[0034] FIG. 12 is a perspective front view of an assembled merchandise shipping carton 480, in a closed state, made from the carton blank 481 of FIG. 11. The closed
20 shipping carton 480 is suitable for shipping and handling. FIG. 13 is a perspective front view of an assembled merchandise shipping carton in an open state, without merchandise contents, showing internal details such as bin glue flaps 490 and bin divider panel 484

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(bin divider panel 482 is not visible but is folded up contiguous to the other side of bin divider panel 484). When the merchandise is ready to be loaded into the display bin, the top part of the carton may be torn or cut away along line 499.

[0035] FIG. 14 is a perspective view of the merchandise carton 480, with top removed, being placed onto or into one of the shelves of the assembled display bin 400. The size of merchandise carton 480 is suitable for fitting into the shelf. Retention tabs 429 may be provided on each shelf to help retain merchandise carton 480.

[0036] FIG. 15 is a perspective view of a complete display bin with merchandise cartons on each shelf.

[0037] Although the above-described embodiments and appended drawings describe a bin display structure having a particular exemplary geometry, it should be understood that variations in the bin display structure, including its geometry, proportions, size and shape do not depart from the scope of the present invention.

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CLAIMS

I claim:

1. A display fixture comprising

5 a columnar support, and

at least one shelf formed by folding a portion of the columnar support,

wherein the columnar support may be collapsed into a flat unit.

2. The display fixture of claim 1, wherein the columnar support has a front surface, and wherein the display fixture further comprises an internal brace with a major

10 surface forming a plane parallel to the front surface..

3. The display fixture of claim 1, wherein the columnar support can be assembled into a structure having four sides.

4. The display fixture of claim 1, wherein said display fixture is made from sheet material.

15 5. The display fixture of claim 4, wherein said display fixture is made from paper, paperboard, or plastic.

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6. The display fixture of claim 1, further comprising at least one merchandise container disposed on the at least one shelf.

7. The display fixture of claim 6, wherein the merchandise container is made from sheet material.

5 8. The display fixture of claim 6, wherein the merchandise container is made from paper, paperboard, or plastic.

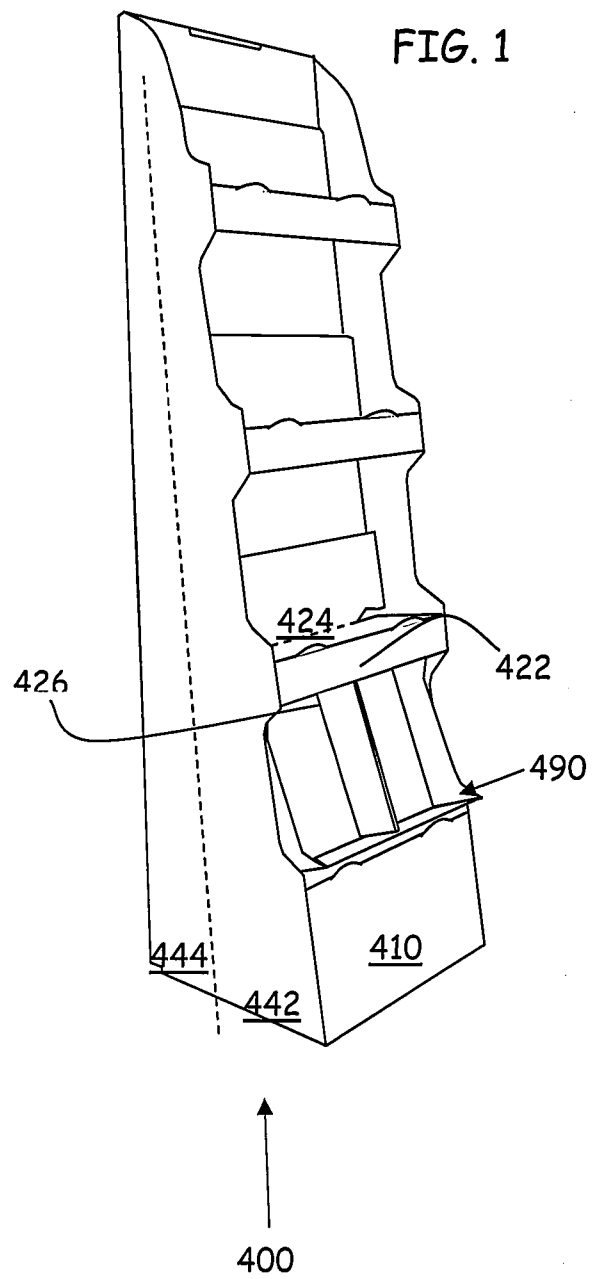
9. The display fixture of claim 6, wherein the merchandise container defines two or more bins.

10 10. The display fixture of claim 6, wherein merchandise contents may be stored in said merchandise container.

11. The display fixture of claim 9, wherein a portion of the merchandise container is removable.

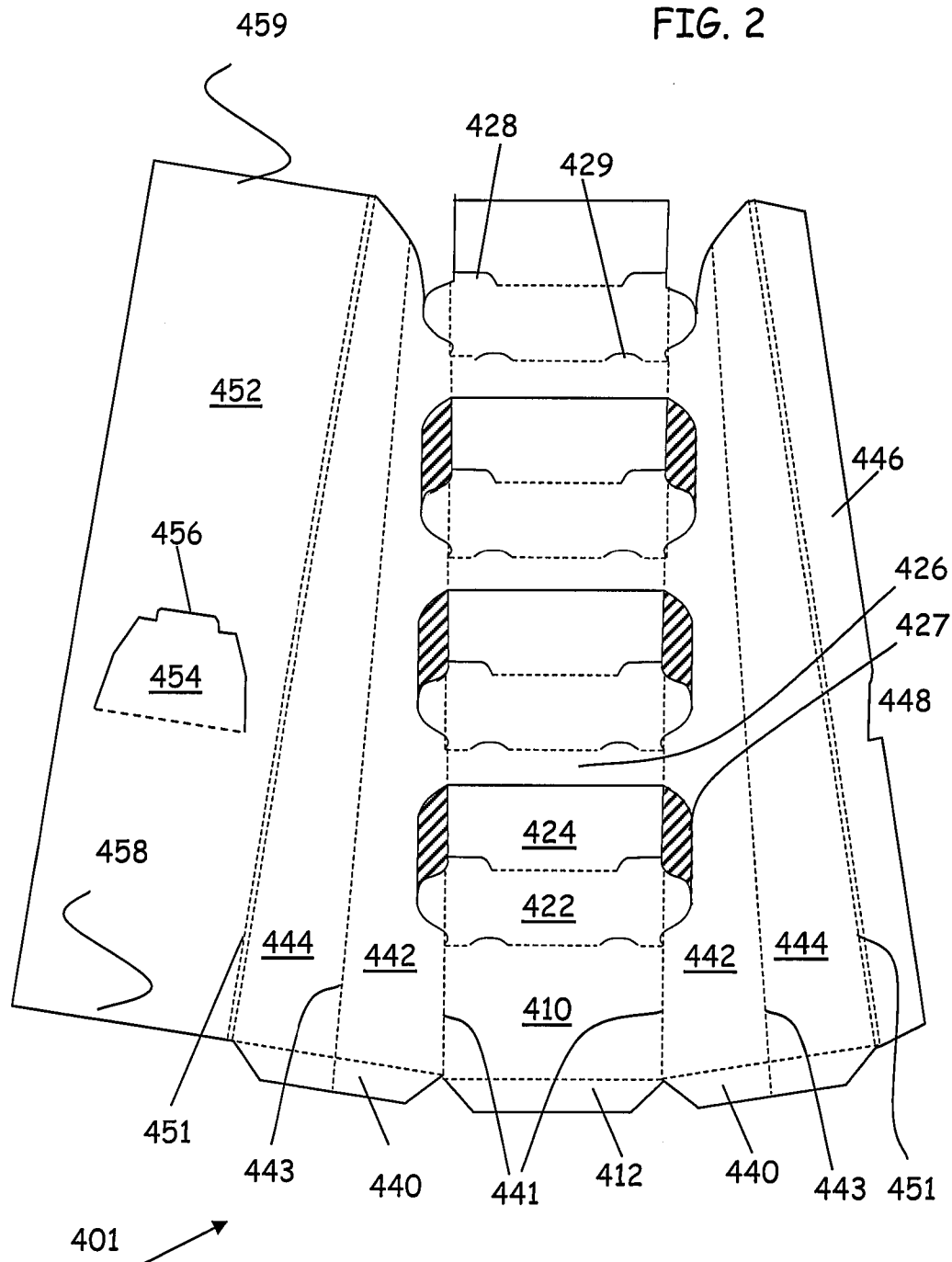
12. The display fixture of claim 6, further comprising at least one retention tab to retain the merchandise container on the shelf.

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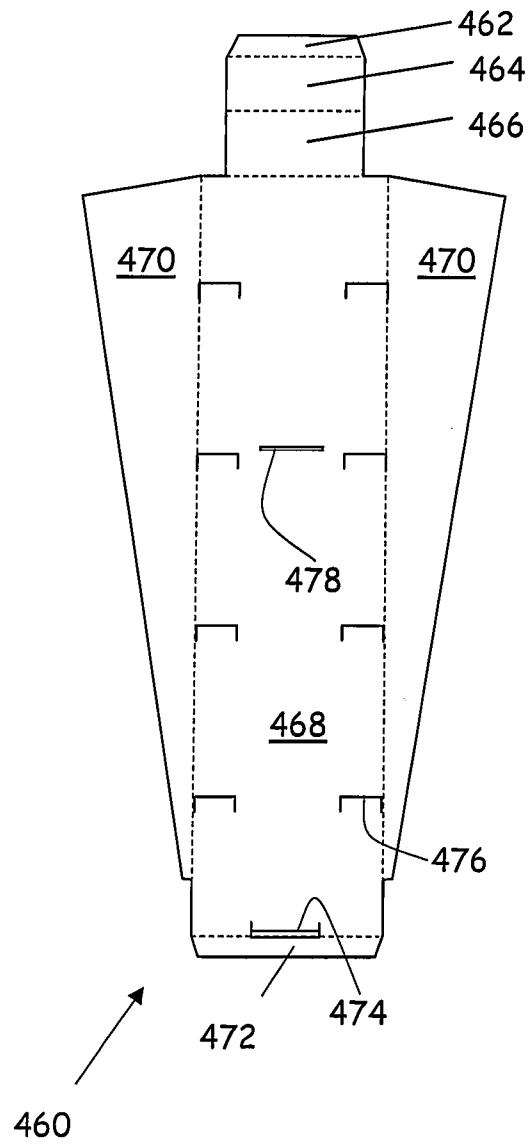
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FIG. 2



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FIG. 3



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FIG. 4

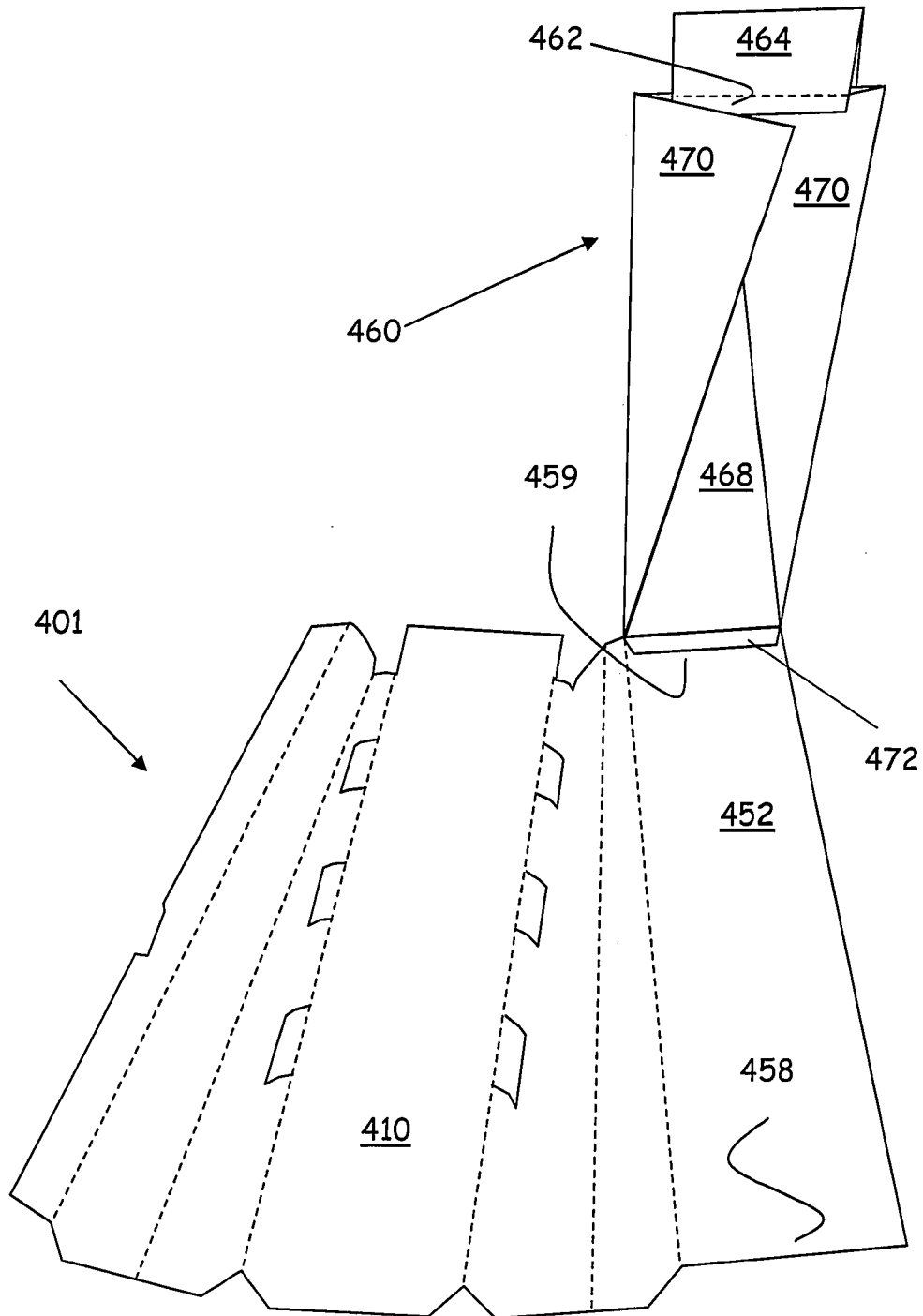
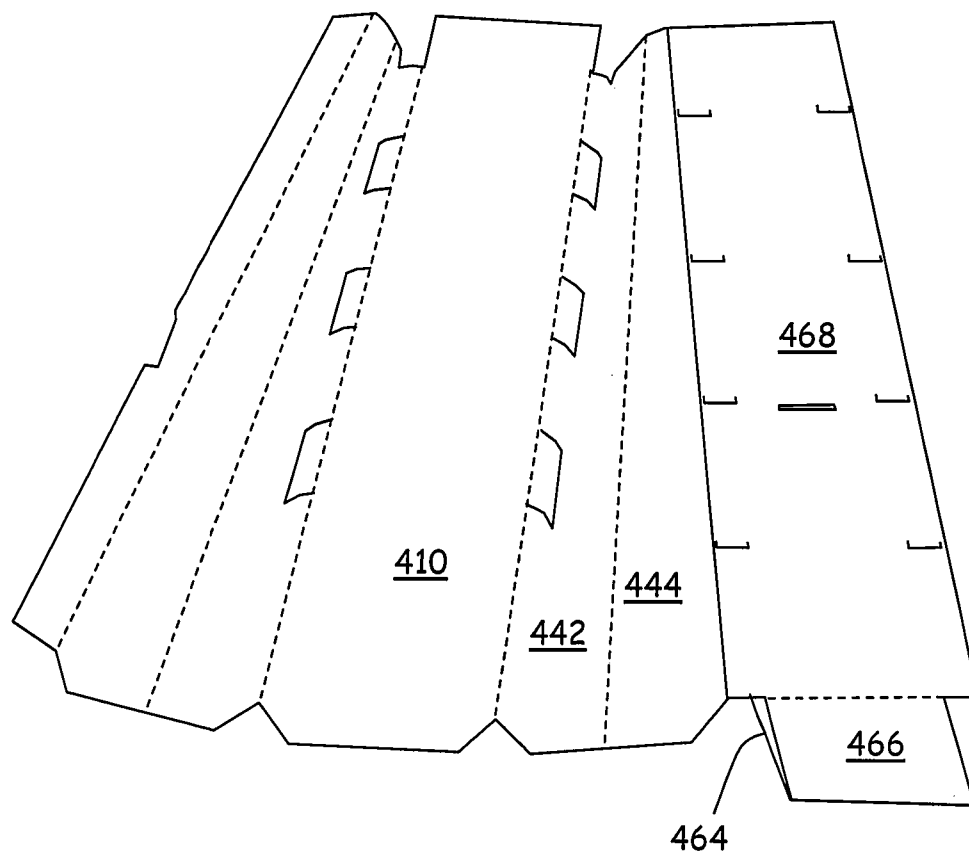


FIG. 5



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FIG. 6

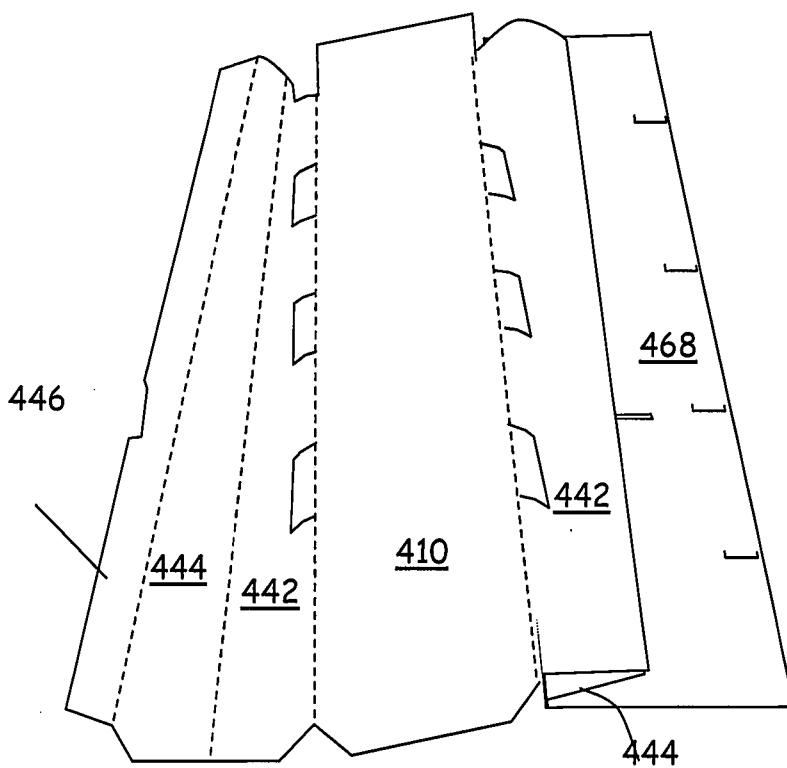


FIG. 7

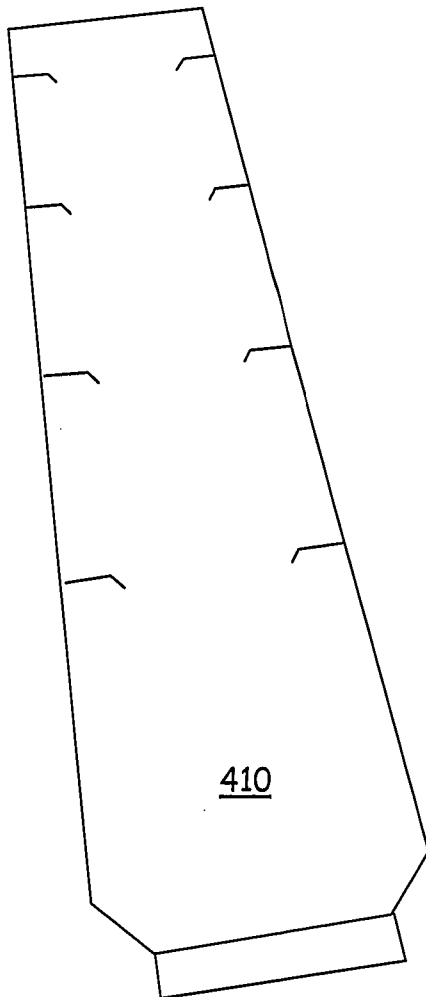
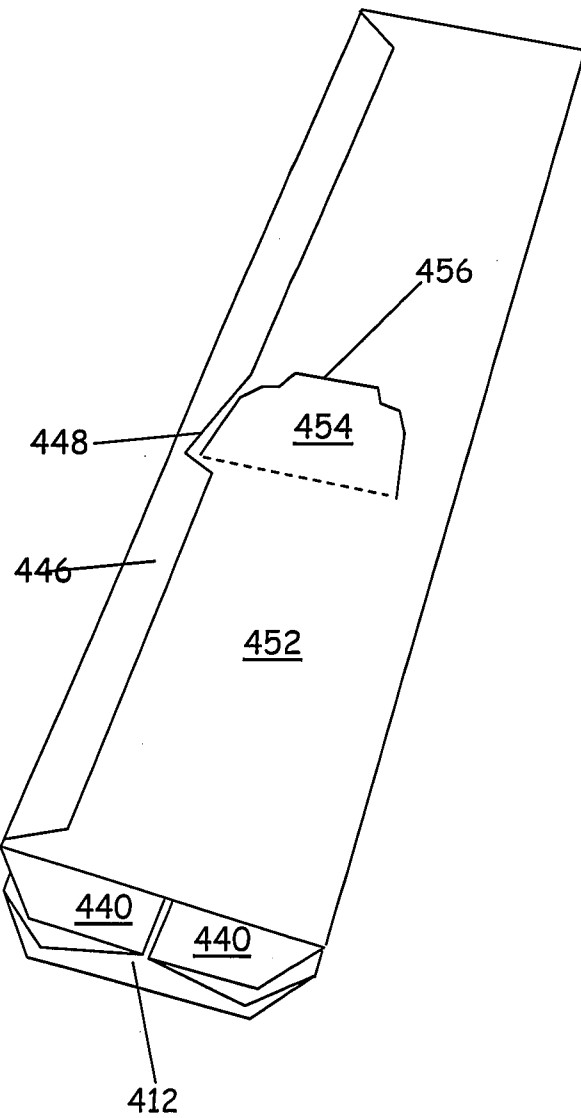


FIG. 8



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FIG. 9

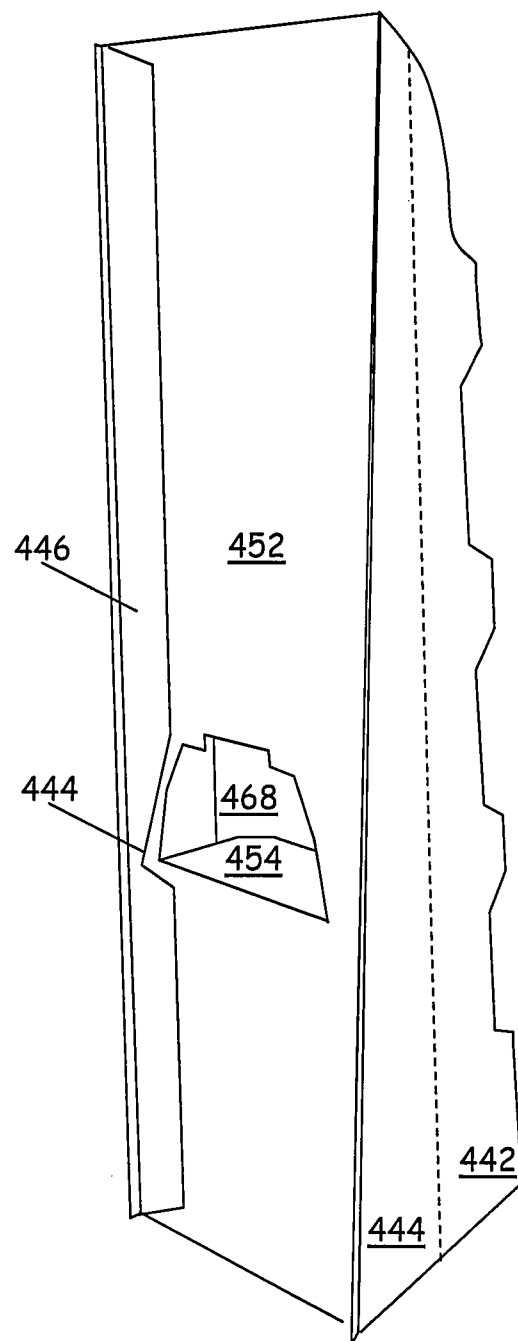


FIG. 10

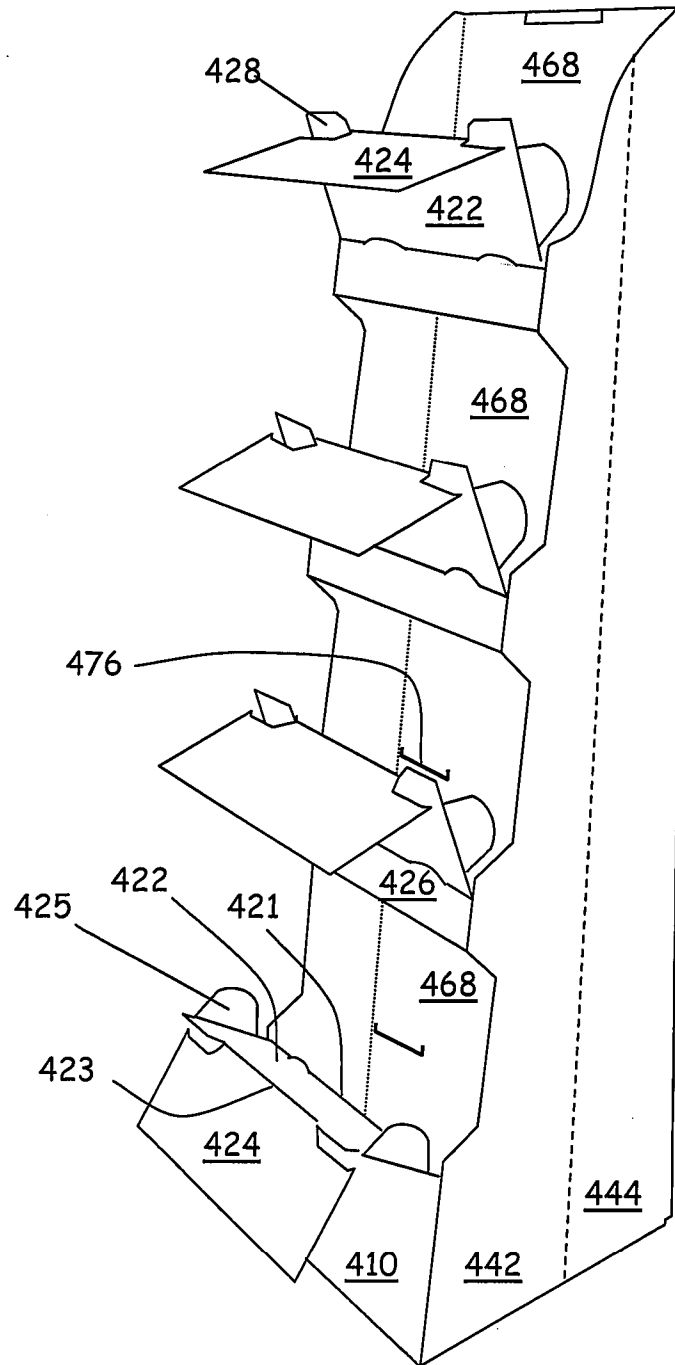
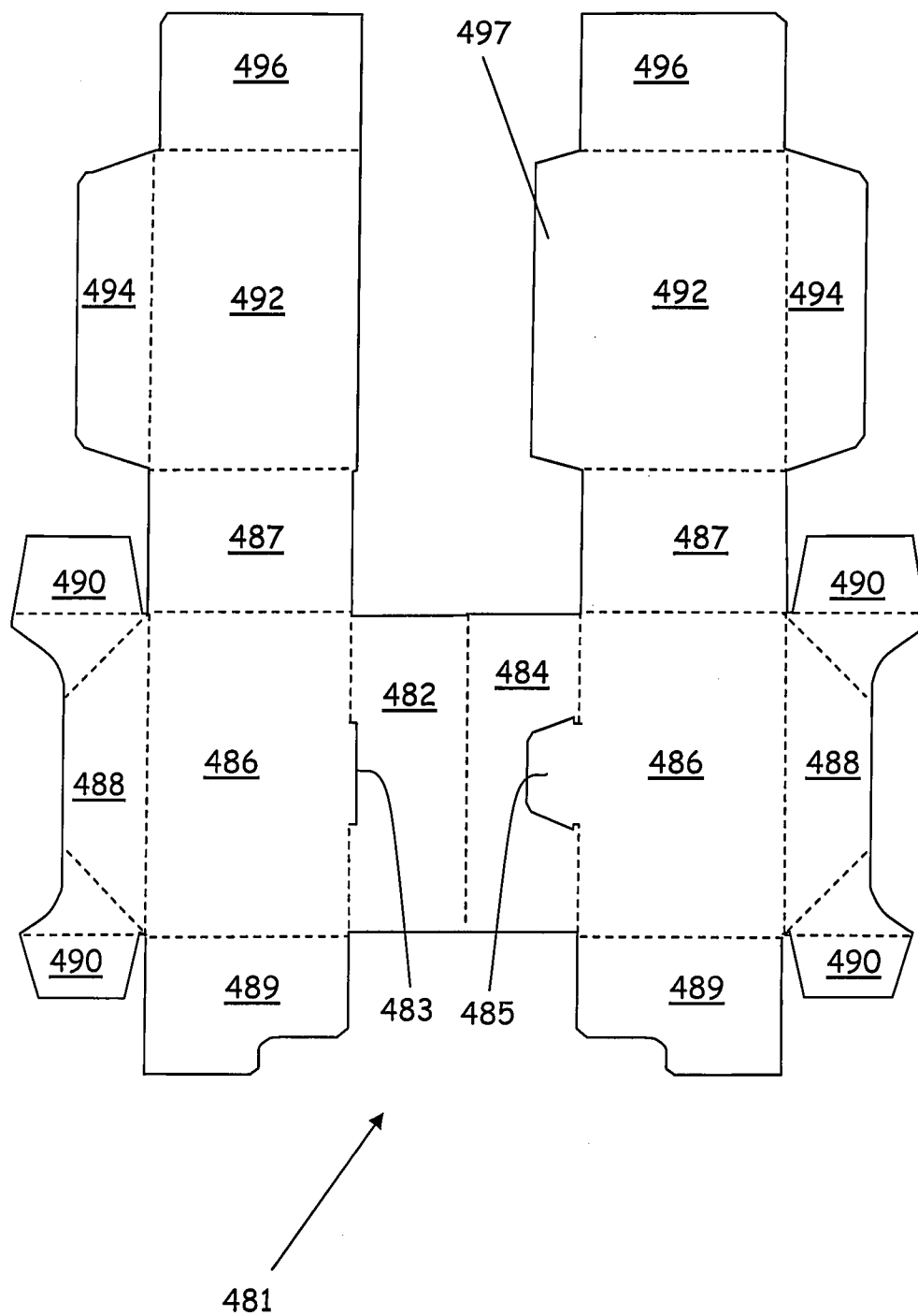


FIG. 11



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FIG. 12

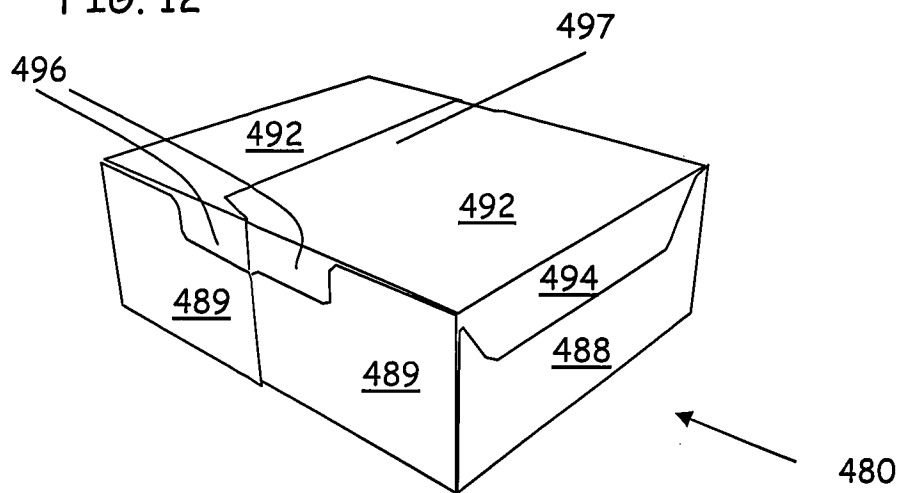
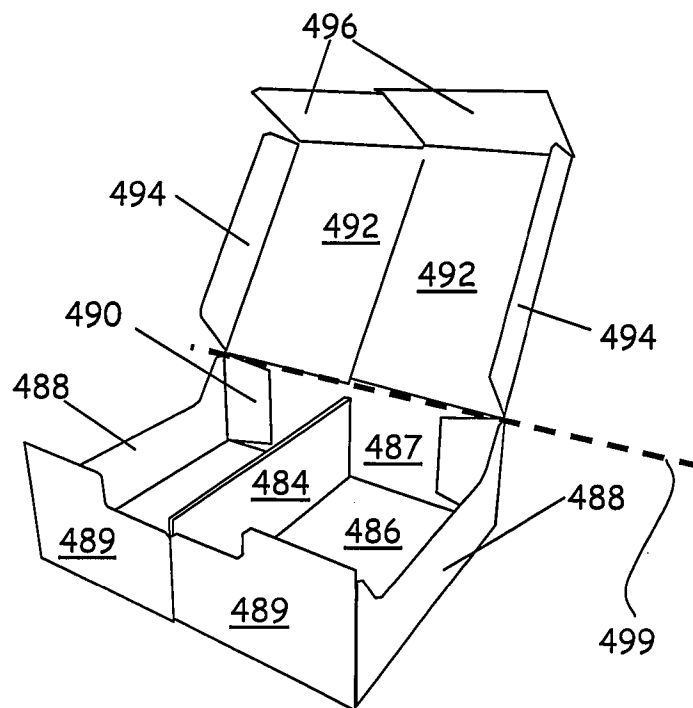
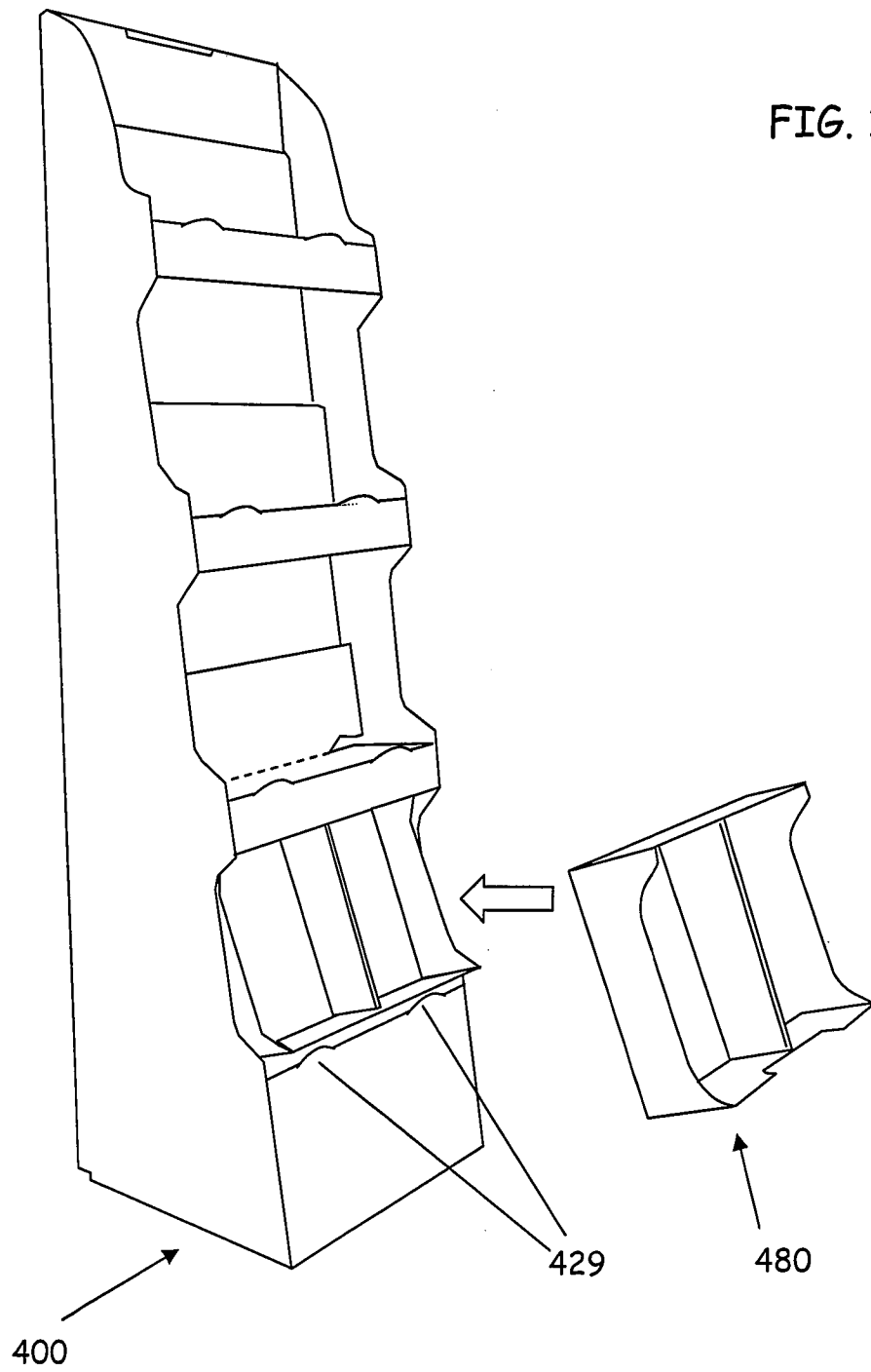


FIG. 13



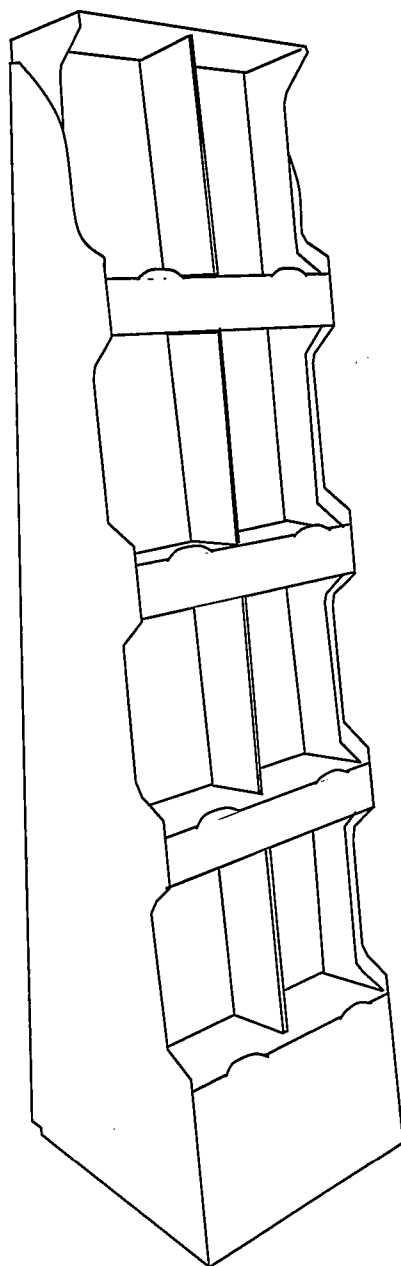
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FIG. 14



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FIG. 15



INTERNATIONAL SEARCH REPORT

International application No

PCT/US2008/059166

A. CLASSIFICATION OF SUBJECT MATTER
INV. A47F5/11

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A47F B65D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2004/030497 A (MODEL AG [CH]; LEMBE CLEMENS [CH]) 15 April 2004 (2004-04-15) figures	1-12
X	US 5 042 651 A (DAVIS A WAYNE [US] ET AL) 27 August 1991 (1991-08-27) the whole document	1-12
X	EP 1 421 879 A (SIMPSON PRINT LTD [GB]) 26 May 2004 (2004-05-26)	1-5
Y	the whole document	6-11
Y	US 3 829 001 A (WHEELER L) 13 August 1974 (1974-08-13) the whole document	6-11

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11 August 2008

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/059166

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