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(54) **SELF-SUPPORTING PACKAGING AND DISPLAY UNIT**

(57) The invention relates to a self-supporting dispenser and packaging/display unit which can be used to transport a product contained therein from the manufacturer to the point of sale. The inventive self-supporting packaging is **characterized in that** it can be used to house and display the product which can then be removed therefrom at the moment of purchase by the end customer. The invention is further **characterized in that** it comprises: angular posts which form a preferably-

square or rectangular configuration; and plurality of angular crossbars, the ends of which are connected to the post using different fixing means, such as to generate a plurality of peripheral supports which are disposed at the same level and at multiple heights and which are separated by a given distance. According to the invention, panels that are used to house and display the different products are placed on top of, or fixed using different means to, the angular crossbars that form the peripheral supports.

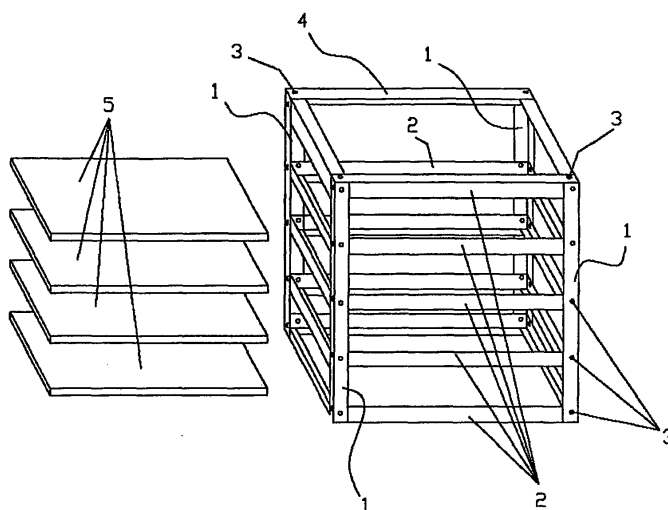


FIG. 1a

Description

FIELD OF THE INVENTION

[0001] The present invention is related to the art of packaging and bailing, more particularly to a package that holds and exhibits products in a point of sale, aimed to end users. More specifically, this invention refers to a self-standing exhibiting and dispensing package that allows for transportation of the product therein to its point of sale; said self-standing package is characterized by its ability to hold and exhibit its product at points of sale, and end consumers may take said product at the time of purchase.

BACKGROUND OF THE INVENTION

[0002] Currently most products are individually packaged so they can reach end users. However, distribution and marketing of these products require bigger packages such as boxes or containers carrying a number of such individually packaged products in order to be transported and taken to points of sale for end users, where they are then unpackaged and placed on shelves or exhibitors designed for such purpose. Furthermore, they make such products appealing for end users.

Otherwise, such as in shopping malls and self service stores, individually packaged products are usually set in islands, placed at various levels and piled on the floor, pallet, stand, box or similar devices.

[0003] Accordingly, the constant need to have safer, trust worthier packages that allow for protection of such products being transported towards end users, as well as the growing need to have bigger packages or bales that allow on one hand to hold the product, and exhibit said product at points of sale on the other hand, where they may be displayed to end users, has generated the development of new packages that strive to fulfill these needs and avoid usage of or additional investment on acquisition of shelves and exhibitors.

[0004] Prior art includes some patents that protect and disclose packaging structures that satisfy the above mentioned needs, such as U.S. Pat. No. 5,251,753 granted to Pigott et al. on Oct. 12, 1993, which refers to a combined product transporting and exhibiting unit, including a plurality of product containing trays vertically set with divisions vertically supported that keep a space between product containers. Under these shipping conditions, the bottom tray is housed and received within a flange that rests on a conventional shipping pallet. Each tray is provided with an individual angulated support member between an adjacent vertically spaced pair of trays. A beam on each corner extends the entire height of the unit providing additional structural support during shipping only. However, as may be disclosed and seen in the Figures hereof, each tray or plate contains products that in turn support the next upper tray or plate and so on, hence making it necessary for the products on said next upper

tray or plate to be organized, then withdrawn in order to have access to products in the next lower tray, and so on, until products such packaged and exhibited in said unit is finished.

[0005] The beams on each corner are only used during shipping, and upon arrival to their final destination at points of sale they are removed, providing structural support for product protection during shipping only.

[0006] U.S. Pat. No. 5,161,692 granted to Stanley E. Knierin on Nov. 10, 1992 refers to a container device with open faces, which includes a cover member with an inner division wall that forms cavities that receive corner beams having a lower outer wall in order to tighten and hold the corners of a household appliance. Such cover and corner beams may be used separately at will. This type of structure is designed to ship products only, more specifically devices of larger dimensions such as household appliances, in order to protect and stabilize such devices during their transportation, not for their exhibition at points of sale.

[0007] U.S. Pat. No. 4,638,941 granted to Robert L. Watson on Jan. 27, 1987 refers to a cardboard container for shipping and exhibiting products, comprising of a plurality of product support trays vertically set one on top of the other, where the product on the lower tray supports the next upper product containing tray.

[0008] Other such patents refer to structures usually comprising trays or containers vertically set and with corner beams as structural elements that protect the products, during their shipping only. In all of them, products on such trays or containers support the next upper product loaded trays.

[0009] Said corner beams or corner pieces as reinforcing structural elements protecting the products on the above described structures, are made of compressed cardboard. However, such compressed cardboard beams have always been used as packaging material and not as exhibitors.

[0010] Accordingly, and including the above referenced and cited patents of the prior art, to this date there is not one structure that allows packaging and exhibiting of products in a plurality of trays, where said products do not have to support the next upper tray, therefore allowing placement of such products on different levels without affecting the structure's stability.

OBJECTIVES OF THE INVENTION

[0011] Making a self-standing exhibiting package that allows vertical placement of trays at multiple levels where various products may be placed and contained for their transportation and exhibition, and which allows for disposition of such products on said various levels and on any of their sides is the main objective of this foregoing invention.

[0012] Another objective of this invention is to make a self-standing exhibiting package that will furthermore be structurally functional, resilient and long lasting available.

A further objective of the present invention is to provide a self-standing exhibiting package, which will additionally allow complete exhibition of the product from any angle and on all levels.

[0013] Still another objective of this invention is to provide such self-standing exhibiting package that will further make such contained and exhibited products highly attractive for end users at points of sale in self service stores.

[0014] Another objective of this invention is to make a self-standing exhibiting package that will furthermore comprise a unique and solid structure.

[0015] A still further objective of this invention is to make such self-standing exhibiting package available while also avoiding and eliminating the need to be put together at stores, and will furthermore avoid such product's organization for its exhibition.

[0016] Another objective of this invention is to make a self-standing exhibiting package that will furthermore comprise wide and visible areas for diverse advertising.

[0017] And all such qualities and objectives that will become apparent based on the general and detailed description of the present invention, supported by the embodiments described herein.

BRIEF DESCRIPTION OF THE INVENTION

[0018] Generally, the basic structure of the self-standing exhibiting package in accordance to the present invention consists of angular beams (corner pieces) that form a configuration preferably square or rectangular, although it may be polygonal; a plurality of angular crossbars joined in their end by diverse fixing devices on such corner angular beams, and such angular crossbars forming peripheral stands with a same level at different heights, spaced between them, where containing and exhibiting panels may be set with various products, which are stacked or fixed by diverse fixing devices on top of said angular crossbars forming said peripheral stands, allowing for such stands to be displaced.

[0019] Said angular beams and crossbars are preferably made of compressed cardboard, taking advantage of its structural characteristics of functionality, resiliency, cost and recycling capabilities.

[0020] Said beams and said angular crossbars are preferably shaped like an "L", both sides having the same length, each angular beam is set with its open side facing the interior of this preferably rectangular or square configuration.

[0021] In one embodiment angular crossbars are attached by an arm to the corresponding end arm of said angular beams, leaving the other arm horizontal in order to allow for support of product containing stands; even though said angular crossbars may be set with a vertical arm in order to capture said support stand from within and provide exhibition of the products.

[0022] End sections of outer faces of said attaching arms in the angular crossbars are spliced with an inner

portion thereof in sections at a defined height of such attaching arms corresponding to said angular beams.

[0023] Upper angular crossbars forming the last peripheral stand, apart from being attached with said angular beams, are joined at their corresponding attached horizontal upper arms.

[0024] Attached ends of said angular crossbars joined at a same level on said angular corner beams, are spliced one on top of the other.

[0025] In another preferred embodiment of the invention, product containing and exhibiting stands are phased out of the center of the package, thus exposed to or beyond the middle of each face of the exhibitor, fixed with fixing devices on said angular crossbars, hence making stands exposed on opposite sides of the package.

[0026] According to the above embodiment, corners of the plurality of stands protruding from each face of the package comprise an external angular beam that provides additional support to the protruding section of such product containing stands, comprising said outer angular beams, angular crossbars attaching them thereto, where they rest upon, and they may be fixed to said products containing stands.

[0027] In another embodiment of this package, corner angular beams are set with their open side facing out and angular crossbars are attached on their edges with the outer face of an arm on the outer faces of the corresponding arm of the angular beams, such angular crossbars being exposed and substantially phased out, where each angular crossbar attached to adjacent angular beams support a product containing and exhibiting stand, which are phased out from the center with a protruding section supported by other outer angular beams attached to the exterior corners of said product containing and exhibiting stands.

[0028] In another embodiment of the invention, considering the embodiment above, corner angular beams are set with their open side facing outwards, and the ends of said angular crossbars are fixed with their outer sides on the outer faces of said angular beams; multiple levels derive from each corner angular beam, perpendicular pairs of angular crossbars generate a "V" shaped support where stands with the shape of 1/4 circle in order to support and exhibit other different or same products, on which edges another vertical angle is fixed to.

[0029] These embodiments may be combined based on the desired configuration, and the characteristics of said angular beams and crossbars, as well as the products supporting and exhibiting stands.

[0030] In another preferred embodiment of the invention, applied to any of these above mentioned embodiments, angular beams are supported by a base, tray or pallet under their lower end.

[0031] Attaching and fixing media for said angular beams and said angular crossbars and such stands on said angular crossbars are selected from a group consisting of screws, bolts, staples, rivets, etc.

[0032] To allow for a better understanding of the char-

acteristics of the foregoing invention this description includes, as an integral part hereof, drawings with illustrative, and not limitative, character, and are described below with regards to the favorite embodiment of the present invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0033]

FIG. 1 is a conventional perspective view of the basic embodiment of the self-standing exhibiting package.

FIG. 1 a is a conventional perspective view of the basic embodiment of the self-standing exhibiting package, with another fixing device for the angular crossbars.

FIG. 2 is a conventional perspective view of another disposition of the product containing and exhibiting stands, according to FIG. 1.

FIG. 3 depicts another embodiment of the self-standing exhibiting package in accordance to the present invention.

FIG. 4 depicts another preferred embodiment of the invention with corner stands or shelves.

[0034] A detailed description of some of the embodiments of this invention is given below to provide a better understanding hereof, with reference to the drawings attached hereto with illustrative, not limitative, purposes.

DETAILED DESCRIPTION OF THE INVENTION

[0035] Characteristic details of the self-standing exhibiting package for various products are clearly depicted in the following description and in the illustrative drawings attached hereto, with reference numerals used to indicate said parts.

[0036] With reference to FIG. 1 that is a conventional perspective view of the basic embodiment of the self-standing exhibiting package. In said Figure, this self-standing exhibiting package basically consists of corner angular beams 1 made of compressed cardboard with their open face facing the inner part of the rectangular configuration, with a plurality of angular crossbars 2 made of compressed cardboard attached on their ends by diverse fixing devices 3 in the inner side of said angular beams 1, so that an arm of said crossbars is placed horizontally and over the other vertically placed arm attached with said angular beams 1, and said angular crossbars provide peripheral supports 4 at the same level at multiple heights, thus forming a plurality of consecutive peripheral supports, where containing and exhibiting stands 5 for various products may be set on, which are laid on such peripheral angular crossbars 2 that generate said peripheral

supports 4; stands 5 may slide so they may be withdrawn or inserted therein.

[0037] Said angular beams 1 and said angular crossbars 2 have preferably an "L" shape with both arms having the same length.

[0038] Angular crossbars 2 are attached with an arm vertically placed on the corresponding adjacent end arm of the angular beams 1, their other arm then remains horizontal allowing support for product containing stands 5.

[0039] End sections of outer faces of said attaching arms in the angular crossbars 2 are spliced with an inner portion thereof in sections at a defined height of such attaching arms corresponding to said angular beams 1.

[0040] Upper angular crossbars 2 forming the last peripheral support 4, apart from being attached with said angular beams 1, are joined at their corresponding attached horizontal upper arms.

[0041] With reference now to FIG. 1 a depicts a conventional perspective view of the basic embodiment of the self-standing exhibiting package, with another fixing device for the angular crossbars. In said Figure, angular crossbars 2 are attached with a vertical arm on the corresponding adjacent end arm of angular beams 1, their other arm then remains vertical and lower respect to the vertical one, so that each peripheral support 4 captures a product containing stand 5 inside. This same figure also shows attached ends of said angular crossbars 2 joined at a same level on said angular corner beams 1, are spliced one on top of the other.

[0042] Higher angular crossbars 2 may be fixed as they are fixed in the embodiment shown in FIG. 1, as upper cap for the end angular beams.

[0043] In figures 1 and 1 a the lower angular crossbars beside of attached to the angular beams 1, they are attached with their corresponding upper adjacent horizontal upper arms.

[0044] With reference now to FIG. 2 that depicts a conventional perspective view of another disposition of the product containing and exhibiting stands, according to FIG. 1. In said Figure, product containing, supporting and exhibiting stands 5 are phased out from the center of such configuration, exposed to or beyond the middle in at least two opposed or adjacent faces of the exhibitor, fixed by diverse fixing devices 3 on said angular crossbars 2. Both exposed outer corners of said plurality of containing, supporting and exhibiting stands 5 comprise an angular beam 1 in order to provide support to said exposed sections of said stands 5, said additional beams 1a are comprised of "L" shape additional angular crossbars 2a that are fixed with an arm vertically placed, parallel and spliced with the corresponding arm of the adjacent additional vertical beam 1 a, remaining the other arm horizontally placed, either above or below of said vertical arm.

[0045] With reference now to FIG. 3 that depicts another embodiment of the self-standing exhibiting package in accordance to the present invention. In said Fig-

ure, angular beams 1 are set with their open face facing outward and angular crossbars 2 are fixated on their ends with their one arm outer face on the outer face of their corresponding arm of said angular beams 1, thus said angular crossbars 2 are set at the height of a face of the package with respect to adjacent faces, therefore it is possible that in each face of the package, sections of product supporting stands 5 are exposed, which are phased out from the center, where a phased out section is supported by other additional angular beams 1a with its open face toward the inside of the structure, which are comprised of additional angular crossbars 2a that attach adjacent additional angular beams 1a and additional angular crossbars 2b that attach angular beams 1 with adjacent additional angular beams 1a, so that said additional angular crossbars 2a and 2b form peripheral supports of said protruding sections of the stands 5. Said angular beams 1 which form a corner with the square and rectangular central structure comprise angular crossbars 2 as an upper cap.

[0046] In this embodiment, and as shown in the Figure, it is possible to have product containing stands 5 at the same height on opposite sides of the package.

[0047] With reference now to FIG. 4 that depicts another preferred embodiment of the invention with corner stands or shelves. In said Figure, the embodiment shown, is a variant of the embodiment illustrated in FIG. 3, where the change is on the additional angular beams 1a which are set with their open side facing outwards of the structure and which likewise comprise the additional angular crossbar 2a that attach adjacent additional angular beams 1a and additional angular crossbars 2b which attach angular beams 1 to adjacent additional angular beams 1a, in order to support the protruding ends of the stands 5. Additionally, at least one angular beam 1 comprises vertical stands 6 that are fixed to one of its lateral ends on the inner faces of the arms of said lateral beam 1 and in other end to the inner face of the adjacent additional angular beams 1a, forming a orthogonal corner, in said vertical stands 6 are fixed additional crossbars 2c (in same height pairs) generating a "V" shaped supports where shelves 7 are placed with the shape of 1/4 circle in order to support and exhibit other different or same products.

[0048] The structure further comprises a central cubic body 8 as stop means of the stands 5 and as stabilizer.

[0049] This invention has been described with details enough so that those skilled in the art may reproduce it and get the results stated herein. However, any person skilled in the art of this present invention may do non-described modifications thereto but if the application of such modifications in a given structure or its manufacture process requires the subject matter included in the following claims, such structures shall be included in the scope of this invention.

Claims

1. A self-standing exhibiting package, **characterized in that** is comprised of beams and plurality of "L" shaped lower, upper and medium angular crossbars attached between each other that provide a square or rectangular configuration; said crossbars attached in their ends to said beams by diverse fixing devices, providing a plurality of peripheral supports at the same level where each peripheral support has a separation distance (height) respect to the adjacent peripheral support; each peripheral support receiving various products containing and exhibiting stands which are stacked or fixated by diverse means onto said angular crossbars that provide said peripheral supports.
2. The self-standing exhibiting package as in claim 1, **characterized in that** said "L" shaped angular beams and crossbars are preferably made of compressed cardboard.
3. The self-standing exhibiting package as in claims 1 and 2, **characterized in that** said "L" shape angular beams and crossbars preferably have both arms having the same length.
4. The self-standing exhibiting package as in claims 1-3, **characterized in that** said "L" shaped angular beams are set with their open face towards the inside of said package's configuration, the "L" shaped lower, upper and medium angular crossbars being placed with one vertical arm which are attached with the adjacent arms of said angular beams, thus having their other arm horizontal and above respect to the other vertical arm, in order to allows for support and displacement of product containing stands.
5. The self-standing exhibiting package as in claims 1 to 3, **characterized in that** said "L" shaped angular beams are placed with its open face towards to the inside of the package configuration, the "L" shaped lower and medium angular crossbars being placed with a vertical arm which are attached with the adjacent arms of said angular beam, remaining the other arm in horizontal and lower form respect to the other vertical arm, so that each peripheral support has a framing shape in order to hold said product containing and exhibiting stand inside.
6. The self-standing exhibiting package as in claim 5, **characterized in that** the upper angular crossbars conforming the last peripheral support, are fixed as is claimed in Claim 4.
7. The self-standing exhibiting package as in claims 4 and 5, **characterized in that** the attached ends of angular crossbars that are attached at the same level

on said angular beams in order to conform the peripheral supports, are spliced and the upper and lower angular crossbars beside of attached with the angular beams, are attached in its corresponding horizontally placed adjacent arms.

8. The self-standing exhibiting package as in claims 4 and 7, **characterized in that** the product containing and exhibiting stands are phased out from the center of said package, exposed to and beyond the middle of opposed or adjacent faces (laterals, front and rear) of said square or rectangular shaped exhibitor, fixed with fixing devices on the horizontal arms of the corresponding supporting angular crossbars
9. The self-standing exhibiting package as in claim 8, **characterized in that** the exposed corners of said plurality of stands phased out on each face of the square or rectangular shaped package, comprise an additional angular beam with additional angular crossbars either fixed with a upper or lower horizontal arm to the joint vertical arm to the corresponding arm of said additional angular beam, in order to provide more support to the protruding sections of said product containing stands.
10. The self-standing exhibiting package as in claims 1-3, **characterized in that** "L" shaped angular beams that form corner with the square or rectangular configuration, are set with their open side facing out and "L" shaped angular crossbars are fixed on said angular beams as is claimed in Claim 4, remaining set said angular crossbars substantially height faced out, supporting product containing and exhibiting stands, which are faced out from the center with a protruding section being supported by other additional angular beams set with its open faces towards inside of the structure, with additional angular crossbars that support and/fix said product containing and exhibiting stands.
11. The self-standing exhibiting package as claim 10, **characterized in that** said additional angular beams that support the protruding end of the stands are set with its open face towards inside of the structure and in both inner faces of both arms of at least one angular beam that forms corner with the square or rectangular shaped central configuration of the structure, are fixed a pair of vertical stands forming an orthogonal corner; in said vertical stands are fixed additional crossbars in pairs of same height making "V" shaped supports, where are set shelves with 1/4 circle shape in order to support and exhibit other same or different products.
12. The self-standing exhibiting package as claim in any of previous claims, **characterized in that** said angular beams are supported on its lower end in a base,

a tray or pallet.

13. The self-standing exhibiting package as claim in any of previous claims, **characterized in that** the joint means between angular beams, angular crossbars and supporting stands, product containing and exhibiting, are selected from the group consisting of screws, bolts, staples, rivets, etc.

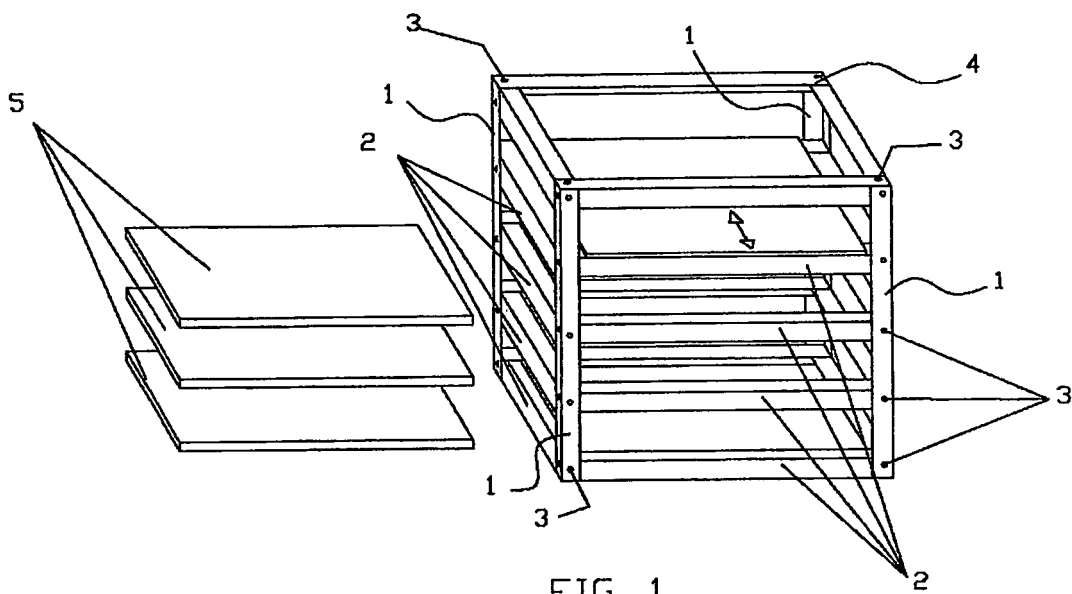


FIG. 1

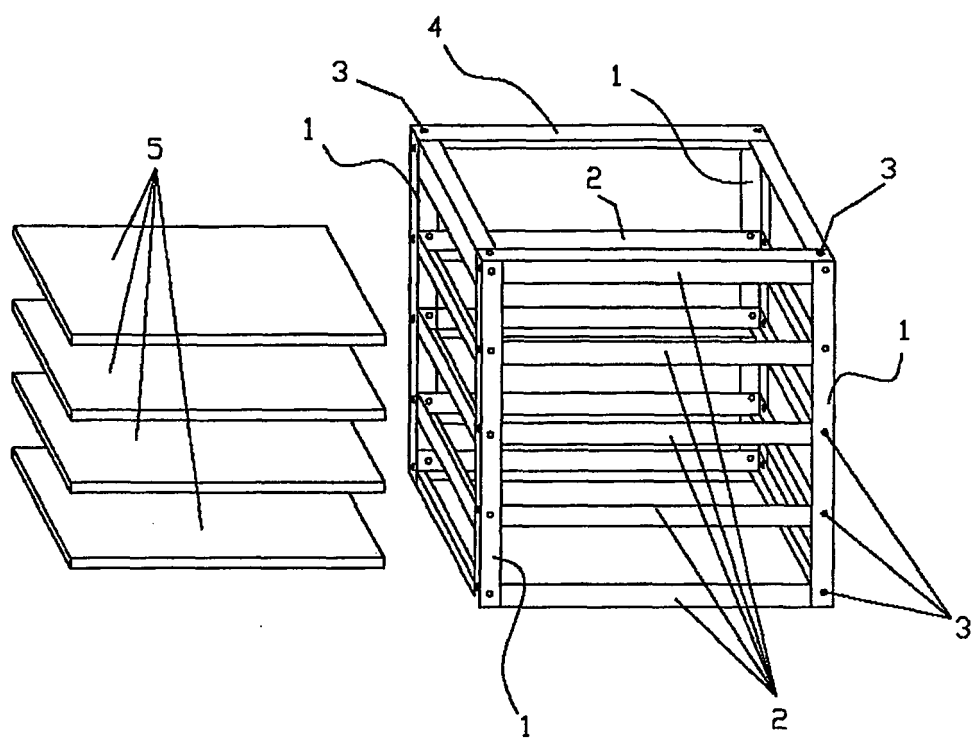


FIG. 1a

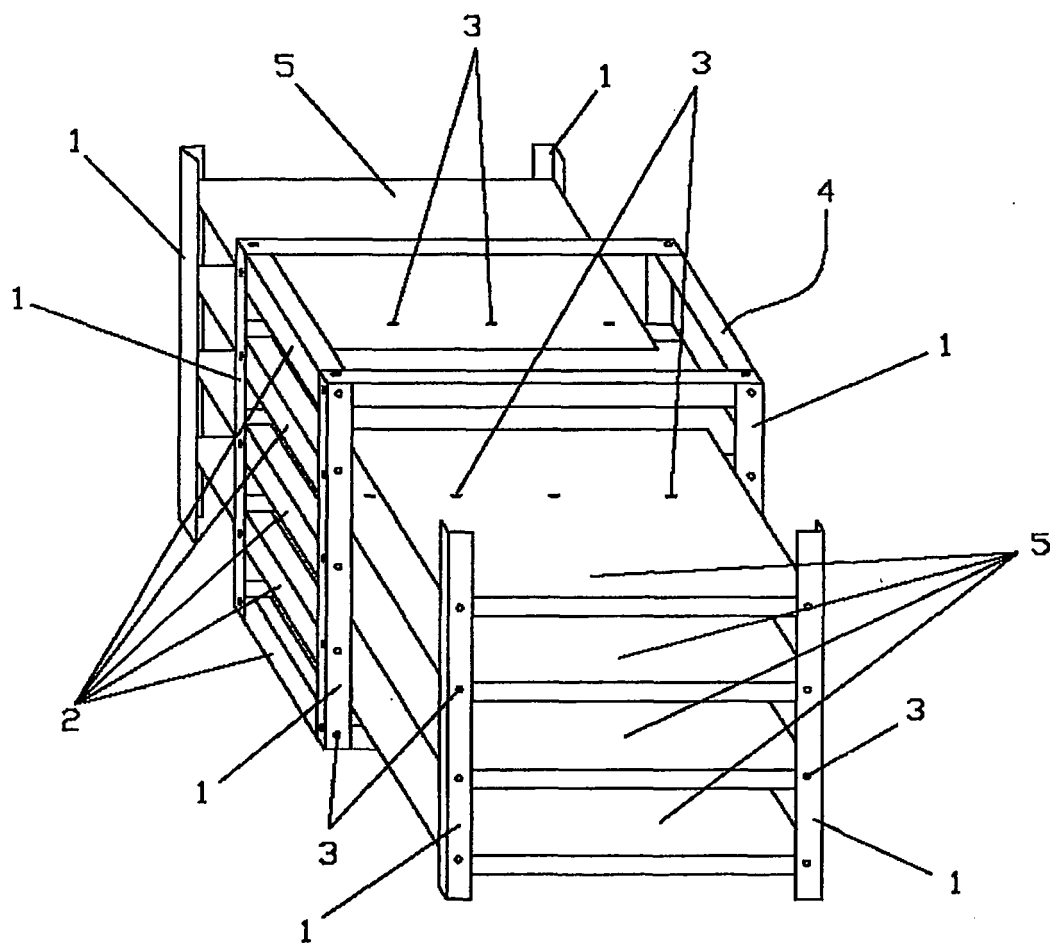


FIG. 2

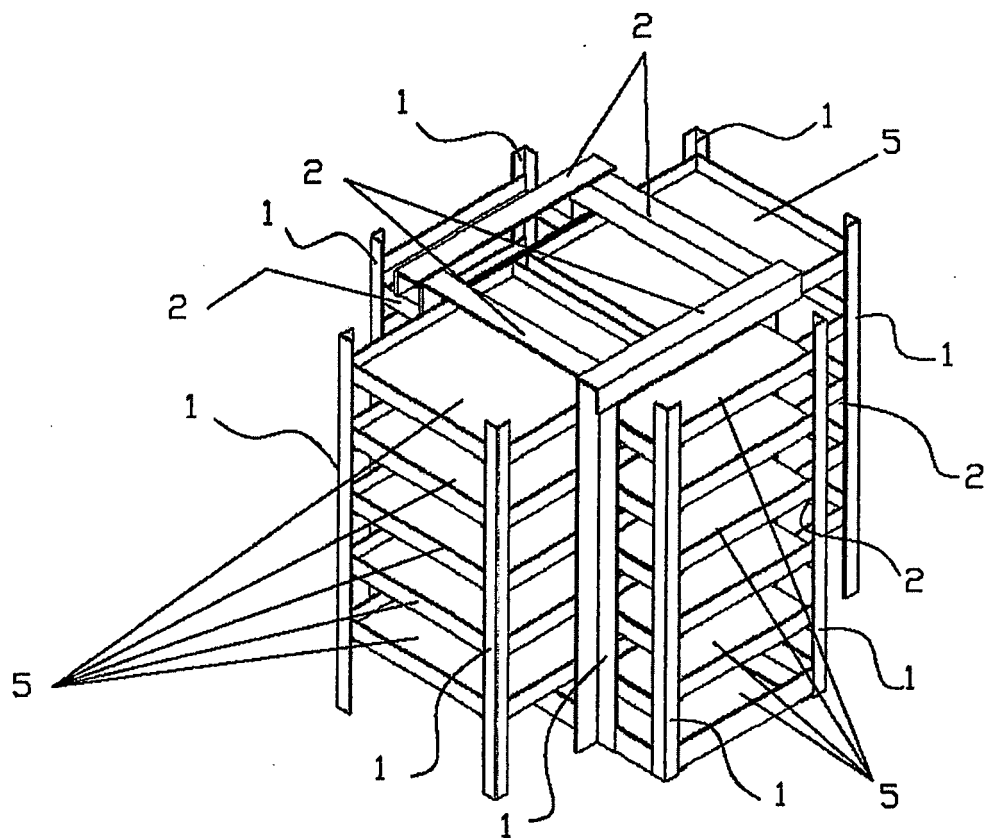


FIG. 3

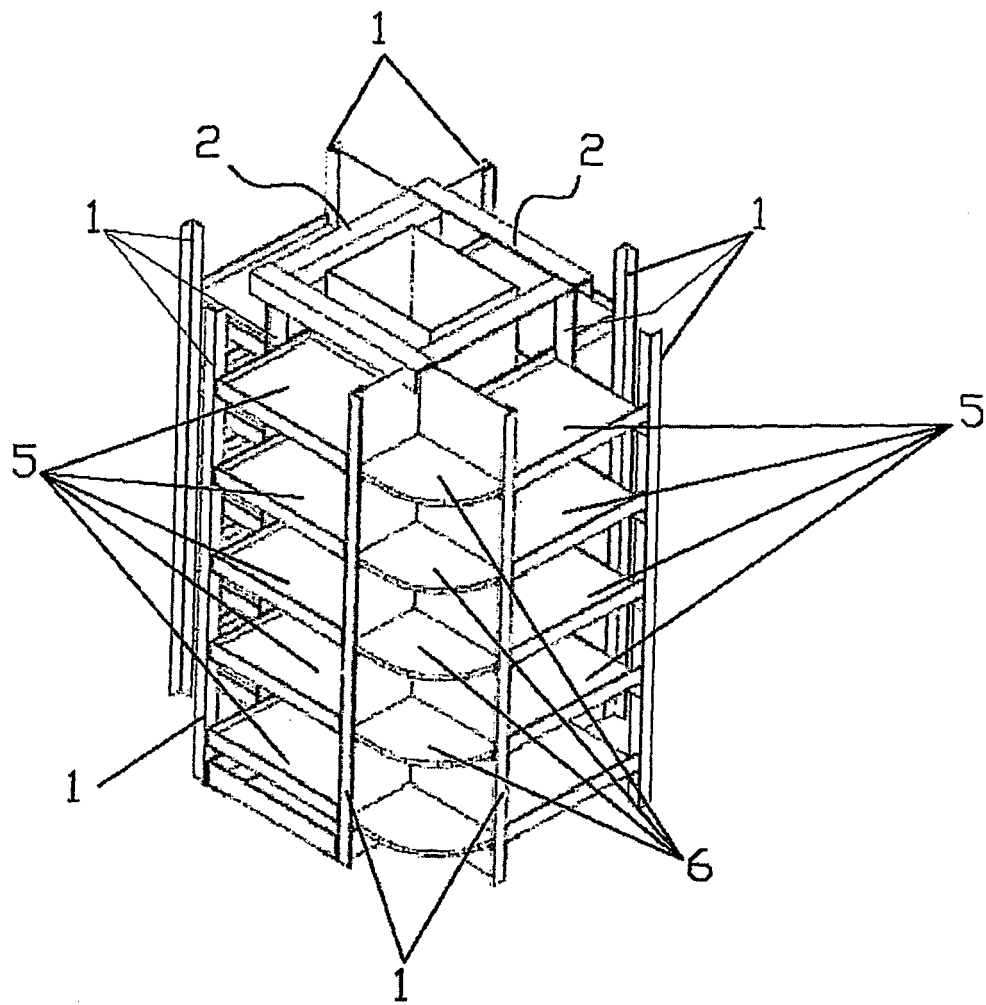


FIG. 4

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ MX 2005/000068

A. CLASSIFICATION OF SUBJECT MATTER		
IPC 8: A47F3/06 (2006.01) A47B53/00 (2006.01) B65D19/26 (2006.01) A47F 5/04 (2006.01)		
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)		
IPC 8: A47F, A47B, B65D19/		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
ES		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
CIBEPAT,EPODOC		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Y	figures 1-5, col. 1- col. 3 line 27.	11, 12
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☒ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
23 November 2005 (23.11.05)		01 December 2005 (01.12.05)
Name and mailing address of the ISA/ S.P.T.O.		Authorized officer
Facsimile No.		Telephone No.

Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ MX 2005/000068

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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