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(54) METHOD AND APPARATUS FOR SHIPMENT OF HANGING GOODS

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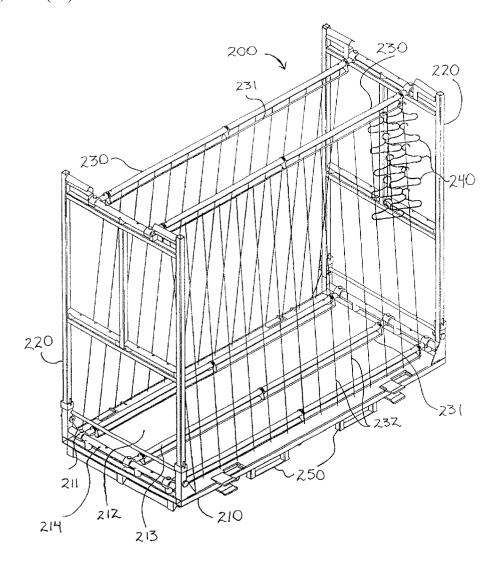
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(57)ABSTRACT

The invention defines a movable and horizontally foldable hanger-rack and method of using the same for transporting garments and other goods capable of being suspended from a hanger, between a manufacturer and a retail store. A hanger-rack includes a base structure having wheels, twoopposing side supports extending upwards from the base structure, and an upper support between the sides supports for supporting garments on hangers. The hanger-rack also includes a plurality of strings hanging from the upper supports that facilitate placement of hangers. In a horizontally collapsed position, the hanger-rack is less than 1/5 of its fully-extended size. A cargo system is defined including the moveable hanger-rack and a freight container for receiving the same.



PRIOR ART

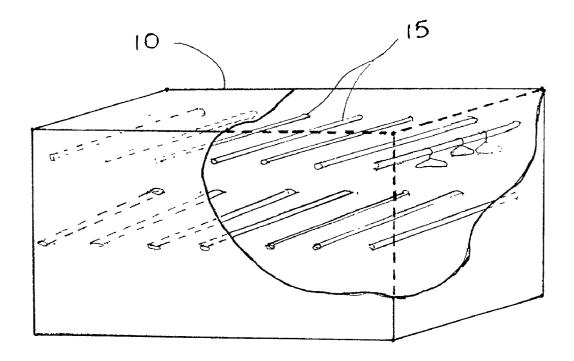
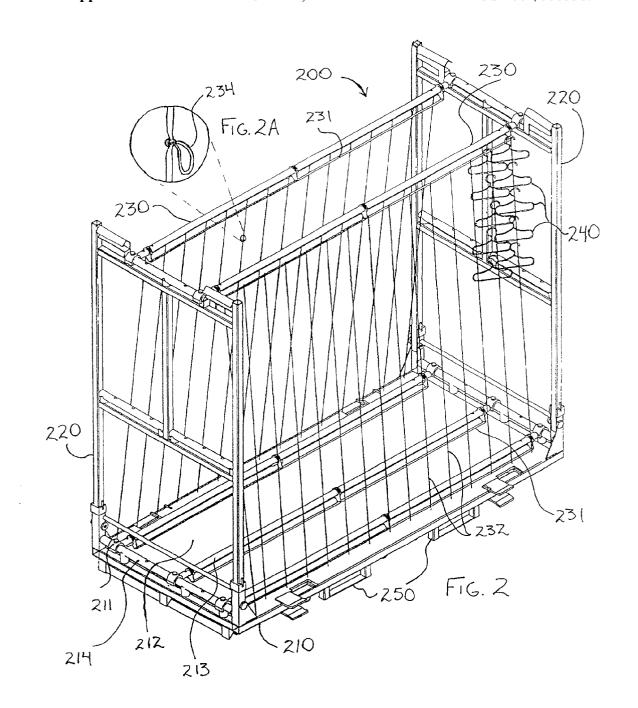
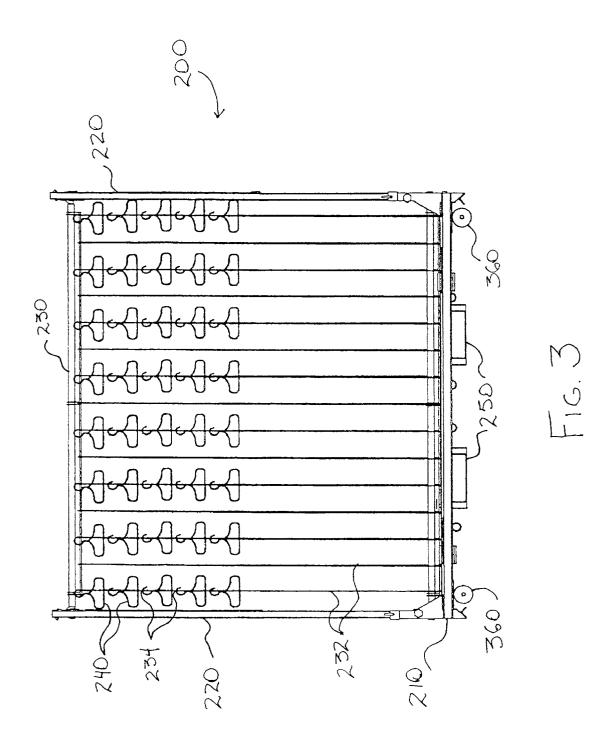
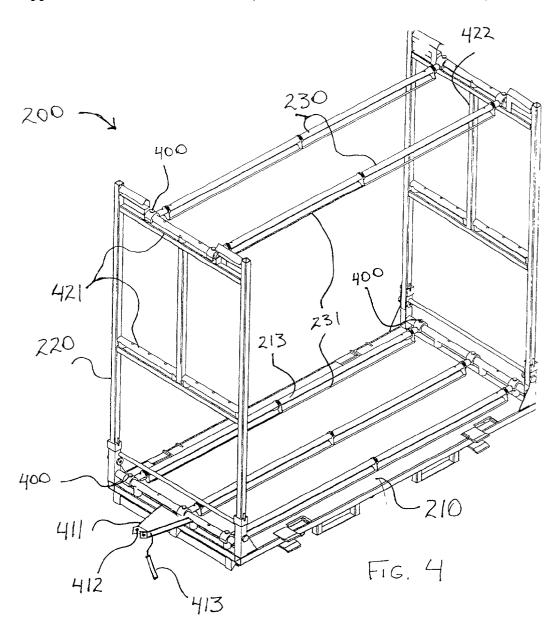
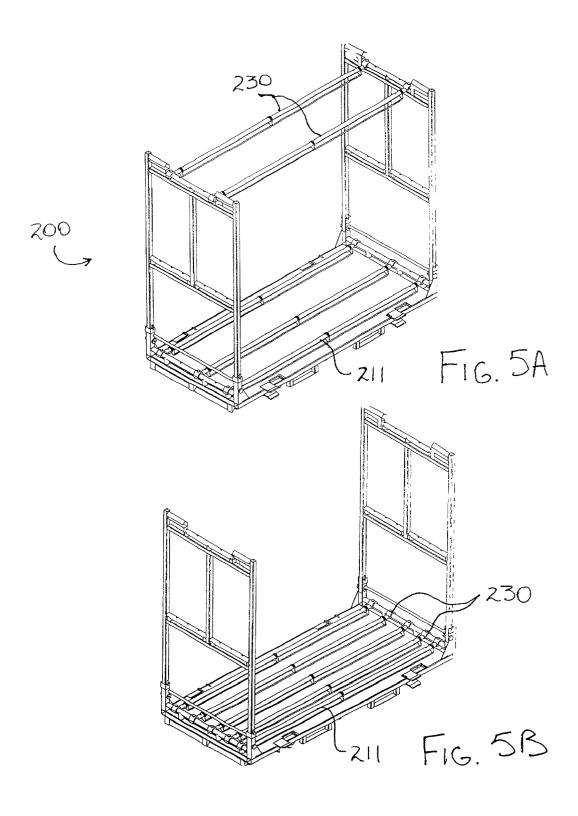


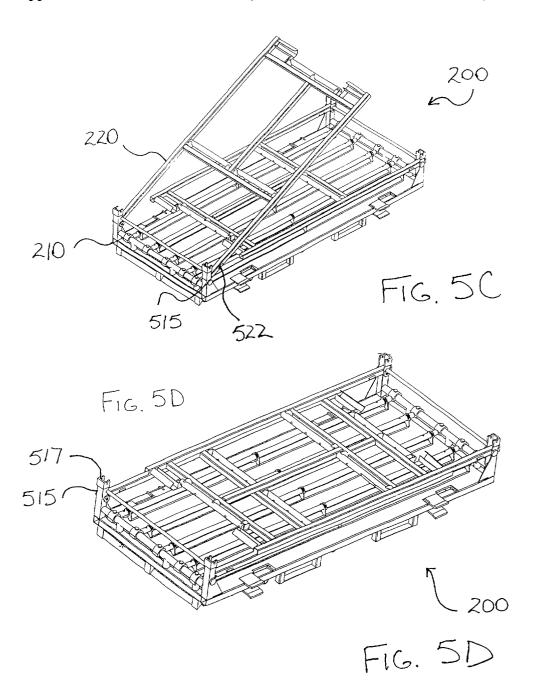
Fig. 1

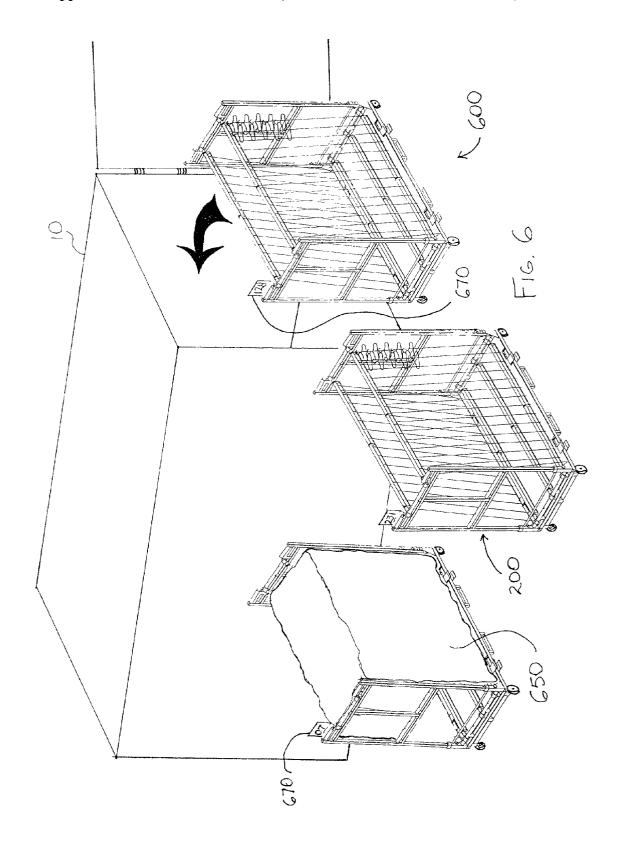












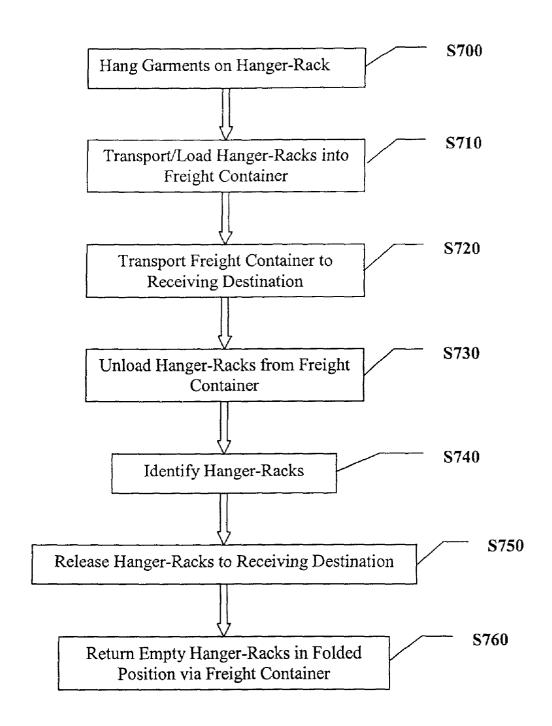


Fig. 7

METHOD AND APPARATUS FOR SHIPMENT OF HANGING GOODS

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] This invention relates to shipping containers and transportation of goods; and more particularly to an apparatus for transportation of garments on hangers.

[0003] 2. Related Art

[0004] The transportation of "floor-ready" garments from a manufacturer to a wholesaler or resale merchant is a common practice in today's garment industry. "Floor-ready" means that a hanger is shipped with the manufactured garments (often including price tags and other labels) to facilitate rapid and simplified deployment of such garments to a merchant's product display.

[0005] The "floor-ready" system, often referred to as Garments on Hangers (GOH) replaces the conventional "flat-packed" method of shipping garments. The flat-packed method typically involved the steps of (i) the manufacturer packing garments (including hangers) into cartons; (ii) shipping the cartons to merchants, and upon receipt; (iii) the merchant unpacking, ironing, and marking for sale the received garments to place them on display. The GOH system reduces labor costs associated with unpacking and sorting garments shipped from the manufacturer by placing the manufactured garments, including labels and price tags, on individual hangers before shipment to the manufacturer.

[0006] A conventional GOH system uses a freight container, as shown in FIG. 1. Freight container 10 is temporarily fixed with various metal rods 15 to facilitate hanging of the garments. Freight container 10 is, for example, a conventional forty-foot or twenty-foot cargo container used to transport various goods on ships, trucks, trains and airplanes. In order to fully utilize the space of the cargo container, a manufacturer may ship thousands of garments pertaining to orders for multiple merchants (e.g. up to 9000 pairs of trousers). Although the garments are intended to be of "floor ready" status, the consignee (or merchant) still needs a distribution center to unload, sort out, and route the large number of garments to its various retail outlets.

[0007] A major detriment of the conventional GOH system is that a great deal of labor is required to load and unload the garments to and from the cargo container. For example, finished garments may be hung in an assembly line during manufacture, moved from the assembly line to be transported on a carrying rack, and then re-hung onto the temporary rods 15 in freight container 10. Just the loading process may involve hanging up the garment three separate times (i.e., from the production line to assembly line in the factory; from the assembly line to a carrying rack; and from the carrying rack to the container). Moreover, the reverse process is basically required when the goods are unloaded from the freight container 10 to the placement of garments in a retail store. The present inventor estimates that merely the process of hanging up garments in the forty-foot cargotype of freight container 10 requires a specially trained worker at least eight hours.

[0008] Furthermore, the freight carrier spends time to temporarily arrange and subsequently remove rods 15 from

freight container 10, which increases freight costs. The inventor estimates the freight charges for this arrangement are increased by 30% for carriages from Asia to America, and by 100% for voyages within Asia.

[0009] A further disadvantage of the conventional GOH system is that, due to the heavy weight of the garments and turbulences involved in various types of cargo transportation (e.g., rough roads, rough seas, or air turbulence), rods 15 may collapse and the garments fall to the floor of freight container 10, resulting in stained or damaged articles and/or additional labor expenses for properly organizing the garments.

[0010] A yet further disadvantage of the conventional GOH system, is that since the cargo-type freight containers 10 require special adaptation with rods 15, it would be unusual and practically difficult to combine the shipment of garments with other types of goods. Consequently, a shipper of garments may be required to pay freight charges for an entire freight container 10 even though its respective goods do not require the full space of freight container 10.

[0011] Published PCT patent application WO 98/24699 to Immonen et al. discloses a transport cage for supporting hanging garments. Immonen discloses a transport cage having an opposed pair of vertical wall elements that, through a sequence of operations, can be placed in a return position by pivoting vertical wall elements thus making the cage assume an essentially "plow-like" angled position in which a number of thus angled tranport cages can be pushed home into each other forming a long continuous row of cages (page 5, lines 10-28). Patent GB 2,149,361A to Mitchell discloses a similarly folding nestable handling trolley.

[0012] A problem with these types of transport cages is that the cages collapse vertically (e.g., the base portions respectively fold to a vertical position) rather than horizontally. This limitation may lead to instability when only one or relative few cages are being return transported in the collapsed position. Moreover, since the conventional cages have multiple pivoting parts for collapsing, the overall expense of each transport cage is relatively high.

SUMMARY OF THE INVENTION

[0013] It is an object of the present invention to solve at least one of the foregoing problems by providing a movable hanger-rack foldable between a fully extended position and a collapsed position. The hanger-rack includes a horizontal base structure, at least two opposing side supports moveably connected thereto, and at least one upper support. When the hanger-rack is in the fully extended position, the opposing side supports are in a substantially vertical position and the upper support is disposed between the opposing side supports in a location above and approximately parallel to the horizontal base structure. When the hanger-rack is in the collapsed position, the upper support is disconnected and the opposing side supports are folded inward to a position approximately parallel to the horizontal base structure.

[0014] A further aspect of the present invention is to provide a method of transporting garments utilizing hanger-rack discussed above.

[0015] A yet further aspect of the invention defines a cargo system including a freight container and the moveable hanger-rack.

[0016] Further aspects of the invention will become apparent from the following detailed description of the preferred embodiments.

BRIEF DESCRIPTION OF THE DRAWING

[0017] FIG. 1 is a perspective view including a cut-away portion of a cargo freight container for transporting garments on hangers according to a system of the related art.

[0018] FIGS. 2 and 2A is a perspective view of an apparatus for transporting garments according to an exemplary embodiment of the present invention.

[0019] FIG. 3 is a side view of the apparatus shown if FIG. 2.

[0020] FIG. 4 is a perspective view of an apparatus for transporting garments according to another embodiment of the present invention.

[0021] FIGS. 5A-5D are sequential perspective views of the FIG. 4 apparatus being horizontally collapsed.

[0022] FIG. 6 is a perspective view of a cargo system according a preferred embodiment of the present invention.

[0023] FIG. 7 is a flow diagram of a preferred method for transporting garments.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0024] Embodiments of the present invention will now be further described with reference to the drawings, wherein like designations denote like elements.

[0025] An apparatus according to the present invention includes a movable hanger-rack facilitating the transportation of hanging goods in freight containers. As used herein the following terms are defined: (1) a "hanger-rack" means a free-standing module for supporting and transporting goods suspended by a hanger; (2) "garment" or "garments" means any article of clothing or other ornamentation intended to be worn by a human being or animal; (3) "hanger" is any structure used to suspend articles above ground and is not limited to conventional clothes hangers.

[0026] According to one preferred embodiment, a hangerrack includes a horizontal base structure and at least two opposing side supports extending upwards from the base structure. The hanger-rack also preferably includes an upper support disposed between the two opposing side supports from which garments on hangers are directly or indirectly supported.

[0027] FIG. 2 shows a perspective view of an example hanger-rack 200 according to one preferred embodiment. Hanger-rack 200 includes a base structure 210 and two opposing side supports 220. Hanger-rack 200 also includes a garment hanging structure. In the embodiment shown in FIG. 2, the garment hanging structure includes upper support 230 and a series of garment hanging lines 232 connected to upper support 230 at one end, and preferably, although not required, connected to base structure 210 at an opposite end. Each line 232 is configured to support garment hangers 240. In another embodiment shown in FIG. 4, the garment hanging structure includes only upper support 230, e.g., omitting lines 232.

[0028] The configuration of lines 232 to support garment hangers 240 may be implemented through a series of knotted loops 234 disposed along a length of nylon string, an example of which is shown in FIG. 2A. Lines 232 may be connected to upper support 230 by rods 231, which may be fixed or removably attached to upper support 230.

[0029] Lines 232 may also be removably attached to upper support 230 and base structure 210 by hooks (not shown) on the ends of each line 232. Other line configurations suitable for supporting hangers may be substituted for knotted loops 234 and/or nylon strings, some examples of which include: cloth or nylon straps having garment hanger receiving holes disposed along their respective lengths; chains having respective linked portions with openings large enough to fixedly support garment hangers 240; a series of plastic or aluminum bars with holes along their lengths, and so on. Lines 232 are preferably made of a flexible material such as industrial strength nylon, wire, rope or twine. While flexibility is not required, it is advantageous for a folding hanger-rack 200 as discussed further below.

[0030] As shown in FIG. 2, upper support 230 is disposed in a location inward from the width periphery of base structure 210. This configuration is advantageous in that garments hung on the garment hanging structure are fully contained within the peripheral boundaries of base 210 and opposing side supports 220, thereby protecting the hanging garments from damage and/or soiling.

[0031] Base structure 210 preferably includes frame 211 and optionally includes, platform 212. Base structure 210 may be constructed from any known rigid materials selected on the basis of weight, strength and durability considerations. For example, frame 211 may be made of steel, aluminum, an alloy or plastic. Frame 211 provides a rigid support for hanger-rack 200 and includes lengthwise bars 211 and widthwise bars 214. In a preferred embodiment, lengthwise bars 213 are of the same design as upper supports 230, including rods 231 for attaching lines 232. Upper supports 230 and lengthwise bars 213 are attached to their respective supporting elements (e.g. side supports 220 and width bars 214 of frame 211) via fasteners 400 (see FIG. 4). Fasteners 400 may be any type of conventional fastener but preferably includes a quick release mechanism for simplified removal of upper supports 230.

[0032] Platform 212 is composed of wood, steel, aluminum or plastic and is provided to minimize damaging and soiling garments-in-transport (e.g. if a garment falls off the garment support structure).

[0033] An optional cover 650 (FIG. 6) made of plastic or cloth is placed over the hanger-rack 200 to protect it and garments-in-transport from damage and soiling. If cover 650 is opaque, it provides anonymity, thereby improving security for the transported goods.

[0034] Hanger-rack 200 is capable of transporting garments from a point where the garments are manufactured to an end point such as a retail outlet or a distributor warehouse. Accordingly, the preferred dimensions of hanger-rack 200 are selected to be compatible with the expected mode of transportation (e.g., a cargo container to be loaded on a ship or airplane, the freight container of a semi tractor-trailer, box cars of a train). In a preferred embodiment of the present invention, the hanger-rack 200 is dimensioned for transport

in a conventional forty-foot cargo container commonly used by freight carriers. For use in this type of cargo container, each hanger-rack **200** preferably has a length of approximately 230 cm, a width of approximately 105 cm and a height of approximately 222 cm. With these dimensions, the conventional forty-foot cargo container may hold as many as eleven hanger-racks **200**. Moreover, each hanger-rack **200** can accommodate over 800 garments (e.g. silk shirts).

[0035] Hanger-rack 200 may optionally include slots 250, as shown in FIGS. 2-3, for facilitating movement by a fork-lift. Slots 250 may also provide passage for ties to secure each hanger-rack 200 in freight container 10. Chaining or tying slots 250 to the floor of the cargo container assists in securing hanger-rack 200 for transport. When multiple hanger-racks are loaded in freight container 10, a rod, plank or chain may be inserted through respective slots 250 of hanger-racks 200 to secure multiple hanger-racks together, thus providing increased stability.

[0036] Hanger-rack 200 optionally includes any conventional support for rolling, for example, a wheel or roller. As shown in FIG. 3, wheels 360 are preferably attached (fixed or removable) to each corner of base structure 210. Wheels 360 facilitate movement of hanger-rack 200 over short distances, for example, along a garment assembly line, in and out of freight container 10, between a delivery vehicle and a retail store, or through a warehouse. Wheels 360 may be swing casters or any other known type of wheel and are preferably capable of being locked when it is desired to prevent hanger-rack 200 from unintentionally moving, for example, during transport.

[0037] FIG. 4 illustrates an embodiment of hanger-rack 200 having a garment hanging structure without lines 232 (e.g., hangers are supported directly by upper supports 230 or other means). This embodiment may be preferable for transporting heavier garments such as coats and the like. Upper supports 230 are preferably adjustable, both vertically and horizontally to accommodate different types of garments being hung together (e.g., blouses and suits, pants and coats). Moreover, the number of upper supports 230 may vary depending on the type and number of garments desired to be supported. For example, when transporting a small number of coats, one support may be used. When transporting a large number of small items such as shorts, hats or shoes, eight or more upper supports 230 may be used in a single hanger-rack 200. Articles may be supported on or over upper support 230.

[0038] Opposing side supports 220 consist of metal, wood, alloy or plastic supports having any geometrical peripheral shape known for support purposes such as a rectangle, square, triangle, circle, and/or oval. As shown in FIG. 4, side supports 220 are rectangular supports. With base structure 210, side supports 220 form a box-shaped hanger-rack 200. Side supports 220 include horizontal members 421 for supporting upper supports 230. Horizontal members 421 may be fixed or adjustable and may be suitably positioned to accommodate a desired size or quantity of hanging articles. The number of horizontal members 421 on each side support 220 may vary depending on strength requirements, taking into consideration the type of material used for side supports 230, and the number and type of hanging structures to be supported.

[0039] Side supports 220 may include vertical members 422 to provide additional strength and rigidity to hanger-

rack 200. Alternatively, side supports 220 may be configured without horizontal and vertical members by providing a solid panel (not shown) having slots for supporting upper support members 230.

[0040] Connecting members may also be provided on peripheral locations of hanger-racks to facilitate side-by-side and/or end-to-end inter-connection of multiple hanger-racks as well as towing of hanger-racks by a motorized vehicle. By including one or more connecting members, hanger-racks may be secured together for stability during transportation and/or linked together for moving multiple hanger-racks in a train-like manner (when including wheels 360).

[0041] As shown in FIG. 4, connecting member 411 is fixed or attached by a swivel on an end portion of base structure 210 and includes an extending portion with coupling means (e.g., holes 412 and pin 413). Connecting members 411 may alternatively be provided on upper portions of the side supports 220. Connecting member 411 is selected (as well as the location thereof) based on the type of connection desired. For example, a swivel connection may be used for train-like movement of multiple hangerracks 200 while a rigid connection may be preferable to provide stability of interconnected hanger-racks 200. Connecting member 411 may be disposed on any one or all peripheral sides of base structure 210 and a combination of swivel and rigid connections may be used.

[0042] In a preferred apparatus for transporting garments on hangers, hanger rack 200 is foldable for storage. By providing a foldable hanger-rack 200, once a shipment has been delivered to its destination and garments have been removed; hanger-rack 200 may be folded to an essentially flat position for storage or returning the hanger-racks to their origin, for example, to the manufacturer. Foldable hanger-rack 200 is configured to be stacked on or beneath additional hanger-racks 200. Preferably, foldable hanger-rack 200 is designed to be folded or collapsed down to a size of about ½ or less of its fully extended size.

[0043] FIGS. 5A-5D illustrate hanger-rack 200 in various positions illustrating a method for collapsing the hanger-rack 200. FIG. 5A shows a perspective view of hanger-rack 200 in a fully extended or working position. FIG. 5B shows the hanger-rack of FIG. 5A after upper supports 230 have been removed and stowed. Preferably, upper supports 230 are similarly constructed to the lengthwise bars of frame 211, and thus upper supports 230 may be stowed adjacent to the lengthwise bars of frame 211, as shown by the example of FIG. 5B.

[0044] FIG. 5C illustrates the foldable hanger-rack of FIG. 5B having partially collapsed side supports 220. Side supports 220 are moveably connected to base structure 210 and fold inwardly towards each other to lay horizontally in a collapsed position as shown in FIG. 5D. Preferably, side supports 220 and base structure 210 are interconnected by a swivel connection 515 with locking means. With this design, hanger-rack 200 is an integrated unit, with the exception of stowed upper supports 230 (although upper supports 230 may also be hingedly connected). Foldable hanger-rack 200 may also be configured to have side supports 220 that fully separate from base structure 210 by for example, by removing side supports 220 from holes in base structure 210.

[0045] Swivel connection 515 also may include notches 517 that facilitate locking of side supports 220 in an upright

manner. Side supports 230 may include spring-loaded pins 522 that project outwardly via a spring (not shown). Spring loaded pins 522 fit into notches 517 of swivel connection 515 when the hanger-rack 200 is in the fully extended position. By pressing spring loaded pins inward, side supports may be collapsed as shown in FIG. 5C.

[0046] Notches 517 may also facilitate stacking another hanger-rack (not shown) on top of the folded hanger rack 200 shown in FIG. 5D. For example, when hanger-rack 200 includes wheels 360, the wheel axels (not shown) may fit into notches 517.

[0047] According to the preferred dimensions of hanger-rack 200 discussed above, as well as proportional equivalents thereof, side supports 220 may be collapsed and fully contained within the horizontal periphery of base structure 210. As previously mentioned, foldable hanger-rack 200 folds to a horizontally collapsed position that is less than ½ of the size of the fully extended position. In the preferred embodiment, the height of hanger-rack 200 is reduced from 222.09 cm (fully extended) to a height of 33 cm (collapsed). The conventional forty-foot cargo container may transport up to fifty-five collapsed hanger-racks 200. Consequently, a shipper may require five cargo containers for an outgoing shipment of hanger-racks in a fully extended position, but only one cargo container to bring back the collapsed hanger-racks 200 of the original shipments.

[0048] Turning now to FIG. 6, a cargo system according to the present invention is shown. The cargo system preferably includes a freight container 10 and at least one hanger-rack 200. Freight container 10 may be any type container for transporting goods, for example, the previously-mentioned forty-foot cargo container used for shipping, a trailer portion of a tractor-trailer, a box car of a train, a cargo bay in a ship or airplane, or a portion of a delivery vehicle. Hanger-rack 200 is preferably of the type and design discussed above, however, any free-standing module for transporting garments hung from hangers may be used.

[0049] In the preferred cargo system 600, hanger-racks 200 are secured and stabilized in freight container 10 by any of the methods discussed above (e.g., interlocked together, secured to the floor of the freight container, and if provided, wheels 360 are in a locked position). Hanger-rack covers 650 are provided to cover each hanger-rack 200 to prevent garments from being soiled or damaged and provide improved security. Hanger-rack covers 650 may be plastic (opaque or translucent) or cloth covers that cover only the garment hanging portions of hanger-rack 200 (as shown) or may cover the entirety of each hanger-rack above wheels 360. Hanger-rack covers 650 may either be attached to hanger-rack 200 via fixing means, or free-floating (i.e., not attached). If attached, fixing means would secure hangerrack cover 650 to any portion of hanger-rack 200 and may include any known fasteners such as buttons, snaps, hooks, ties, etc.

[0050] Each hanger-rack 200 of cargo system 600 also preferably includes an identification device providing information related to the garments contained in each hanger-rack 200. The particular information provided by the identification device significantly depends on the type of identification device used.

[0051] As shown in FIG. 6, an identification device 670 is displayed on each hanger-rack 200. As shown, identification

device 670 is a number plate wherein the displayed number designates the particular hanger-rack 200. For example, during manufacture, each garment ordered for a particular designation will be placed on one or a group of hanger-racks 200. The number displayed on the number plate is written (or entered by computer) on the invoice or order. When unloading hanger-racks 200 from freight container 10, the ultimate destination of each hanger-rack 200 is readily determined based on the number displayed on identification device 670.

[0052] Many variations of identification device 670 are possible such as including a scanning bar code displayed externally on any portion of hanger-rack 200, wherein when scanned by a computer system (not shown), the bar code provides information relating to: an ultimate destination; each garment contained within the hanger-rack 200; pricing information for each garment; total cost of the order; identification of the number of additional hanger-racks 200 associated with the order, etc. Moreover, a bar code can be used to update tracking information of garments and shipments using conventional techniques. Tracking information could include information pertaining to the location along a shipping route, at which the bar code is scanned, and time/date of delivery to the ultimate destination, etc.

[0053] Identification device 670 could also be as basic as including color-coded markings or attaching a packing list or invoice in a prominent external location of each hanger-rack 200 as well as on the hanger-rack cover 650. In any event, the use of identification devices 670 for each hanger-rack 200 improves overall efficiency and speed of distribution for garments shipped in cargo system 600.

[0054] Next, a preferred method of transporting garments on hangers will be explained with reference to FIG. 7. When completing a "floor-ready" garment, a garment manufacturer hangs the "floor ready" garment on a selected hangerrack S700. A "selected hanger-rack" means that the hangerrack will be, or is predetermined to be, bound for a specific receiving destination such as a distributor's warehouse or a retail store. Once the selected hanger-rack is either full or the order for the receiving destination is completed within the selected hanger-rack, the selected hanger-rack is transported into a freight container S710. As previously mentioned, transporting hanger-racks 200 into a freight container 10 is preferably accomplished by forklift, by rolling hanger-racks 200 on their respective wheels 360, or a combination thereof. It should be noted that transporting hanger-rack 200 into a freight container may include one movement of the hanger-racks 200, or a sequence of operations, for example, rolling the hanger-racks 200 into the back of a truck, unloading from the truck and reloading by forklift into another freight container, for example, the forty-foot cargo container.

[0055] Next, the freight container 10 is transported to a receiving destination S720. As described herein, a receiving destination can include: (i) a distribution point such as a shipping yard, train station, or airport; (ii) a storage facility, for example, a warehouse taking delivery of the garments for future distribution; and (iii) a final destination such as retail or wholesale store accepting delivery of garments.

[0056] After transporting the freight container 10 to the receiving destination, the hanger-racks 200 are unloaded from the freight container S730, optionally identified S740

by an identification device 670, and released to the receiving destination S750. Released to the receiving destination means that custodianship of the hanger-racks, or garments therein, is transferred to the receiving destination. In the case where the receiving destination is a distribution point or a storage facility, the hanger-racks 200 may undergo additional steps of loading S710, transporting S720, unloading S730, identifying S740 and releasing S750.

[0057] When a receiving destination is finished with hanger-racks 200 (e.g., garments on hangers have been transferred to display racks), the hanger-racks 200 are folded and returned via a freight container 10 to the origination point, for example, the garment manufacturer.

[0058] The present invention specifically addresses the shipment of garments on hangers. However, it should be noted that the invention is not limited solely to the transport of garments, but may also be used and/or easily adapted for transport and shipping of any goods, and is particularly advantageous, although not limited to, goods that may be hung on hangers such as those found on display in a retail store.

[0059] Unless contrary to physical possibility, the inventor envisions the methods, devices and systems described herein: (i) may be performed in any sequence and/or combination; and (ii) the components of respective embodiments combined in any manner including combination with components of other embodiments.

[0060] Although there have been described preferred embodiments of this novel invention, many variations and modifications are possible and the present invention is not limited by the specific disclosure above, but rather should be limited only by the scope of the appended claims and their legal equivalents.

What is claimed is:

- 1. An apparatus for transporting garments on hangers comprising:
 - a movable-hanger rack foldable between a fully extended position and a collapsed position, said movable hanger-rack comprising a horizontal base structure, at least two opposing side supports moveably connected thereto, and a garment hanging structure, wherein when the movable hanger-rack is in the fully extended position, the at least two opposing side supports are in a substantially vertical position and the garment hanging structure is disposed between the at least two opposing side supports in a location above the base structure, and wherein when the movable hanger-rack is in the collapsed position, the garment hanging structure is at least partially disconnected and the at least two opposing side supports are moved inward to a position substantially parallel to the base structure.
- 2. The apparatus according to claim 1, further comprising at least two wheels disposed on said base structure to facilitate movement of the movable hanger-rack.
- 3. The apparatus according to claim 1, further comprising slots disposed on said base structure to facilitate at least one of, (i) movement of the movable hanger-rack by a forklift, and (ii) securing the moveable hanger-rack.
- 4. The apparatus according to claim 1, wherein when in the collapsed position, the movable hanger-rack is config-

- ured to be vertically stacked on and under additional similarly constructed movable hanger-racks in respective collapsed positions.
- 5. The apparatus according to claim 1, wherein the garment hanging structure comprises a plurality of garment hanging strings connected to a at least one upper support.
- 6. The apparatus according to claim 5, further comprising at least two wheels disposed on said base structure to facilitate rolloing of the movable hanger-rack.
- 7. The apparatus according to claim 6, wherein when in the collapsed position, the movable hanger-rack is configured to be vertically stacked on and under additional similarly constructed movable hanger-racks in respective collapsed positions.
- 8. The apparatus according to claim 1, further comprising an identification device displayed on a peripheral location of the moveable hanger-rack for providing information relating to at least one of, the type and number of garments transported in the movable hanger-rack, tracking of garments transported in the moveable hanger-rack, destination of the movable hanger rack, and identification of additional moveable hanger-racks associated with a customer order.
- **9**. The apparatus according to claim 7, further comprising an identification device displayed on a peripheral location of the moveable hanger-rack for identifying information relating to shipment of garments to be placed in the moveable hanger-rack.
- 10. The apparatus according to claim 1, further comprising at least one connecting member disposed on a peripheral location of the moveable hanger rack, the at least one connecting member configured to connect with similar connecting members of additional similarly constructed hangerracks.
- 11. The apparatus according to claim 9, further comprising at least one connecting member disposed on a peripheral location of the moveable hanger rack, the at least one connecting member configured to connect with similar connecting members of additional similarly constructed hangerracks.
- 12. The apparatus according to claim 1, wherein the moveable hanger-rack is configured to be less than or equal to ½ of its size in the collapsed position as compared to the size of the moveable-hanger-rack in the fully extended position.
 - **13**. A method of transporting garments comprising:
 - hanging at least one garment on a moveable hanger-rack that is foldable between a fully extended position and a horizontally collapsed position, the placement of the at least one garment occurring while the moveable hanger-rack is in the fully extended position;

transporting the moveable hanger-rack to a receiving destination; and

- releasing at least one of (i) the moveable hanger-rack or (ii) the at least one garment contained therein, to the receiving destination.
- **14**. The method according to claim 13 wherein transporting the moveable hanger-rack comprises:

loading the moveable hanger-rack into a freight container; moving the freight container to the receiving destination; and

unloading the moveable hanger-rack from the freight container.

- 15. The method according to claim 13, wherein after releasing, the method further comprises, returning the moveable hanger-rack in the horizontally collapsed position.
- **16**. The method according to claim 14, wherein a plurality of the moveable hanger-racks containing garments are transported in the freight container to the receiving destination.
- 17. The method according to claim 16, wherein at least one of the plurality of moveable hanger-racks is unloaded at the receiving station, wherein unloading comprises identifying the at least one of the plurality of moveable hanger-racks from a identification device located on a periphery thereof.
- 18. The method according to claim 14, wherein loading the moveable hanger-rack into the freight container includes securing the moveable hanger rack in the freight container by at least one of, (a) placing wheels of the moveable hanger-rack in a locked position and (b) securely connecting the moveable hanger-rack to at least one of, (i) the freight container and (ii) a similarly constructed moveable hanger-rack located in an adjacent position.
- 19. The method according to claim 16 further comprising returning empty moveable hanger-racks in the horizontally collapsed position.
- 20. The method according to claim 14, wherein a plurality of floor-ready garments are respectively hung in a plurality of the moveable hanger-racks each having respective wheels, and wherein loading of the plurality of moveable hanger-racks into the freight container comprises:
 - connecting the plurality of moveable hanger-racks via respective connecting members disposed thereon; and
 - moving the connected plurality of moveable hanger-racks into the freight container in a train-like manner.
- 21. The apparatus for transporting garments on hangers according to claim 1 further comprising:
 - a freight container configured to receive the moveable hanger-rack therein.
- 22. The apparatus for transporting garments on hangers according to claim 12 further comprising:
 - a freight container configured to receive the moveable hanger-rack therein.

- 23. A cargo system for transporting goods on hangers comprising:
 - a plurality of foldable hanger-racks each having a fully extended position for transporting goods on hangers and a horizontally collapsed position for storage; and
 - a freight container configured to contain and transport the plurality of foldable hanger-racks.
- 24. The cargo system according to claim 23, wherein each of the plurality of foldable hanger-racks are configured to be vertically stacked upon or beneath one another when in the horizontally collapsed position.
- 25. The cargo system according to claim 24, wherein the freight container and foldable hanger-racks are configured and dimensioned to enable, (i) when foldable hanger-racks are in the fully extended position, eleven foldable hanger-racks to be contained within the freight container, and (ii) when foldable hanger-racks are in the horizontally collapsed position, fifty-five foldable hanger-racks to be contained within the freight container.
- **26**. The cargo system according to claim 23, further comprising a cover for each foldable hanger-rack to protect transported goods from damage and soiling.
- 27. The method according to claim 20, wherein a corresponding cover is placed over each of the plurality of moveable hanger-racks before loading into the freight container.
- **28.** An apparatus for transporting goods on hangers between a manufacturer and a receiving destination, the apparatus comprising:
 - a moveable hanger-rack having a fully extended position for transportation of goods on hangers and a horizontally collapsed position for storage of the moveable hanger-rack.
- **29**. The apparatus according to claim 28 further comprising a plurality of wheels disposed on a bottom side of the moveable hanger-rack.
- **30**. The apparatus according to claim 29 wherein the moveable hanger-rack is configured such that when in the horizontally collapsed position, the moveable hanger-rack is vertically stackable on and beneath additional similarly constructed moveable hanger-racks.

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