



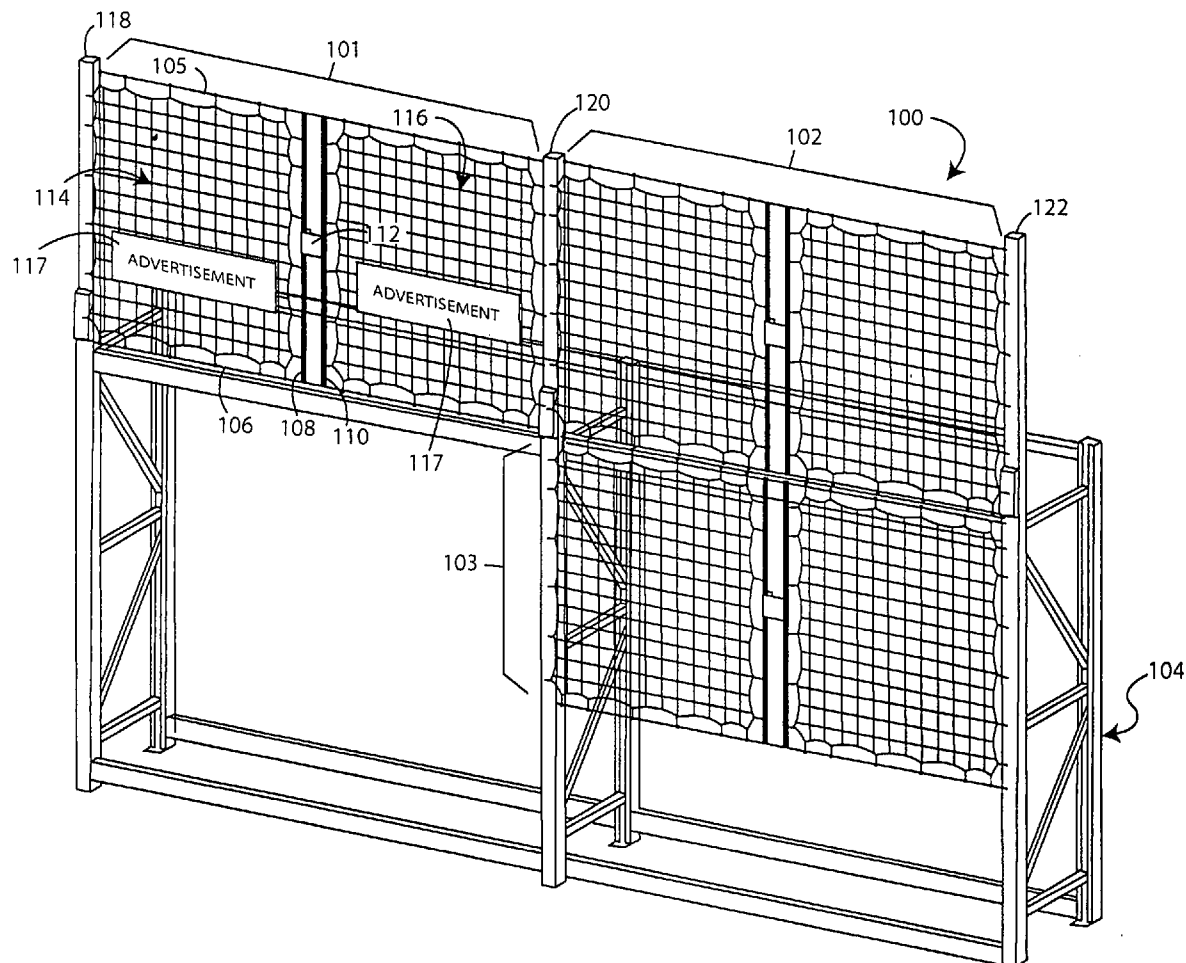
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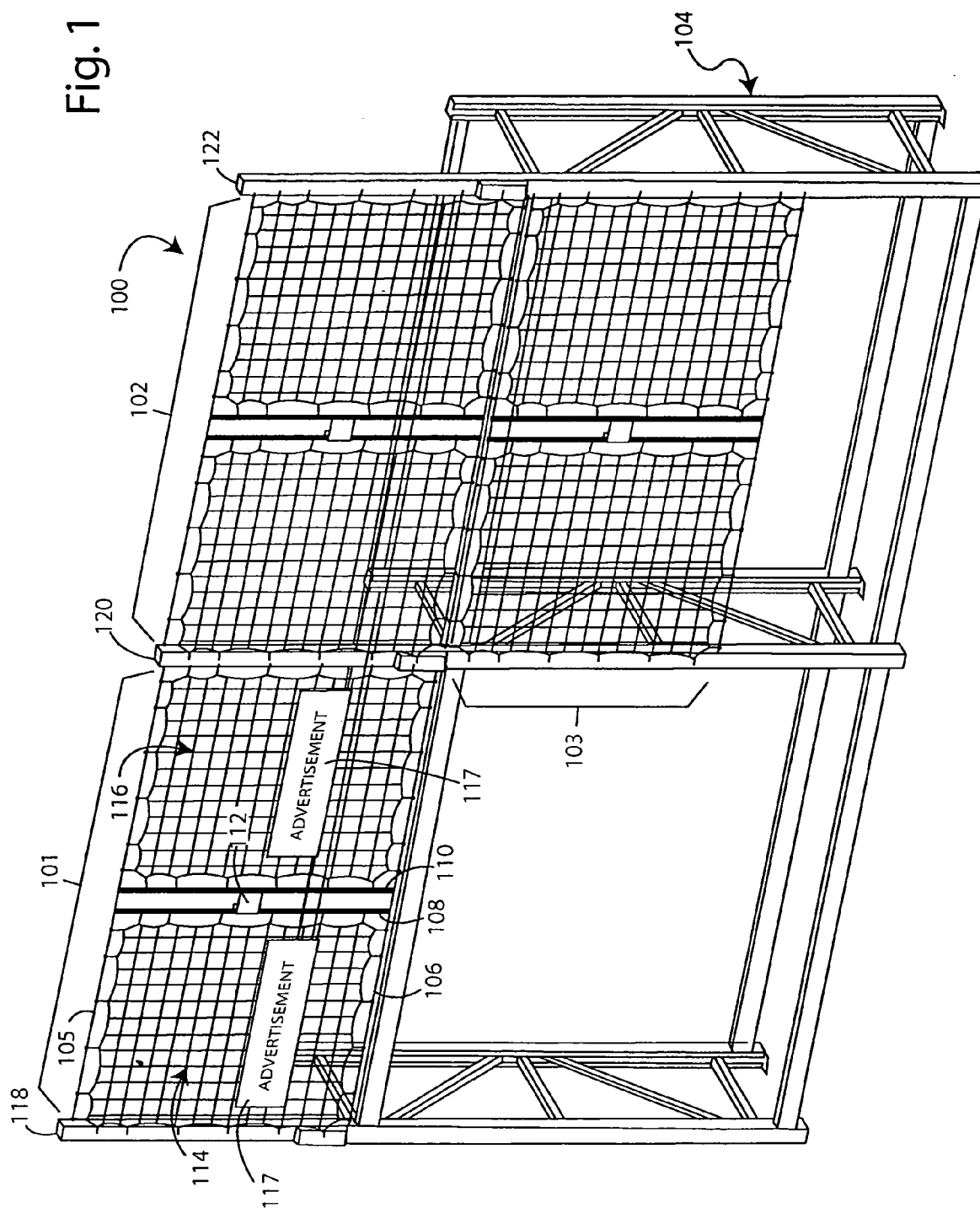
(19) **United States**(12) **Patent Application Publication**
Calleja(10) **Pub. No.: US 2004/0182809 A1**(43) **Pub. Date: Sep. 23, 2004**(54) **WAREHOUSE MATERIAL-RACK
ADVERTISING SYSTEM**(52) **U.S. Cl. 211/180; 211/183**(76) **Inventor: Michael J. Calleja, Brisbane, CA (US)**(57) **ABSTRACT**

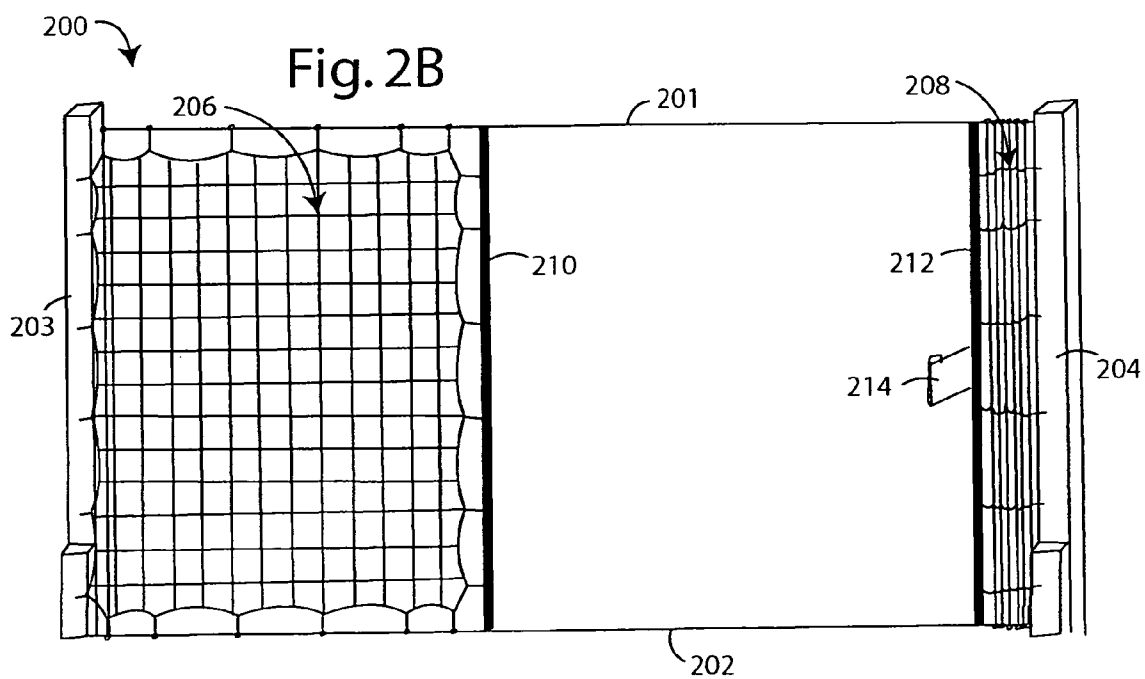
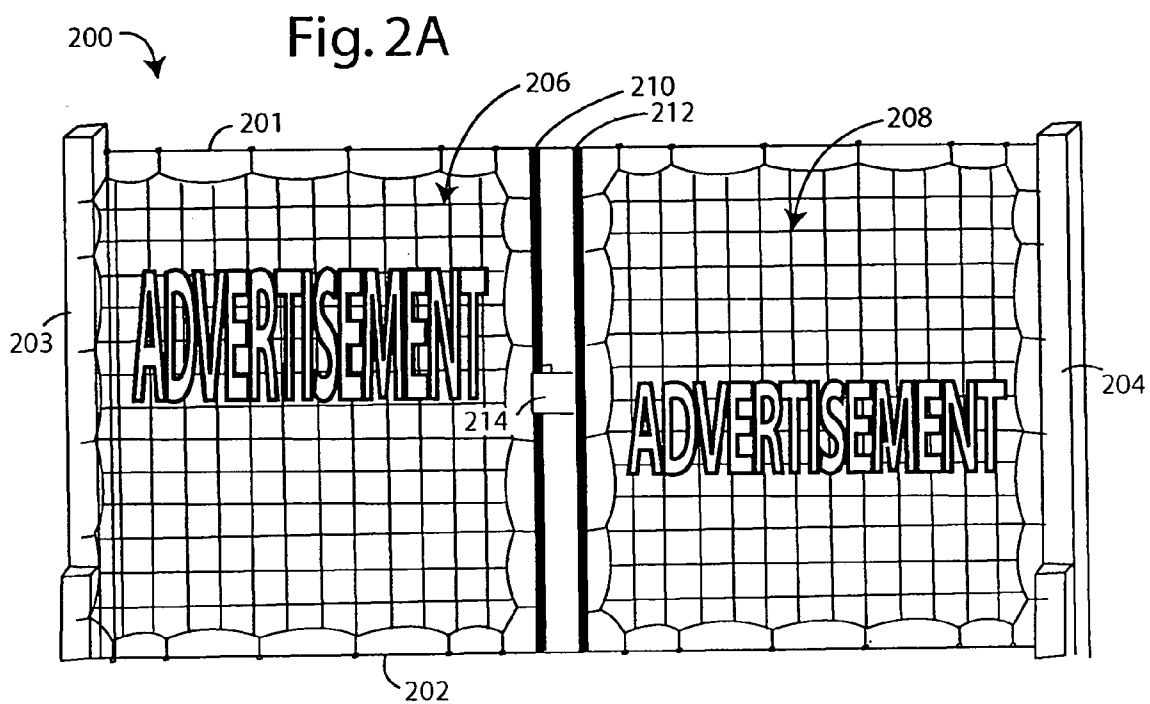
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A warehouse shelving system comprises a material rack providing for storage of products on-sale and in a location visited by customers. A curtain netting is attached to the material rack. An advertisement promoting a company, product, and/or service is disposed on the curtain netting and visible to the customers. Alternatively, a warehouse material-rack safety-netting system includes left and right vertical extension posts that bolt to the face of the top bay of an open material rack. A two-part curtain netting that parts in the middle is supported between horizontal, parallel top-and-bottom wire ropes on hooks. The left and right edges of the curtain netting are hooked to the vertical extension posts with carabiners. A latch is provided at the center to secure the two-parts of the curtain netting together. The curtain material is painted, embroidered, or other patterned with advertising to promote a company, product or service.







WAREHOUSE MATERIAL-RACK ADVERTISING SYSTEM

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to in-store advertising, and more particularly to advertising placed on material safety netting that contains products on sale.

[0003] 2. Description of Related Art

[0004] Shelves and racks are a convenient way to store items, and stored many levels high such can maximize floor space. A typical warehouse retail store like The Home Depot has material racks that are two, three, and four levels high. Heavy items, like backup store inventory on a pallet, is placed and fetched from high above by a forklift. These heavy items can weigh 10-200 pounds.

[0005] Heavy items placed ten to twenty feet high above aisles in material racks and on shelves can present a significant and not-so-rare personal injury risk. Shaking, bumping, and poorly stacked items can come tumbling down and hurt people below, or at a minimum damage the product.

[0006] Not surprisingly, a number of different devices and methods have evolved to address these problems. The Law too has entered the picture with OSHA regulations, and personal injury lawsuits. New company procedures, union work rules, and plain common sense now dictate that an effective restraint, barrier, or guard system be installed on the higher shelves and rack to prevent falling debris.

[0007] As could be expected, some methods and devices are better than others. Conventional safety products can be expensive to buy, and difficult to work with or install. A simple netting secured all around the shelf opening can be effective if the netting is strong enough and secured well. But the way the netting is secured and constructed can mean opening the net to access the shelf is made very difficult, in some cases requiring a technician to climb high above and use hand tools to open and/or close the net. Sinco/Sala (Middletown, Conn.), InCord (East Haddam, Conn.), and others market rack guard systems that use different kinds of barriers and attachment hardware. For example, Sinco/Sala uses a nylon mesh that is stretched inside a perimeter frame of taut wire rope. So-called EZ-clips are used to attach the netting to the wire rope frame. InCord markets their SURE-GARD synthetic mesh that is able to stretch under load. A variety of mesh-size openings are offered for a range of contained item types and sizes.

[0008] A MEZZNET-DEFENSE-SYSTEM is marketed by BayNets (East Haddam, Conn.) that raises and lowers flexible netting hung from a rod that is guided up and down by a pair of side posts. Open-sided mezzanines with these systems are accessed by operating a cable and pulley system that connects to the rod and runs inside the two side posts. The cable and pulleys can be manually cranked, or powered by an electric motor. BayNets' advertising literature suggests that these systems meet federal Occupational Safety and Health Administration (OSHA) fall-protection standards. Screens and nets that protrude out, or that have protruding fasteners, can hook and catch people and equipment operating nearby. So what is needed is a netting system that does not protrude into the aisle ways.

SUMMARY OF THE INVENTION

[0009] Briefly, a material-rack safety-netting embodiment of the present invention comprises left and right vertical extension posts that bolt to the face of the upper bay of a material rack. A two-part curtain netting that parts in the middle is supported between horizontal, parallel top-and-bottom wire ropes on hooks. The left and right edges of the curtain netting are hooked to the vertical extension posts with carabineers. A latch is provided at the center to secure the two-parts of the curtain netting together. The curtain material is painted, embroidered, or other patterned with advertising to promote a company, product or service.

[0010] An advantage of the present invention is that a safety netting is provided that is a very visible form of in-store advertisement.

[0011] Another advantage of the present invention is that a safety netting is provided that is easy to install.

[0012] A further advantage of the present invention is that safety netting systems are provided that are simple to operate.

[0013] The above and still further objects, features, and advantages of the present invention will become apparent upon consideration of the following detailed description of specific embodiments thereof, especially when taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 is a perspective view of a non-preferred safety netting system installed on a material rack shelving unit; and

[0015] FIGS. 2A and 2B are diagrams representing the opening and closing of the screens and the use of the clasp.

DETAILED DESCRIPTION OF THE INVENTION

[0016] FIG. 1 illustrates a safety netting system embodiment of the present invention, referred to herein by the reference numeral 100. The safety netting system 100, in this example, comprises three screened sections, 101-103, that are attached to a material rack 104. Such combination would be used in an ordinary warehouse, or in a warehouse store like The Home Depot. The principle purpose of the safety netting system 100 is to keep objects on the overhead shelves of the material rack 104 from falling down onto the floor, for whatever reason. A further purpose is to carry advertising related to a company, product, and/or service. Such advertising must be visible to persons passing through in the aisles in front.

[0017] Each of the three sections of the safety netting system 100 is exemplified by section 101, which includes a top horizontally strung wire rope 105 and a bottom strung wire rope 106. A left-screen bar 108 and a right-screen bar 110 are configured to slide along the wire ropes and close at the middle with a snap latch 112.

[0018] A left screen 114 is fixed at its left edge to the framework of the material rack 104. Similarly, a right screen 116 is fixed at its right edge at the opposite side of the shelf opening to the material rack framework. The screens comprise flexible netting of canvas, sheet plastic, nylon rope,

chain link fencing, rigid vertical links, etc. An advertisement **117** is placed on either or both of the screens **114** and **116**, e.g., by painting, embroidery, stenciling, light projection, reflection, silk-screening, printing, or other patterning. Such must catch the eye of passersby and be easily visible, and any logos, ad bugs, or words must be readable.

[0019] A set of posts **118**, **120**, and **122** are added to the top of the material rack **104** to hold aloft the top wire rope **105**. Each such post may be guyed or stayed like the main mast of a sailboat if the vertical frame members of the material rack **104** cannot be supplied as one solid piece of box-beam or I-beam steel. If the loads to be secured on the top shelves are especially heavy and dangerous, it is preferable to guy and stay the posts **118**, **120**, and **120** in every instance.

[0020] FIGS. 2A and 2B illustrate how the screens of system **100**, for example, are latched together (FIG. 2A) and separated (FIG. 2B). A top and bottom pair of parallel wire ropes **201** and **202** are stretched taut between a rigid pair of vertical support posts **203** and **204**. A left and a right draw screen **206** and **208** are made of flexible netting, e.g., made of nylon rope. A number of loops top and bottom allow the screens to slide left and right on the wire ropes. The left screen **206** is secured with wire loops or hooks to the left post **203**. And the right screen **208** is secured at its right edge with wire loops or hooks to the right post **204**. A rigid left bar **210** finishes the right edge of the left screen **206**. A rigid right bar **212** similarly finishes the left edge of the right screen **208**. These rigid bars help close up a gap between them and the screens when a latch **214** is secured.

[0021] A warehouse shelving system, in an alternative embodiment of the present invention, includes a material rack providing for storage of products on-sale and is placed in a location visited by customers. A curtain netting is attached to the material rack, e.g., as resembles FIGS. 2A and 2B. An advertisement promoting a company, product, and/or service is included on the curtain netting so as to be visible to the customers.

[0022] Although particular embodiments of the present invention have been described and illustrated, such is not intended to limit the invention. Modifications and changes will no doubt become apparent to those skilled in the art, and it is intended that the invention only be limited by the scope of the appended claims.

The invention claimed is

1. A warehouse shelving system, comprising:

a material rack providing for storage of products on-sale and in a location visited by customers;

a curtain netting attached to the material rack; and

an advertisement promoting a company, product, and/or service that is disposed on the curtain netting and visible to said customers.

2. The warehouse shelving system of claim 1, wherein:

the curtain netting is in two parts that open apart and close together.

3. A warehouse safety device for preventing objects from falling out of a material rack and for advertising, comprising:

a pair of vertical extension posts for mounting to opposite left and right sides at the front of one bay in a warehouse material rack;

a series of attachment holes disposed along a middle line of each inside opposite-facing edge of each one of the pair of vertical extension posts;

a corresponding number of carabiners threaded through pairs of ones of the series of attachment holes and providing for anchor points;

a curtain netting attached at left and right edges to respective ones of the carabiners and thus anchored by them; and

an advertisement promoting a company, product, and/or service that is disposed on the curtain netting and visible to people passing in an aisle way in front.

4. The warehouse safety device of claim 3, further comprising:

a pair of horizontally disposed top and bottom wire ropes for stretching between the pair of vertical extension posts at points along said middle line of each inside opposite-facing edge.

5. The warehouse safety device of claim 3, further comprising:

a bottom curtain wire for stretching between the pair of vertical extension posts at points along said middle line of each inside opposite-facing edge, and for attaching a bottom edge of the curtain netting.

6. The warehouse safety device of claim 4, wherein:

the curtain netting further comprises a pair of left and right screens for a sliding curtain-hanger attachment between the top and bottom wire ropes such that they can be horizontally separated at the middle, and wherein outside edges of each screen are anchored at the left and right ends by the carabiners.

7. The warehouse safety device of claim 3, wherein:

the advertisement is placed on by painting, embroidery, stenciling, light projection, reflection, silk-screening, printing, or other patterning; and

wherein such catches the eye of any passersby and are easily visible, and any logos, ad bugs, or words that must be readable.

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