A merchandiser comprising at least three display modules. At least two of the display modules have a substantially similar horizontal periphery. The display modules each have a front and a rear. At least two of the display modules have shelves, with at least a portion of the rear of the at least two display modules having shelves being open to allow stocking of the shelves from the rear of the at least two display modules having shelves. The display modules are releasably connected together to allow the display modules to be connected and disconnected. The display modules, when disconnected, can be separated to allow the at least two display modules having shelves and having the at least a portion of the rear that is open to be stocked from the rear. Furthermore, the display modules, when connected, can be moved as a unit.
FOUR WAY ISLAND MERCHANDISER

BACKGROUND OF THE INVENTION

[0001] The present invention relates to merchandisers, and in particular to a four-way island merchandiser.

[0002] Shelving units are used in stores to display merchandise or stock sold in the stores. The shelving units include a plurality of horizontally arranged shelves having the merchandise or stock thereon. Heretofore, once the merchandise or stock was taken from the front of the shelves, a person working at the store would have to move all of the merchandise or stock on the shelves forward to make the merchandise or stock available to a consumer and to provide an aesthetically pleasing appearance. Alternatively, the person working at the store could place more stock or merchandise on the shelves to replace the stock or merchandise taken by the consumer.

[0003] Any improvement to the stocking system that easily moves merchandise forward and makes restocking easy is desired.

SUMMARY OF THE INVENTION

[0004] One aspect of the present invention is to provide a merchandiser comprising at least three display modules. At least two of the display modules have a substantially similar horizontal periphery. The display modules each have a front and a rear. At least two of the display modules have, with the at least a portion of the rear of the at least two display modules having shelves being open to allow stocking of the shelves from the rear of the at least two display modules having shelves. The display modules are releasably connected together to allow the display modules to be connected and disconnected. The display modules, when disconnected, can be separated to allow the at least two display modules having shelves and having the at least a portion of the rear that is open to be stocked from the rear. Furthermore, the display modules, when connected, can be moved as a unit.

[0005] Another aspect of the present invention is to provide a four-way island merchandiser comprising four display modules. Each display module has a substantially rectangular horizontal periphery. The display modules each having a front, a rear and a pair of sides. The rear of each display module is adjacent one side of an adjacent display module. At least two of the display module have shelves, with at least a portion of the rear of the at least two display modules being open to allow stocking of the shelves from the rear of the at least two display modules. The display modules are releasably connected together to allow the display modules to be connected and disconnected. The display modules, when disconnected, can be separated to allow the at least two display modules having the at least a portion of the rear that is open to be stocked from the rear. Furthermore, the display modules, when connected, can be moved as a unit.

[0006] Yet another aspect of the present invention is to provide a method of displaying merchandise. The method includes providing at least three display modules, with at least two of the display modules having a substantially similar horizontal periphery. The display modules each have a front and a rear. The rear of each display module is covered when the display modules are connected together. The method also includes providing at least two of the display modules with shelves, with at least a portion of the rear of the at least two display modules having shelves being open. The method further includes disconnecting at least two of the display modules and inserting stock into at least one of the display modules having shelves through the rear of the display module. The method also includes abutting the display modules against each other and connecting the display modules to form a unit.

[0007] These and other features, advantages, and objects of the present invention will be further understood and appreciated by those skilled in the art by reference to the following specification, claims and appended drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a perspective view of a merchandiser of the present invention is an island position.

[0009] FIG. 2 is a perspective view of a merchandiser of the present invention in a loading position.

[0010] FIG. 3 is a perspective view of a module of the merchandiser of the present invention.

[0011] FIG. 4 is a front view of the module of the merchandiser of the present invention.

[0012] FIG. 5 is a rear view of the module of the merchandiser of the present invention.

[0013] FIG. 6 is an enlarged view of a connection mechanism of adjacent modules of the present invention.

[0014] FIG. 7 is a front view of a second embodiment of the module of the present invention.

[0015] FIG. 8 is a front view of a third embodiment of the module of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0016] For purposes of description herein, the terms “upper,” “lower,” “right,” “left,” “rear,” “front,” “vertical,” “horizontal,” and derivatives thereof shall relate to the invention as orientated in FIG. 1. However, it is to be understood that the invention may assume various alternative orientations, except where expressly specified to the contrary. It is also to be understood that the specific devices and processes illustrated in the attached drawings, and described in the following specification are simply exemplary embodiments of the inventive concepts defined in the appended claims. Hence, specific dimensions and other physical characteristics relating to the embodiments disclosed herein are not to be considered as limiting, unless the claims expressly state otherwise.

[0017] The reference number 10 (FIG. 1) generally designates a merchandiser of the present invention. The merchandiser 10 comprises at least three display modules 12. At least two of the display modules 12 have a substantially similar horizontal periphery. The display modules 12 each have a front 14 and a rear 16. At least two of the display modules 12 have shelves 18, with at least a portion of the rear 16 of the at least two display modules 12 having shelves 18 being open to allow stocking of the shelves 18 from the rear 16 of the at least two display modules 12 having shelves 18. The display modules 12 are releasably connected
together to allow the display modules 12 to be connected (FIG. 1) and disconnected (FIG. 2). The display modules 12, when disconnected, can be separated to allow the at least two display modules 12 having shelves 18 and having the at least a portion of the rear 16 that is open to be stocked from the rear 16. Furthermore, the display modules 12, when connected, can be moved as a unit.

[0018] In the illustrated embodiment, the display modules 12 (FIGS. 3-5) are configured to display merchandise or stock. The display modules 12 include the front 14 and the rear 16. The display modules 12 are configured to display the merchandise or stock such that the merchandise or stock is obtainable from a purchaser through the front 14 of the display modules 12. In the illustrated example, the display modules 12 are all identical and include a rectangular horizontal periphery. The display modules 12 with the rectangular horizontal periphery include a first side 20 and a second side 22. When the merchandiser 10 is in the connected configuration, the first side 20 of each display module 12 abuts against a portion of a rear 16 of a second display module 12 (see FIGS. 1, 2 and 4). However, it is contemplated that the display modules 12 could have other configurations. For example, all of the display modules 12 could be square. Furthermore, it is contemplated that the display modules 12 could be triangular, with three display modules 12 combining to make the merchandiser 10 or the display modules 12 could be trapezoidal, with four display modules 12 combining to make the merchandiser. If three triangular display modules 12 are used, the rear of the display modules includes at least a portion of the two sides facing inwardly when the display modules are connected to form the merchandiser. Moreover, it is contemplated that the merchandiser 10 could be formed of any number of display modules 12 of and could have any geometric shape as a periphery. Furthermore, it is contemplated that the merchandiser 10 could include display modules 12 having more than one geometric horizontal periphery. For example, the merchandiser 10 could include two display modules 12 having a square periphery and two display modules having a rectangular periphery.

[0019] The illustrated display modules 12 have a bottom section 24, a first wall 26 defining the first side 20 of the display module 12, a second wall 28 defining the second side 22 of the display module 12, a top section 30, the shelves 18 and a support system 32 for supporting the shelves 18. In the illustrated embodiment, the first wall 26 extends upwardly from the bottom section 24 and is L-shaped, having a first portion 34 and a second portion 36. The first portion 34 extends the depth of the display module 12 and the second portion 36 extends outwardly from the first portion 34 at a perpendicular angle. The second wall 28 extends upwardly from the bottom section 24 and is parallel to the first portion 34 of the first wall 26. The second wall 28 includes a front edge 38 that curves rearwardly as it moves upward. The top section 30 of the display module 12 extends between the first wall 26 and the second wall 28. A curved border member 40 extends along the front edge 38 of the second wall 28, the top of the top section 30 and a side of the top section 30 spaced from the second wall 28 and adjacent the first wall 26.

[0020] In the illustrated example, the display modules 12 include the shelves 18 for holding the merchandise or stock. The support system 32 of the display modules 12 supports the shelves 18. The support system 32 comprises a U-shaped cage 42 including a first leg 44 connected to the outside of the first wall 26 and a second leg 46 connected to the inside of the second wall 28. As illustrated in FIG. 3, the first leg 44 of the U-shaped cage 42 is hidden by the second portion 34 of the first wall 26 and the second leg 46 is hidden by the curved border member 40 as the display module 12 is viewed from the front 14. The U-shaped cage 42 is comprised of a plurality of horizontal rods 48 and vertical rods 50. The U-shaped cage 42 includes at least one horizontal rod 48 extending across the rear 16 of the display module 12 for each shelf 18. The support system 32 also include a horizontal support bar 52 extending between the first wall 26 and the second wall 28 of the display module 12.

[0021] The illustrated shelves 18 are configured to support the merchandise or stock and present the merchandise or stock. The shelves 18 include a front area 54 and a rear area 56. The shelves 18 include a plurality of hooks 58 on a rear end thereof configured to hook over one of the horizontal rods 48 of the U-shaped cage 42 to support the rear area 56 of the shelf 18. Each shelf 18 is also positioned over one of the horizontal support bars 52 to support the front area 54 of the shelf 18. The shelves 18 include an angled portion 60 whereby the rear area 56 of the shelves is higher that the front area 54. Therefore, when the merchandise or stock is placed on the rear area 56 of the shelf 18, the merchandise or stock will slide down the angled portion 60 because of gravity and move the merchandise or stock to the front area 54 of the shelf 18. Accordingly, the display modules 12 can be stocked with the merchandise or stock by placing the merchandise or stock onto the rear area 56 of the shelves 18 through the open rear 16 of the display modules 12 and the merchandise or stock will move to the front area 54 of the shelves 18 for easy access from the front of the display module 12 by a purchaser of the merchandise or stock. Preferably, the front area 54 of the shelves 18 include a horizontal section 59. In the illustrated example, the merchandise or stock comprise battery packages 62. Furthermore, the shelves 18 include divider walls 64 for maintaining the battery packages 62 in a lane 66 on the shelves 18. Preferably, the shelves 18 include a front face having a conventional price tag channel 70 similar to those used on the front of shelves holding merchandise in retail stores. The price tag channel 70 includes an upper retaining flange 72 and a lower retaining flange 74 for holding price tags, merchandise identification cards, etc. For example, the price tag channel 70 of the present invention could be used to hold identification cards identifying the type of battery (e.g., AAA, AAAA, etc.) located in the battery package 62 in the lane 66 behind the identification card. Although a specific system for supporting the shelves 18 is disclosed herein, it is contemplated that any system could be used to support the shelves 18 such that the merchandise or stock on the shelves 18 is accessible from the front of the display modules 12.

[0022] In the illustrated example, the merchandiser 10 can be moved from the connection configuration to the unconnected configuration to allow the display modules 12 of the merchandiser 10 to be filled with the stock or merchandise from the open rear 16 of the display modules 12. Each illustrated display module 12 includes a first connection mechanism 100 and a second connection mechanism 102 with each first connection mechanism 100 being configured to be releasably connected to the second connection mechanism 102 of an adjacent display module 12 to releasably connect the display modules 12 together (FIG. 6). Therefore, the first connection mechanism 100 can be disconnected from the second connection mechanism 102 to allow the merchandiser 10 to be moved to the unconnected configuration. In the unconnected configuration, the open rear 16 of the display modules 12 is accessible for placing the
stock or merchandise on the rear area 56 of the shelves for stocking the display modules 12. The merchandiser 10 is moved to the unconnected configuration by disconnecting the first connection mechanism 100 from the second connection mechanism 102 and moving at least one of the display modules 12 (e.g., by rolling the display modules 12 on wheels 90 or by sliding the display modules 12) such that the open rear 16 is accessible (see FIG. 2).

[0023] The illustrated display modules 12 of the merchandiser 10 each include the first connection mechanism 100 and the second connection mechanism 102 whereby the display modules 12, when disconnected, can be separated to allow the display modules 12 to be stocked from the rear and whereby the display modules 12, when connected, can be moved as a unit. In the illustrated example, the first connection mechanism 100 is a pin 110 extending from the second wall 28 of the display module 12 and the second connection mechanism 102 is a rotatable latch 120 extending from the bottom section 24 of the display modules 12 in a direction perpendicular to the second portion 36 of the first wall 26. The rotatable latch 120 is configured to rotate and includes a downwardly facing slot 122. As illustrated in FIG. 6, a first one of the display modules 12 is connected to a second one of the display modules 12 by placing the rear 16 of the first one of the display modules 12 against the first wall 26 of the second one of the display modules 12, with the rear 16 of the first one of the display modules 12 being hidden by the second portion 36 of the first wall 26. Thereafter, the latch 120 is rotated until the pin 110 is accepted into the slot 122 of the latch 120. After all of the display modules 12 are connected together, the merchandiser 10 can be moved as a unit.

[0024] FIGS. 7 and 8 illustrate a closed shelf display module 12a and a peg board display module 12b, respectively, that can be substituted for one of the display modules 12. The closed shelf display module 12a includes a plurality of horizontal shelves 200 having dividers 202 thereon. The closed shelf display module 12a includes a rear wall 204, whereby the closed shelf display module 12a cannot be stocked through the rear of the closed shelf display module 12a. The horizontal shelves 200 are configured to be connected to a support system and/or the first wall 26 and the second wall 28 of the closed shelf display module 12a. The peg board display module 12b includes a peg board 300 along a rear face thereof. The peg board 300 includes a plurality of openings 302 therein. The openings 302 are configured to accept hanger rods 304. Battery packages and other merchandise can be hung from the hanger rods 304 by inserting the rods 304 into slots in the top of the battery packages as is well known to those skilled in the art.

[0025] In the illustrated merchandiser 10, the merchandise placed thereon can be displayed in every direction and the merchandise can easily be stocked onto the shelves 18 by moving the merchandiser 10 to the unconnected configuration and placing the stock on the shelves 18 such that they are moved into a displayed position at the front of the shelves 18 by gravity. Therefore, the shelves 18 can be easily stocked and the merchandise will always be positioned on the front of the shelves 18 for easy accessibility and display. Likewise, by placing the stock on the rear of the shelves 18, the older stock will be taken from the merchandiser 10 and purchased by the consumer. Therefore, the merchandiser 10 can provide that the stock placed on the shelves 18 first is the first stock purchased (i.e., first in, first out). However, it is contemplated that the shelves could be stocked from the front by pushing the stock currently on the shelves 18 backward and inserting new stock in the front area of the shelves. Furthermore, it is contemplated that the top section 30 and the outside of the second wall 28 of the display modules 12 could include advertising thereon for notifying shoppers of the merchandise sold on the merchandiser 10.

[0026] The above description is considered that of the preferred embodiments only. Modifications of the invention will occur to those skilled in the art and to those who make or use the invention. Therefore, it is understood that the embodiments shown in the drawings and described above are merely for illustrative purposes and not intended to limit the scope of the invention.

We claim:

1. A merchandiser comprising:
   - at least three display modules, at least two of the display modules having a substantially similar horizontal periphery;
   - the display modules each having a front and a rear;
   - at least two of the display modules having shelves, with at least a portion of the rear of the at least two display modules having shelves being open to allow stocking of the shelves from the rear of the at least two display modules having shelves;
   - wherein the display modules are releasably connected together to allow the display modules to be connected and disconnected, whereby the display modules, when disconnected, can be separated to allow the at least two display modules having shelves and having at least a portion of the rear that is open to be stocked from the rear and whereby the display modules, when connected, can be moved as a unit.

2. The merchandiser of claim 1, wherein said merchandiser comprises at least four display modules.

3. The merchandiser of claim 2, wherein said four display modules have a substantially rectangular periphery.

4. The merchandiser of claim 3, wherein the rear of each display module is adjacent one side of an adjacent display module.

5. The merchandiser of claim 1, wherein the shelves have a rear area and a front area, the shelves including an angled portion, whereby stock placed on the rear area of the shelves will be moved to the front area over the angled portion by gravity.

6. The merchandiser of claim 5, wherein the front area of the shelves comprises a horizontal section.

7. The merchandiser of claim 1, wherein each display module includes a first connection mechanism and a second connection mechanism; and each first connection mechanism is configured to be releasably connected to the second connection mechanism of an adjacent module to releasably connect the modules together.

8. The merchandiser of claim 7, wherein the first connection mechanism is a pin; the second connection mechanism is a rotatable latch with a slot; and the first connection mechanism is connected to the second connection mechanism by inserting the pin into the slot of the latch during rotation of the latch.

9. The merchandiser of claim 1, wherein each display module includes wheels at a bottom thereof for easily moving each individual display module and for moving the display modules as the unit.
10. The merchandiser of claim 1, wherein all of the display modules have the substantially similar horizontal periphery.

11. The merchandiser of claim 1, wherein each display module has the shelves and the at least a portion of the rear that is open such that each of the display modules can be stocked from the rear.

12. A four-way island merchandiser comprising:

- four display modules, each display module having a substantially rectangular horizontal periphery;
- the display modules each having a front, a rear, a pair of sides;
- the rear of each display module being adjacent one side of an adjacent display module;
- at least two display module having shelves, with at least a portion of the rear of the at least two display modules being open to allow stocking of the shelves from the rear of the at least two display modules;
- wherein the display modules are releasably connected together to allow the display modules to be connected and disconnected, whereby the display modules, when disconnected, can be separated to allow the at least two display modules having the at least a portion of the rear that is open to be stocked from the rear and whereby the display modules, when connected, can be moved as a unit.

13. The merchandiser of claim 12, wherein the shelves have a rear area and a front area, the shelves including an angled portion, whereby stock placed on the rear area of the shelves will be moved to the front area over the angled portion by gravity.

14. The merchandiser of claim 13, wherein the front area of the shelves comprises a horizontal section.

15. The merchandiser of claim 12, wherein each display module includes a first connection mechanism and a second connection mechanism; and each first connection mechanism is configured to be releasably connected to the second connection mechanism of an adjacent module to releasably connect the modules together.

16. The merchandiser of claim 15, wherein the first connection mechanism is a pin; the second connection mechanism is a rotatable latch with a slot; and the first connection mechanism is connected to the second connection mechanism by inserting the pin into the slot of the latch during rotation of the latch.

17. The merchandiser of claim 12, wherein each display module includes wheels at a bottom thereof for easily moving each individual display module and for moving the modules as the unit.

18. The merchandiser of claim 12, wherein each display module has the shelves and the at least a portion of the rear that is open such that each of the display modules can be stocked from the rear.

19. A method of displaying merchandise comprising:

- providing at least three display modules, with at least two of the display modules having a substantially similar horizontal periphery, the display modules each having a front and a rear, the rear of each display module being covered when the display modules are connected together;

- providing at least two of the display modules with shelves, with at least a portion of the rear of the at least two display modules having shelves being open;

- disconnecting at least two of the display modules;

- inserting stock into at least one of the display modules having shelves through the rear of the display module;

- abutting the display modules against each other; and

- connecting the display modules to form a unit.

20. The method of displaying merchandise of claim 19, wherein said merchandiser comprises at least four display modules.

21. The method of displaying merchandise of claim 20, wherein the four display modules have a substantially rectangular periphery.

22. The method of displaying merchandise of claim 21, wherein the rear of each display module is adjacent one side of an adjacent display module.

23. The method of displaying merchandise of claim 19, further including providing the shelves with a rear area and a front area, the shelves including an angled portion; placing the stock on the rear area of the shelves; and moving the stock to the front area over the angled portion by gravity.

24. The method of displaying merchandise of claim 23, wherein the front area of the shelves comprises a horizontal section.

25. The method of displaying merchandise of claim 19, further including providing each display module with a first connection mechanism and a second connection mechanism; wherein disconnecting at least two of the display modules comprises disconnecting the first connection mechanism of a first one of the display modules from the second connection mechanism of a second one of the display modules; and wherein disconnecting at least two of the display modules comprises connecting the first connection mechanism of the first one of the display modules to the second connection mechanism of the second one of the display modules.

26. The method of displaying merchandise of claim 25, wherein the first connection mechanism is a pin; and the second connection mechanism is a rotatable latch with a slot; wherein disconnecting at least two of the display modules comprises rotating the rotatable latch until the pin is in the slot; and wherein disconnecting at least two of the display modules comprises rotating the rotatable latch until the pin is no longer in the slot.

27. The method of displaying merchandise of claim 25, further including providing each display module with wheels at a bottom thereof for easily moving each individual display module and for moving the display modules as the unit.

28. The method of displaying merchandise of claim 19, wherein all of the display modules have the substantially similar horizontal periphery.

29. The method of displaying merchandise of claim 19, wherein each display module has the shelves and the at least a portion of the rear that is open such that each of the display modules can be stocked from the rear.

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