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(54) **COOLER/COUNTER MERCHANDISING DISPLAY UNIT**

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(57) **ABSTRACT**

A cooler/counter merchandising display unit combination wherein a merchandising cooler is integrated into various counter arrangements, the cooler being substantially contained within the footprint of the merchandising counter or check-out counter arrangement. In one embodiment, a modular refrigerated cooler is interfaced with a docking base unit which can be positioned, secured or interfaced at the end of a particular service counter, or between two counter portions. In another embodiment, the docking base unit is integrally formed into the merchandising counter and the modular refrigerated cooler is again interfaced with the integrated docking base unit. In still another embodiment, the service counter, docking base unit and refrigerated cooler are all integrated into a one-piece counter arrangement. At least one access door is provided on the cooler to allow consumers to retrieve products therefrom and at least one of the walls forming the cooler compartment includes a transparent window to allow consumers to view the products positioned within the cooler compartment.

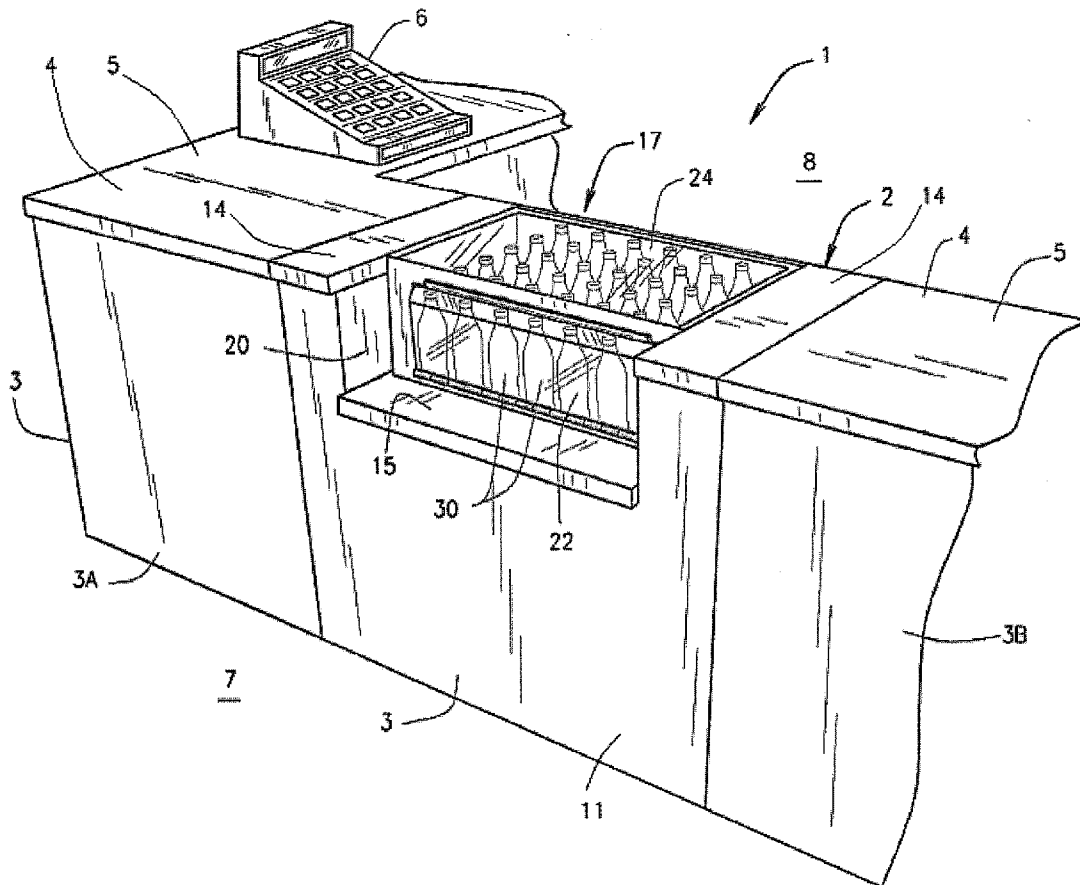
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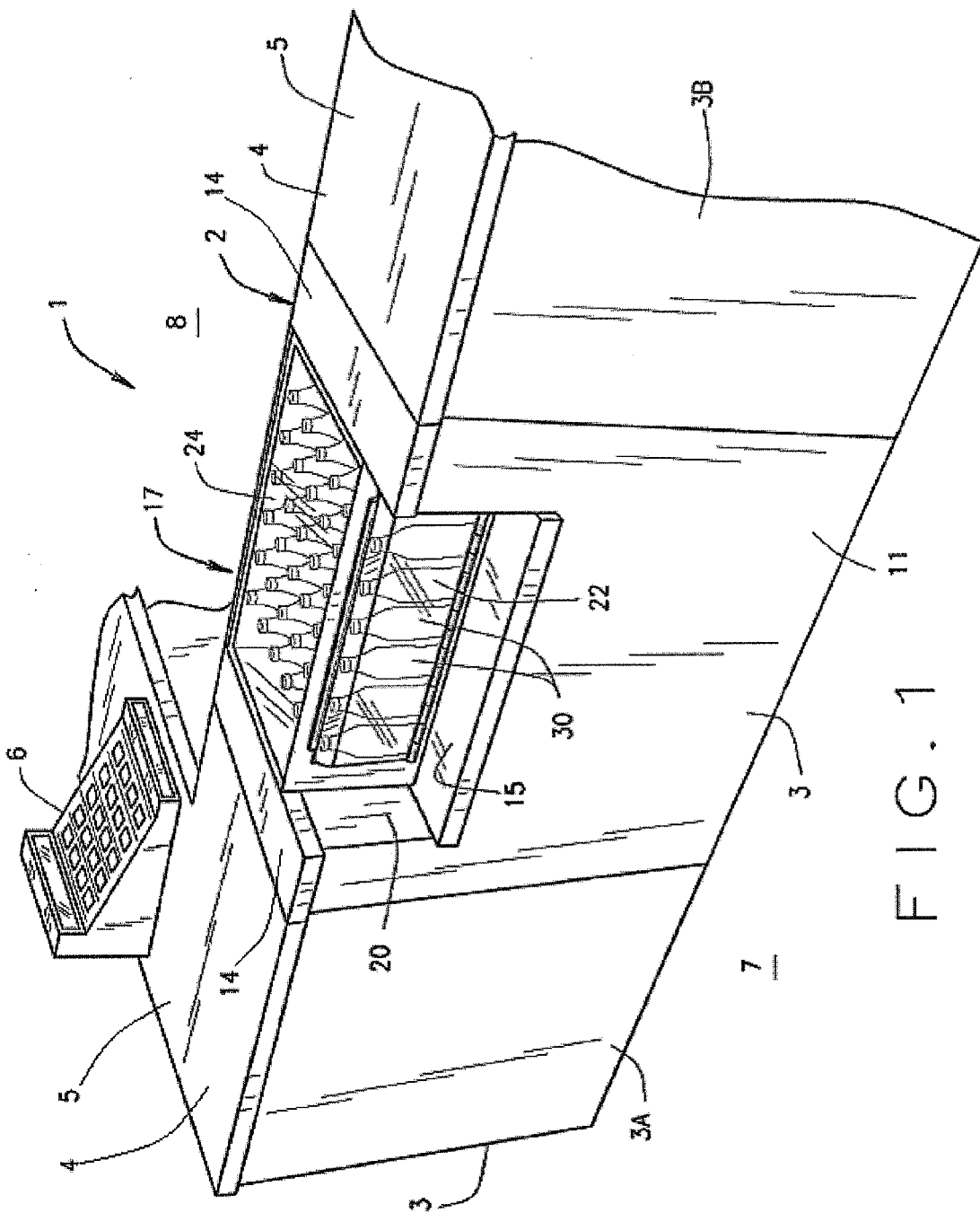
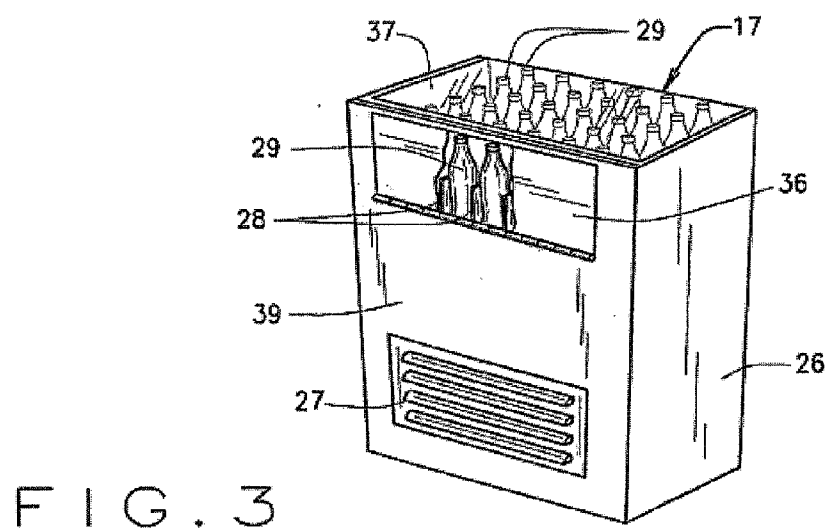
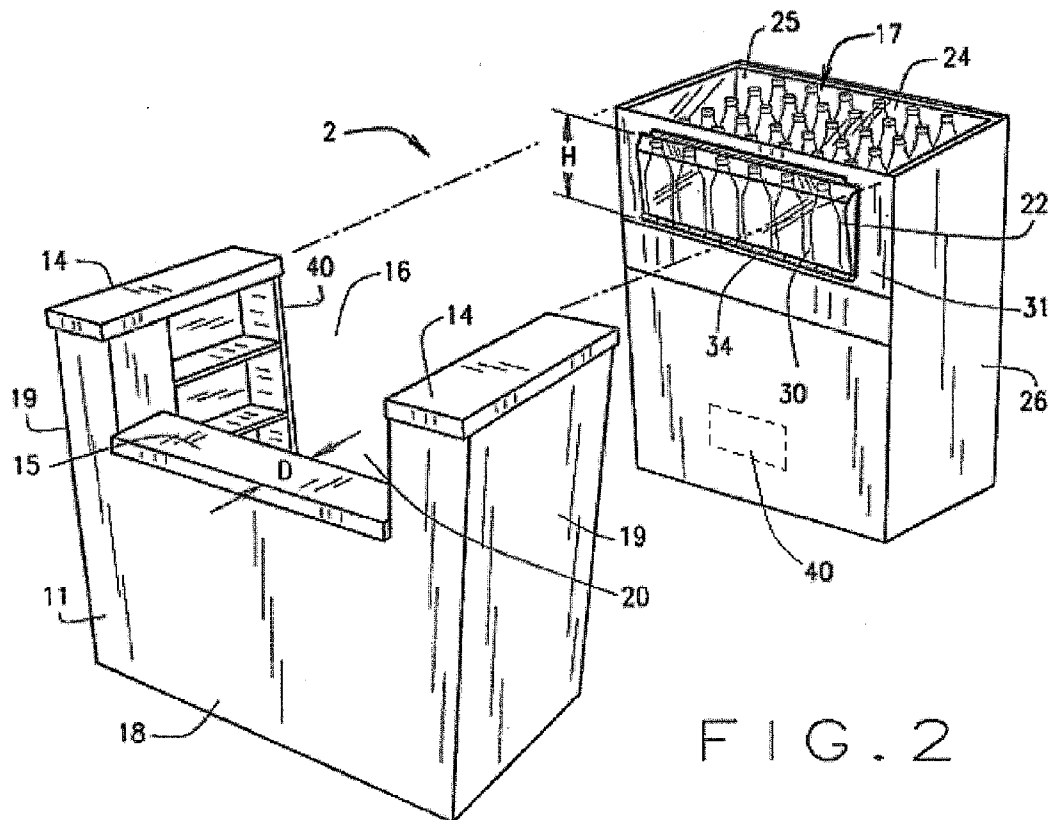


FIG. 1



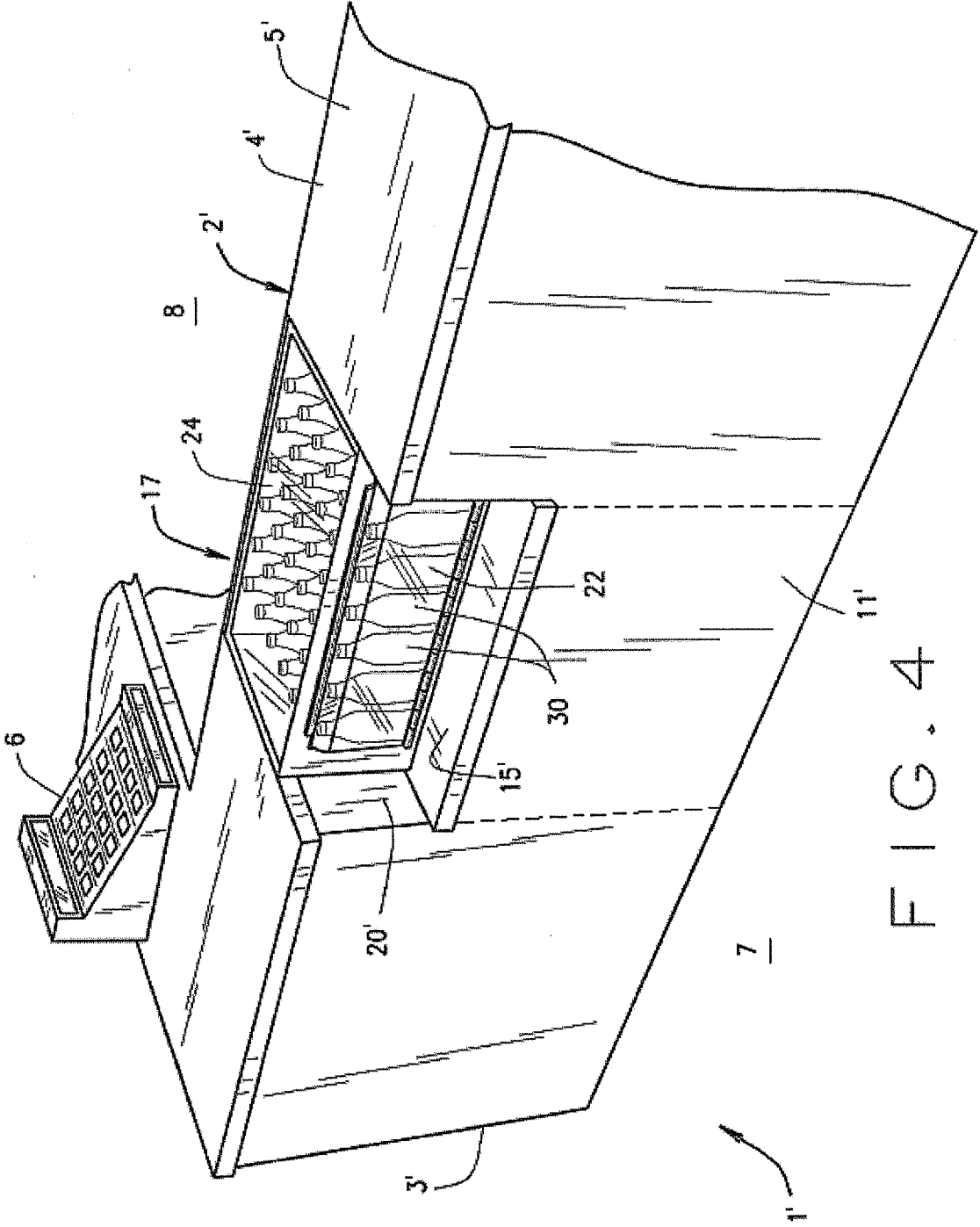


FIG. 4

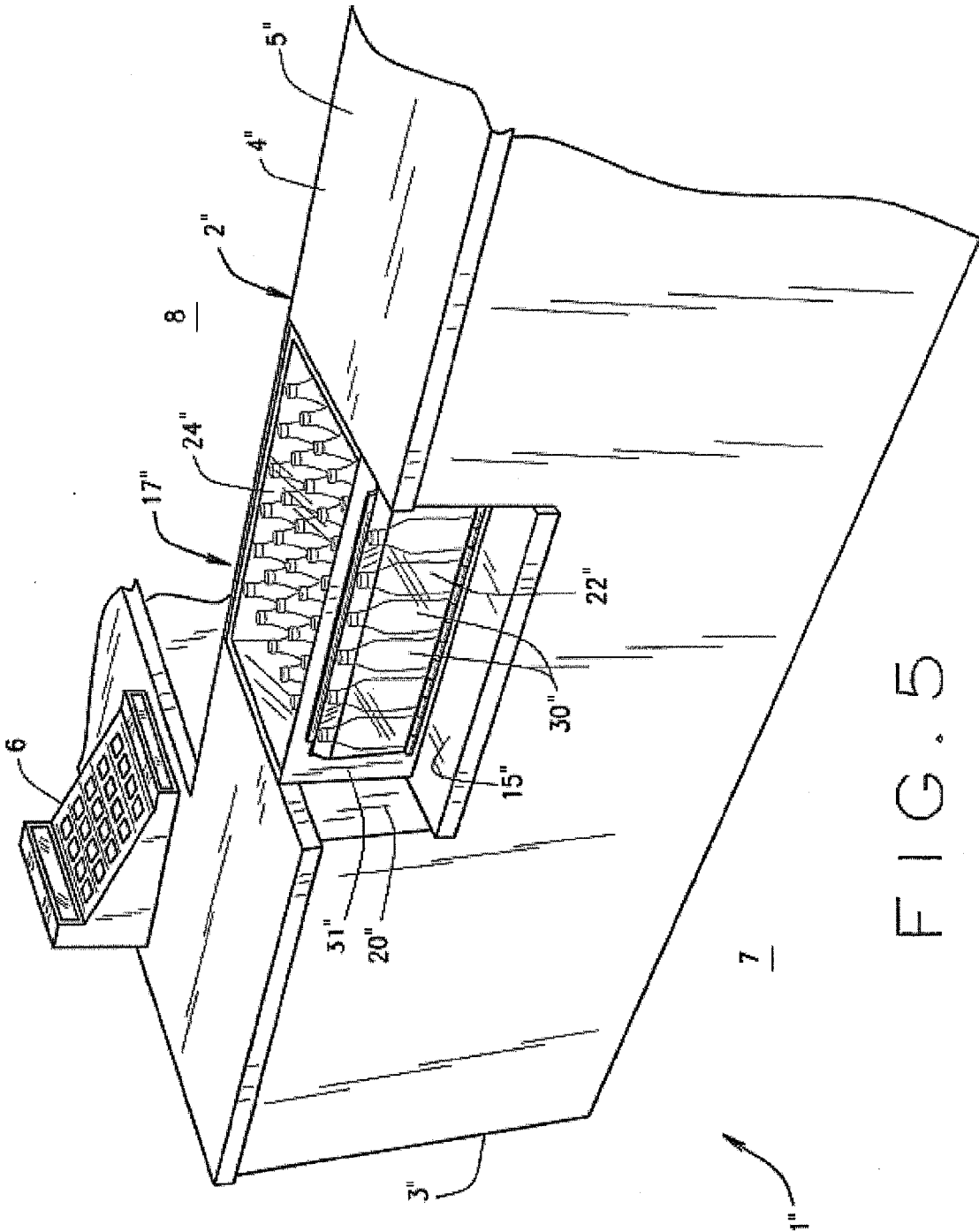


FIG. 5

COOLER/COUNTER MERCHANDISING DISPLAY UNIT

BACKGROUND OF THE INVENTION

[0001] The merchandising of products at retail outlets can be complicated and expensive. It oftentimes requires high visibility as well as convenience to trigger a purchase, particularly purchase of an impulse type product. This is particularly true in convenience stores where people tend to spend less time making purchasing decisions since they are typically only in need of a few items and there is a perceived need to reduce the time spent in such stores. In some areas of various convenience stores little time can be spent by a customer, particularly at a service or checkout counter, because of other people standing in line trying to pay and leave the premises. It is well known that to merchandise certain products, their physical location within the store can be an important criteria. Stores are known to charge manufacturers for shelf space in the store to display and sell product, charging a premium for better locations. Additionally, not only is the physical location on the store's floor plan important, but the height at which the products are displayed can also be important to further enhance visibility and focus attention on such products. In this regard, end-of-isle displays and point of purchase displays enhance sales and help to trigger impulse buying.

[0002] For certain items such as chilled beverages, it is highly desirable to have those items displayed in a manner which will focus attention on such products and which will generate more convenient purchasing activities including impulse buying. One primary location for impulse items is at the checkout counter. Typically, display racks, end-of-isle displays and barrel type ice coolers are provided at checkout counters for the merchandising of certain items including chilled beverages and these point of purchase displays are effective in selling products. In grocery stores that utilize conveyor type checkout counters, it is relatively easy to provide display shelf arrangements adjacent to the entry of the checkout aisle because of the direction of customer movement relative to the counter. However, at convenience stores, the checkout counter is usually a counter arrangement that can be L-shaped, U-shaped, V-shaped, rounded or linear and the ability to place display shelves at or adjacent to the counter is limited because of the way pedestrian traffic flows to and away from such counters. It is also important to keep such display shelves and other point of purchase displays out of the normal pathways of customer movement to prevent people from tripping over or running into such displays. Traditionally, such point of purchase displays at checkout areas are for dry goods or shelf stable goods that require nothing more than shelf space, although barrel type ice coolers are occasionally used adjacent to such counters where space permits. Oftentimes, at convenience stores, display racks are set on top of the checkout counter for the display and merchandising of items at the display counter thereby limiting such sales usually to dry goods only.

[0003] The ability to merchandise products utilizing refrigeration, for example, chilled soft drinks and other chilled beverages, has been traditionally relegated to an area of the store requiring a customer to make a lengthy and time consuming trip to another location in the store for obtaining such products, coming back to the checkout counter, and then checking out. Such display cases are typically walk-in type coolers and are relatively large and provide access from a

back side of the cooler for filling or restocking. These coolers oftentimes have shelves inclined downwardly and forwardly so that the products gravity feed from the back to the front of the shelf allowing easy restocking from the back and easy consumer access from the front. Stores are constructed to accommodate such walk-in type coolers by having an entire room located on the backside of such cooler display cases for storing and restocking product thereby limiting their use to a wall area of the store or building.

[0004] It is also recognized that over 50% of convenience store consumers never make it passed the checkout counter. They are there to pay for gas, or to purchase tobacco products or lottery tickets. This is a target audience typically missed with respect to the sale of impulse type items.

[0005] There is also a careful balance in positioning products throughout the merchandising space of a store. If too much product is located adjacent to a checkout area, people will come to the checkout counter, spend time shopping thereby blocking effective use of the checkout counter for people to pay and leave.

[0006] It would therefore be desirable to have high margin and high sales items including impulse items such as chilled beverages displayed at the checkout counter to increase impulse buying and to provide another opportunity to sell product. It would also be desirable to provide a checkout counter merchandising unit that is integrated into the counter and that can be easily accessed for both the sale of items and the replenishment of sold items.

SUMMARY OF THE INVENTION

[0007] The present invention involves the provision of a cooler construction that is integrated into a counter at a retail outlet. The counter has a customer side and an attendant side, and a generally upwardly facing top surface. A storage compartment is provided that has at least one wall defining the compartment with at least one transparent window positioned for viewing contents in the compartment by a person positioned on the customer side of the counter. This transparent window can be associated with the top surface of the counter, with the customer side of the counter, or both. A refrigeration unit is associated with the storage compartment and is operable to effect cooling of the compartment and the contents therein, although the storage compartment could likewise be adapted to hold ice or other cooling means. The cooler construction includes at least one door forming at least a portion of a wall defining the storage compartment. The door is selectively movable between open and closed positions for removing product from the storage compartment. The cooler is at least substantially contained within the footprint of the counter and preferably at or adjacent the checkout area of the counter.

[0008] The present invention also involves the provision of a method of merchandising products at a retail outlet. The method includes integrating a normally closed cooler into a customer checkout counter. Product is visually displayed in the cooler to consumers. The contents of the cooler are made available to consumers for purchase at the checkout counter with the cooler being positioned at least substantially within the footprint of the counter.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1 is a fragmentary perspective view of a counter arrangement with a merchandising unit for use in a retail store constructed in accordance with one embodiment of the present invention.

[0010] FIG. 2 is a fragmentary exploded perspective view of a portion of the counter arrangement shown in FIG. 1.

[0011] FIG. 3 is a rear view of the cooler portion of the merchandising unit shown in FIG. 1.

[0012] FIG. 4 is a fragmentary perspective view of a counter arrangement with an integral docking base and a modular refrigerated cooler.

[0013] FIG. 5 is a fragmentary perspective view of a counter arrangement with an integrated refrigerated cooler.

[0014] Like numbers throughout the various figures designate like or similar parts and/or construction.

DETAILED DESCRIPTION

[0015] The reference number 1 in FIG. 1 designates generally a service counter arrangement with a merchandising unit 2 for use in a retail outlet, for example, a grocery store or convenience store. The counter 1 includes a base unit 3 having a footprint defined by the outer perimeter of the base unit 3. A top of the counter 4 is connected to the base 3 and provides an upwardly facing surface 5. Items may be placed on the top surface 5, for example, a cash register 6, display racks and the like. Business is normally conducted on and across the counter top 4. The counter 1 has a patron or customer side designated generally 7 and an attendant side designated generally 8. The counter 1 can be any suitable size and shape including linear, L-shaped, U-shaped, V-shaped, rounded or any other suitable shape as viewed in plan form.

[0016] As best seen in FIG. 2, the merchandising unit 2 includes a docking base 11 that can be suitably secured or otherwise positioned or interfaced to an end of the remainder of the counter 1, or it can be secured, positioned or interfaced between two counter portions 3A, 3B of the base 3 as illustrated in FIG. 1. As shown, the docking base 11 is generally U-shaped in plan form having upper top end portions 14 with a recessed top intermediate surface 15 extending therebetween. A refrigerated cooler 17 is positioned within the space 16 between the front portion 18 and the two side portions 19 such that the recess 20 provides space for access into and product removal from the cooler 17. Preferably the cooler 17 is power operated having an electrically powered refrigeration unit 40, although it is also recognized that the cooler 17 could likewise be adapted to hold ice or other cooling means. An electrically powered refrigeration unit may be of the type described in U.S. Pat. No. 7,444,825 to Miller, Jr. et al., and is preferably of a standard motor-compressor-condenser design, as would be understood by one of ordinary skill in the art. The depth D (FIG. 2) of the surface 15 and recess 20 is preferably equal to or larger than the height H of a door 22 associated with the cooler 17. The surfaces 14 are preferably co-planar with an upper surface 25 of a top wall 24 of the cooler 17.

[0017] The cooler 17 includes at least one transparent wall or a transparent portion of a wall to permit consumers or patrons to view the contents within the cooler. In one embodiment, at least a portion of the front wall, which is in the form of a door 22, and at least a portion of the top wall 24 are both transparent. While the front wall is shown as being in the form of a door, it is to be understood that the top wall 24 could, instead or in addition, likewise include a door. As illustrated, the door 22 is hinged and may include a return mechanism to close the door 22 upon release by a consumer such as by means of a counterweight mechanism, a spring, a gas spring, or other biasing means. The door 22 could also be a sliding

door with a return mechanism. Preferably, the transparent windows are made of a suitable break resistant plastic, glass or other see-through material.

[0018] The cooler 17 is preferably modularized for installation, exchange or service convenience and can fit into an opening in the base unit 11. The cooler 17 can be held in place by frictional engagement with the floor. Suitable fastening devices may be provided to provide a releasable connection between the cooler 17 and the docking base unit 11. The cooler 17 has a lower portion of a cabinet 26 that can contain the refrigeration unit (not shown). The refrigeration unit can be any suitable electrically powered refrigeration unit. The cabinet 26 can be vented at 27 for flow of air into and out of the cabinet 26. The cooler 17 can be provided with suitable internal organizing racks 28 (FIG. 3). The racks 28 preferably will slope forwardly and downwardly from the attendant side 8 toward the customer side 7 so that the product 29 contained therein can slide forward and present product at the face 30 of the cooler 17 when a door 22 is provided at the front of the cooler 17. The racks 28 can have upstanding dividers to provide product directing channels as is well-known in the art. Preferably, the cooler 17 is configured for the sale of chilled pre-containerized beverages such as soda, fruit juice, tea, milk and the like.

[0019] In one embodiment, and as illustrated, the cooler 17 has a door 22 mounted on the front vertical face 31 of the cooler providing an opening into the cooler 17 through the recess 20 of the base 11. The top surface 15 is positioned at a height relative to the door 22 so that the door may be hinged downwardly with the surface 15 acting as a door stop. In the event the door 22 is not configured for automatic return, the door 22 can be released to rest on the surface 15. Preferably, the door 22 is hinged at a bottom edge 34 so that the door pivots downwardly. The height H of the door 22 is preferably approximately equal to or less than the depth D of the surface 15 so that the door 22 does not project outwardly in front of the base 11 when open. In an alternate embodiment, the wall or a portion of the wall 24 may include an access door which could be either hingedly mounted or slidably mounted for movement between open and closed positions. It is also anticipated that the door 22 could be slidably mounted on the front face 31 of the cabinet 26 so as to be accessible from the recessed surface 15, or the recessed surface 15 could be eliminated and the slidably mounted door could lie flush with the front wall 18 of the counter. Other door configurations are likewise recognized and anticipated.

[0020] The cooler 17 may be provided with a rear door 36 forming one wall of the cooler storage compartment 37. A rear door 36 (FIG. 3) can provide access by an attendant to either retrieve product for sale or to add additional product to the product storage compartment 37. Preferably, the rear face 39 of the cooler 17 is co-planar with the back face 40 of the base 11 to reduce catch and trip points. The rear door 36 may also be provided with closing devices such as a spring, a gas spring, a counterweight mechanism or other biasing mechanisms for soft closing of the door. The rear door 36 may also be hinged at the top to prevent attendants from placing loads on the door and from possible breaking of the rear doors 36, or it may be slidably mounted.

[0021] It is recognized and anticipated that the overall configuration of the cooler 17 and its corresponding base 11 can take on a wide variety of different sizes, shapes and configurations, and the recess surface 15 and the cooler door 22 can likewise take on a wide variety of different shapes and con-

figurations including eliminating the recess surface 15. The same is likewise true with respect to the interior organization of the cooler compartment 37 including the positioning and location of any internal organizing racks and dividers such as the racks 28 illustrated in FIG. 3. Still further, the cooler 17 may include one or any plurality of doors for allowing access to the interior of the compartment 37. This may include a single door located on the front side of the cooler for access by a customer; a single door located on the top side of the cooler for access by both a customer and an attendant; a single door located on the rear side of the cooler for access by an attendant; or any combination thereof. Other modifications, arrangements and embodiments relating to the positioning and locating of cooler unit 17 in a typical service counter or checkout counter 1 such as the counter illustrated in FIG. 1, or to the physical construction of the cooler itself, are likewise envisioned and contemplated.

[0022] In addition, it is likewise recognized and anticipated that the entire merchandising unit 2 as illustrated in FIG. 2 which includes the cooler 17 and docking base 11 can be integrally formed into any service counter or checkout counter arrangement such that the entire checkout counter configuration 1 illustrated in FIG. 1 is fabricated as a one-piece unit, or such arrangement can be fabricated in assemblies other than the assembly illustrated in FIG. 2. For example, in another embodiment as shown in FIG. 4, service counter arrangement 1' is integral with a merchandising unit 2'. Thus, docking base 11 shown in FIGS. 1 and 2 is integral with base unit 3, forming base unit 3' which now includes docking base portion 11'. Similarly, top end portions 14 are integral with counter top 4, forming counter top 4' which now includes top end portions 14 and top surface 5'. As in FIGS. 1 and 2, integrated docking base portion 11' includes recess 20' and a recessed top intermediate surface 15'. Thus, a modularized refrigerated cooler 17 as discussed above is positioned within the footprint of the counter arrangement 1', and is operable as discussed above.

[0023] In a third embodiment as shown in FIG. 5, service counter 1" may include a non-modularized refrigerated cooler 17" such that refrigerated cooler 17" is integrated into the service counter 1". Thus, top wall 24" of cooler 17" is connected to the counter top 4", forming a single top surface 5". Similarly, front vertical face 31" of the cooler 17" is connected to recessed top intermediate surface 15" and top wall 24". At least a portion of either or both of the top wall 24" and front vertical face 31" are preferably transparent and either or both may include a door as explained above. Such doors may be hinged or sliding in nature, or any other type of door.

[0024] Thus, there has been shown and described several embodiments of a novel invention. As is evident from the foregoing description, certain aspects of the present invention are not limited by the particular details of the examples illustrated herein, and it is therefore contemplated that other modifications and applications, or equivalents thereof, will occur to those skilled in the art. The terms "having" and "including" and similar terms as used in the foregoing specification are used in the sense of "optional" or "may include" and not as "required". Many changes, modifications, variations and other uses and applications of the present invention will, however, become apparent to those skilled in the art after considering the specification and the accompanying drawings. All such changes, modifications, variations and other uses and applications which do not depart from the spirit and

scope of the invention are deemed to be covered by the invention which is limited only by the claims which follow.

1. A cooler/counter merchandising display unit comprising:

a counter having a customer side and an opposite attendant side;

a docking base unit interfaced with said counter;

a modular refrigerated cooler including a storage compartment having at least one wall with a transparent window positioned therein for viewing contents in said compartment by a person positioned on the customer side of the counter, cooling means associated with said storage compartment and operable to cool said compartment, and at least one door forming at least a portion of a wall defining said storage compartment, said at least one door being selectively movable between open and closed positions for removing product from said storage compartment; and

said refrigerated cooler interfacing with said docking base unit such that said refrigerated cooler is operable as a portion of said counter.

2. The cooler/counter unit of claim 1 wherein a front wall and a top wall of said storage compartment each includes a transparent window.

3. The cooler/counter unit of claim 2 wherein said front wall of said storage compartment includes said door, and wherein said door at least partially includes a said transparent window.

4. The cooler/counter unit of claim 3 wherein said door is hingedly mounted to said front wall.

5. The cooler/counter unit of claim 3 wherein said door is slidably mounted to said front wall.

6. The cooler/counter unit of claim 2 wherein the top wall of said storage compartment includes said door, and wherein said door at least partially includes said transparent window.

7. The cooler/counter unit of claim 6 wherein said door is hingedly mounted to said top wall.

8. The cooler/counter unit of claim 6 wherein said door is slidably mounted to said top wall.

9. The cooler/counter unit of claim 1 wherein said counter has a footprint, and wherein said docking base unit includes upper top side portions and a recessed top front intermediate portion extending between said upper top side portions, said upper top side portions and said top front intermediate surface defining a generally U-shape in plan form.

10. The cooler/counter unit of claim 9 wherein said storage compartment is positioned within a recess formed by said U-shaped docking base unit such that said compartment is at least substantially circumscribed by the footprint of said counter.

11. The cooler/counter unit of claim 10 wherein said door is mounted on a front vertical face of said storage compartment such that said recessed top front intermediate portion of said docking base unit is recessed at a height relative to said door such that said door is hinged downwardly, with the top surface of said recessed top front intermediate portion acting as a door stop.

12. The cooler/counter unit of claim 1 including a rear door forming at least a portion of a rear wall defining the back of said storage compartment, said rear door being selectively movable between open and closed positions for restocking product in said storage compartment.

13. The cooler/counter unit of claim 1 wherein said at least one door includes a return mechanism to close said door upon release by a user.

14. The cooler/counter unit of claim 13 wherein said return mechanism includes one of a spring or counterweight.

15. The cooler/counter unit of claim 1 further including a cabinet for housing said storage compartment and said cooling means.

16. The cooler/counter unit of claim 1 wherein the cooling means includes a refrigeration unit.

17. The cooler/counter unit of claim 16 further including a cabinet for housing said storage compartment and said refrigeration unit, said cabinet being vented for flow of air into and out of said cabinet.

18. The cooler/counter unit of claim 1 wherein the cooling means includes ice.

19. A cooler/counter display unit comprising:

a counter having a customer side and an opposite attendant side;

a docking base unit integral with said counter for receiving a modular refrigerated cooler;

said modular refrigerated cooler including a storage compartment having at least one wall with a transparent window positioned therein for viewing contents in the compartment by a person positioned on the customer side of the counter, cooling means associated with said storage compartment and operable to cool said compartment, and at least one door forming at least a portion of a wall defining said storage compartment, said at least one door being selectively movable between open and closed positions for removing product from the storage compartment; and

said refrigerated cooler interfacing with the docking base unit of said counter such that said refrigerated cooler is operable as a portion of said counter.

20. A cooler/counter display unit comprising:

a counter having a customer side and an opposite attendant side;

a refrigerated cooler integrated with said counter such that said refrigerated cooler is operable as a portion of said counter, said refrigerated cooler including a storage compartment having at least one wall with a transparent window positioned for viewing contents in the compart-

ment by a person positioned on the customer side of said counter, cooling means associated with said storage compartment and operable to cool said compartment, and at least one door forming at least a portion of a wall defining said storage compartment, said at least one door being selectively movable between open and closed positions for removing product from said storage compartment.

21. A method of distributing consumable items at a store comprising the steps of: integrating a normally closed cooler into a customer checkout counter so that the cooler is at least substantially circumscribed by a footprint of the checkout counter;

visually displaying contents in the cooler to consumers; and

making the contents of the cooler available to consumers at the checkout counter for purchase.

22. The method of claim 21 wherein the step of making the contents of the cooler available includes providing at least one door forming at least a portion of a wall of said cooler, said door being selectively movable between open and closed positions.

23. The method of claim 21 wherein said visually displaying step includes providing a transparent window in at least one wall of said cooler, said window positioned to allow viewing of the contents by consumers.

24. The method of claim 21 wherein said integrating step includes positioning said cooler within a recess in a docking base unit of said counter, said docking base unit having upper top side portions and a recessed top front intermediate portion extending between said upper top side portions, said upper top side portions and said top front intermediate surface defining a generally U-shape in plan form.

25. The method of claim 21 further including cooling the contents of said cooler with a refrigeration unit associated with said cooler.

26. The method of claim 21 further including cooling the contents of said cooler with ice.

27. The method of claim 22 further including restocking said cooler through a door forming at least a portion of a rear wall of said cooler, said door being selectively movable between open and closed positions.

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