A moving advertising display is provided comprising a series of air receiving pockets carrying like or dissimilar messages on their sidewalls, which pockets are presented in succession at a generally eye level display station being traversed with air, to fill the pockets for responsive movement of the message carrying sidewalls in an attention-getting manner.
MEANS FOR THE MOVING DISPLAY OF ADVERTISING OR LIKE MATERIAL

BACKGROUND OF THE INVENTION

This invention has to do with advertising and like displays of printed, literal or symbolic indicia in a manner to positively attract the attention of consumers, such as supermarket shoppers.

With a typical supermarket, a shopper is exposed to thousands of visual impressions as each product seeks to attract attention. Vendors vie for shelf space and location preferences to better display their product. For example, eye-level display i.e., display within 24 inches of a horizontal gaze has been demonstrated to produce increased sales over higher or lower display locations. The supermarket shelf is therefore crammed with boxes, bags and cans of varying coloration, dimension and design, each seeking to be identifiable amid the chaos of color confronting the consumer. Nonetheless, despite the vibrancy of package color choices, the displays are essentially static and visually blur when an aisle array is viewed.

The retailer’s response has been ever larger display devices in increasingly awkward locations, e.g., at the end of aisles where turns with filled carts must be negotiated.

This invention is addressed to the problem of presenting attention getting messages to the consumer about the availability and value of products and services, in minimum space, at low cost, with infinite variety and, withal, tailored to the volume of traffic at the display location.

SUMMARY OF THE INVENTION

This and other objects of the invention to become apparent hereinafter are realized in accordance with the principles of the invention by the method for the attention-getting display of successive like or dissimilar messages to consumers which includes individually presenting at a generally eye-level display station, a series of air receiving pockets comprising a sidewall having air inlet means responsive to air reception by the pocket and carrying an advertising message, and delivering air into the pockets at the display station to move the sidewall in an attention-getting manner. The method further contemplates varying the air delivery into the pocket at the display station to flutter the message carrying sidewall thereof, removably supporting the pocket at the display station opposite the message carrying sidewall, and advancing the next of the series of pockets to the display station responsive to removal of the preceding pocket therefrom.

Apparatus is provided for carrying out the above method for the moving display e.g., at point-of-purchase location, of successive like or dissimilar messages to consumers which comprises a generally eye level advertising message display station and means to traverse the station with an air stream, a series of air receiving pockets carried for individual presentation at the display station, each of the pockets comprising a wall portion having responsive movement to air reception by the pocket and carrying an advertising message, and means to present the pockets in succession at the display station in air receiving relation to move the advertising message bearing wall portion in an attention-getting manner. The pocket presenting means typically will include means to releasably support the pockets at the display station for manual removal following display, which may be responsive to such removal to present the next successive pocket and the message thereon at the display station. The pocket support means generally comprises a web carried for travel to and from the display station, the web having a surface releasably adherent to the pockets, and being adapted to advance the next successive pocket to the display station in response to removal of the pocket preceding.

In particularly preferred embodiments, the pockets each comprise opposed sidewalls joined at three sides to define an open-ended pocket, one of the sidewalls carrying the message and successive pockets being severally interconnected, pocket support means comprising a movable member adapted to releasably engage the pocket sidewall opposite the message carrying sidewall, means to move said member in pocket supporting relation relative to the display station to present succeeding pockets and their messages at the station responsive to successive removals of pockets from the display station with the pocket end opening disposed at said station to receive air from the air stream means to inflate the pocket for free sidewall movement.

The air stream means may comprise a blower arranged to stream air across the display station and the apparatus may further include means to vary the volume of air streamed across the display station to variably inflate the pocket at the station and correspondingly flutter the free sidewall carrying the advertising message.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will be further described as to an illustrative embodiment in connection with the accompanying drawings wherein:

FIG. 1 is a perspective view of a succession of interconnected pockets bearing advertising messages on a sidewall thereof;

FIG. 2 is a perspective view of one form of apparatus for the successive presentation of pockets and advertising messages; and

FIG. 3 is a vertical sectional view taken on line 3—3 in FIG. 2 of the message presentation apparatus.

DETAILED DESCRIPTION

With reference now to the drawings, the advertising display apparatus 1 is shown in FIG. 2 and 3 and comprises a cabinet 2 having a rear portion 3 and a front door 4 hinged at the left side and locked at the right side by latch 5. The door 4 defines a message display station 6 occupied in FIGS. 2 and 3 by bag like structure defining the air receiving pocket 7 of the invention. The cabinet 2 includes base 8 adapted by means of pads 9 to rest upon a shelf 10 (FIG. 3) or, in appropriate cases, to be supported by a pedestal or bracket (not shown).

The apparatus 1 is adapted to advance singly and in succession each one of a series of interconnected bag structures like those shown in FIG. 1 which define the series of air receiving pockets 7 herein. With reference to FIGS. 1—3 the pockets are seen to comprise opposed sidewalls 11, 12 joined together at three sides, 13, 14, 15 to form the pocket 7 having an open end 16. This arrangement may be realized by effecting opposed transverse perforations in the walls of flattened plastic tubing and heat sealing the tubing walls together adjacent one side of the perforations. In FIG. 1, this ar-
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Arrangement is shown with the pockets 7a, 7b and 7c carried in interconnected relation for presentment bottom or sealed side 14 first with perforations 17, 18 being provided transversely in the tubing for severance of the forwardmost pockets from the remainder e.g., as has been done at 19. Thus arranged the pockets 7 can be supplied rolled into roll form or in stacked relation.

The front sidewall 11 of each pocket 7 is printed with an advertising message "BUY PRODUCE" which is typical of the literal or design indicia which may be imprinted onto one or both, but at least the front sidewalls. Trademarks, slogans, logos, information or other symbols may be printed or embossed onto sidewall for display.

It will be observed that the pocket 7 at the display station 6 is carried in open ended relation and upwardly disposed for air reception as will now be explained.

Initially, however, it may be pointed out that it is the mode of disposition and the air reception when so disposed that enables the achieving of fluttering responsive movement of the pocket front sidewall 11. The rear sidewall 12 is engaged, as will be explained, leaving the front sidewall 11 free to move within the limits of its junction at sides 13, 15 and bottom 14 to the rear sidewall. Typically, the pockets 7 are formed of thin plastic e.g., polyethylene, polyvinyl chloride or other polyolefin film e.g., from 1 to 10 up to 25 mils in thickness. Other sheet material of like flexibility may also be used including cellulose and metallic foil materials and the like, i.e., films and sheet materials capable of containing but not restricting through air flow when formed into a bag-like structure.

It is a signal feature of the present apparatus and method that a succession of messages, like or dissimilar in content, are presented, and in response to consumer use of the display medium i.e., the pocket. This result is realized by the use of the mentioned interconnected or at least serially presentable pockets 7 and a pocket support and presentment mechanism now to be described.

The supply of pockets 7 is preferably within cabinet 2 and adjacent to the pocket handling mechanism indicated at 26. In the drawing, the supply of pockets is not shown, but is at the lower right in FIG. 3, i.e., at 21 in that Figure. The pockets 7, interconnected, are drawn from the supply to the handling mechanism 20 where guide 22 carried between arms 23 presses the pockets outward for handling mechanism engagement.

The handling mechanism 20 provides means to transport tubing pockets 7 from the supply to the display station 6 at door 4, and means to relatively move the bag sidewalls 11, 12 during passage to the display station, to selectively sever at least one sidewall of the pocket from the next succeeding pocket, to open the pocket end 16. Accordingly, the pocket handling mechanism comprises the transport structure, the opening structure, and a drive and controls to operate these structures in timed relation.

The pocket transport structure is essentially comprised of means extending between the supply at 21 and the display station 6 and means to grip the pockets in sequence for travel from the supply to the station.

With reference to FIG. 3, one form of pocket transport structure is shown, comprising a lower roller assembly 24, an upper roller assembly 25, and an endless belt 26 extending between and around the roller assemblies, the belt carrying pocket adherent adhesive as a surface layer 27. The lower roller assembly 24 comprises driven lower roller 28 fixed on horizontal shaft 29 which is journaled in vertically disposed mounting plates 30 welded at 31 to the door panel 32. The roller shaft 29 rotates on its longitudinal axis in bearings 33, carried in the mounting plates 30.

The endless belt 26 comprises a relatively inelastic, tough web of cloth, plastic, metal or like material suitably having a gummy, tacky or sticky outer surface for temporary adhesion to the pockets 7 e.g., a tacky adhesive coating forming layer 27. Preferably, the adhesive of layer 27 is high in shear strength and low in peel strength to enable positive advancement of the pockets 7 and easy removal at the display station 6. Numerous known, high tack, rubber or resin based materials possess the requisite temporary adherent quality and can be used, including materials available in tape form, the belt then being, a tape backing e.g., Mylar film, or a solid block of gum rubber or sticky elastomer suitably shaped e.g., as a wheel can be used. Other means e.g., mechanical clamping devices, may be used for pocket transport.

The upper roller assembly 25 lies in a common vertical plane with the lower roller assembly 24 and includes an upper roller 34, a shaft 35 parallel to lower roller shaft 29 journaled in bearings (not shown) and carried by the door 4. The upper roller 34 is an idler roller and is carried on the upper shaft 35 for rotation about the shaft.

It will be observed that lower roller 28 carries the belt 26 closely adjacent to the pocket supply at 21 and into pocket 7 as directed outwardly by guide 22. The pockets 7 in connected relation are thus engaged in sequence from the supply.

The belt 26 by means of adhesive layer 27 adherently grips each pocket 7 urged thereto by guide 22. The belt 26 carries the adhesively engaged pockets 7 bottom side 14 up (or heat seal end first) from the supply upward to upper roller assembly 25 whereupon the pockets are drawn over the upper roller 34 and thereby inverted as they come into the display station 6, see FIG. 3. The pockets 7 can be advanced open end 16 first to the lower roller assembly 24 to achieve the same open end up relation of the pocket at the display station 6. The pocket 7 at the display station 6 is separable by hand, utilizing the relatively low peel strength of the adhesive layer to advantage.

An electric motor of the reversing type (not shown) is provided supported on the door 4 between the rollers 28, 34 for driving the rollers through motor output shaft 36, drive pulley 37 and drive belt 38, connected to lower shaft 29.

The lower and upper rollers 28, 34 are drivingly connected by the belt 26 so that forward or reverse operation of the motor causes respectively counterclockwise or clockwise rotation of the upper and lower rollers together about their respective axes and concomitant belt travel. Control of motor and thus belt 26 travel direction is by switches, e.g., limit switch 39 and circuitry (not shown) which sequentially actuate to alternate belt 36 travel direction, in unequal forward and reverse modes.

Having thusfar described the transport of the pockets 7 from the supply to the display station 6, the pocket opening aspects of the device will be detailed.

The pockets 7 are initially interconnected across perforations 17, 18, etc., in the opposing sidewalls 11, 12.
The pockets 7 are opened by moving their opposing sidewalls 11, 12 relative to one another in the course of pocket transport from the supply to the display station 6.

In preferred practice, one sidewall only i.e., 11 of the pockets 7 is severed, the other sidewall, i.e., 12, remains interconnected with the next succeeding, corresponding pocket sidewall, so that there is no discontinuity in the advance of the pockets from the supply to the display station 6, and the pockets are carried for alternately reversing movement. Means to relative move the opposing sidewalls 11 and 12 in conjunction with the belt 26 is provided in the form of drag structure generally indicated at 41 which is carried adjacent the pocket 7 advancement path and intermediate the rollers 28, 34 to engage the sidewall 11 therewith, for unidirectional movement. The drag structure 41 includes a wheel 42 in engagement with sidewall 11 of the pockets 7, urged into pocket engagement. A backup plate 42 is provided behind the belt 26 opposite the wheel 42 to cooperate with the wheel in firmly engaging the sidewall 11 between the upper and lower rollers 28, 34.

Through a clutch means (not shown) the wheel 42 is permitted to rotate only clockwise or with the pocket advance. The wheel 42 is provided with a relatively non-slip surface and is desirably somewhat resilient to maximize the "footprint" of the wheel on the sidewall 11. Suitably wheel 42 is fabricated of relatively hard rubber or plastic or provided with a surface layer of suitable friction material.

During advance of the pockets 7 to the display station 6, the wheel rides in a rolling manner on the sidewall in directly opposed relation to belt 26. Reversal of the pocket 7 travel direction by switch actuation of the belt drive motor causes the clutch mechanism to lock the wheel 42 against counterclockwise rotation and the wheel drags on the sidewall 11. Sufficient pressure is applied by the wheel 42 to preclude substantial retrogressive movement of the sidewall 11, although the opposite sidewall 12, gripped by the adhesive layer 27 of the belt 26 does move in the reverse direction. The result is relative movement of the sidewalls 11, 12 as they slide past each other. The wheel engaged sidewall 11 crumples and backs up. The nonengaged sidewall 11 of the next succeeding pocket 7, untrammeled by any drag structure does move, and the result is a tearing force at the perforation 19 in the sidewall 11, but not at the sidewall 12. The perforation 19 yields locally, severing the pocket 7 interconnection on one side, and the bag is opened. See FIG. 3.

Once opened, the pockets 7 are advanced to the display station 6 by again reversing the belt 26 travel direction.

With reference particularly to FIGS. 2 and 3, a further feature of the apparatus I can now be described. At the top of cabinet 2, secured to the cabinet top wall 44 by bracket 45 is a self-contained blower 46 having an outlet 47 arranged to deliver pressurized air along the inside of the top wall. A transversely curved deflector 48 is provided, hinged at 49 to the forward edge of the top wall 44 to define a plenum at 50 between the deflector 48 and the pocket wall 11 atop upper roller 34 which causes the pressurized air from blower outlet 47 to be distributed across the width of display station 6 to stream across the station downwardly in traversing relation. The one sidewall separated—but other side-wall interconnected—pocket 7 being advanced to the display station 6 is filled with blower air as it is fully inverted, (see FIG. 3) with the message carrying sidewall 11 free of support by belt 26 bellying outward, in a continuing irregular movement responsive to more or less air in the pocket as the pocket fills then spills air. The pocket 7 can be removed by simply overcoming the remaining perforated connections and the low peel strength of the belt adhesive 27.

The apparatus I is arranged to cycle the belt 26 through alternately reversed travel directions to alternately open and deliver pockets 7 and their advertising message through operation of the motor mentioned and switches like limit switch 39.

Accordingly when a pocket 7 is separated at the display station 6, the apparatus carries the next succeeding pocket backward, whereupon the drag structure 41 automatically actuates to retard outer sidewall 11 movement as explained above, and thus open the pocket at e.g., perforation 18. The opened pocket is advanced to the display station 6 until the lower limit switch 39 is depressed. It will be noted that the open end 16 of the pocket 7 passes through plenum 50 and the pocket is thus air inflated as it enters the display station. The deflector 48 continues to direct blower 46 air into the open back end 16 to maintain inflation, see FIGS. 2 and 3. The continuing entry of air into the pocket causes the free sidewall, wall 11, to bilow and vavex as the air circulates within the pocket and leaves countercurrently to incoming air. The message on the sidewall 11 correspondingly dances before the eyes of shoppers to positively attract attention.

The dancing effect may be enhanced by varying the air flow into the pocket, e.g., by having deflector 48 weighted to be responsive to air flow to move to increase or decrease the plenum 50, as shown in phantom lines in FIG. 3. Or the blower 46 may be cycled in its operation by time control switch 51. In either case the pocket 7 may be alternately filled and collapsed, by varying the air flow.

As noted above, the present display apparatus is actuated for display of the next message by removal of the pocket 7 of the display station 6. Because the pockets 7 are removable by consumers, e.g., for use as a bag in packaging groceries, the next message is displayed in response to the volume of traffic at the location.

We claim:

1. Apparatus for the moving display of successive like or dissimilar messages to consumers comprising a generally eye-level advertising message display station and means to traverse the station with an air stream, a series of air receiving pockets carried for individual presentation at the display station, each of said pockets comprising a wall portion having responsive movement to air reception by the pocket and carrying an advertising message, and means releasably engaging said pockets opposite said wall portion at the display station, said engaging means being movable to and from the display station to present said pockets in succession and in air receiving relation to move the advertising message on said wall portion in an attention-getting manner.

2. Apparatus according to claim 1 in which said pocket presenting means is responsive to removal of a pocket from the pocket support means to present the next successive pocket and the message thereon at the display station.
3. Apparatus according to claim 2 in which the pocket support means comprises a web carried for travel to and from the display station, said web having a surface releasably adherent to said pockets opposite said pocket wall portion and being adapted to advance the next successive pocket to the display station in response to removal of the pocket preceding.

4. Apparatus according to claim 1 in which said pockets each comprise opposed sidewalls joined at three sides to define an open ended pocket, one of said sidewalls, carrying said message, said pocket presenting means including a pocket support means comprising a movable member adapted to releasably engage the pocket sidewall opposite the message carrying wall portion, means to move said member in pocket sidewall engaging relation relative to the display station and from the display station to present succeeding pockets and their messages at the station responsive to successive removals of pockets from the display station with the pocket end opening disposed to receive air from the air stream means to inflate the pocket for free wall portion movement.

5. Apparatus according to claim 4 including also means to vary over time the volume of air streamed across the display station to variably inflate the pocket at said station and correspondingly flutter the free sidewall carrying said message.

6. Apparatus according to claim 4 in which the web engaged sidewalls of successive pockets are severally interconnected.

7. Method for the attention-getting display of successive like or dissimilar messages to consumers which includes individually presenting at a generally eye-level display station, a series of air receiving pockets comprising a first sidewall having responsive movement to air reception by the pocket and carrying an advertising message, engaging the pocket sidewall opposite said message sidewall, and delivering air into said pockets at the display station to move said first sidewall in an attention-getting manner.

8. Method according to claim 7 including also varying the air delivery into the pocket at the display station to flutter the message carrying sidewall thereof.

9. Method according to claim 7 including also advancing the next of said series of pockets to the display station responsive to removal of the preceding pocket therefrom.

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