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Inventor(s)

Lamb; Tony

LIQUID TOPPINGS DISPENSING SYSTEM

Abstract

A mobile confectionary apparatus includes a vehicle with at least one upstanding side wall. An interior space may be surrounded by the upstanding side wall. An opening may extend through the side wall. A liquid toppings dispensing system is adjustably positionable adjacent to the side wall and includes a first plurality of liquid dispensers configured to dispense at least one liquid topping. The liquid toppings dispensing system is pivotable relative to the side wall between a first position and a second position. The liquid toppings dispensing system is located externally of the side wall in each of the first and second positions.

Inventors: Lamb; Tony (Walton, KY)

Applicant: Kona Ice, Inc. (Florence, KY)

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Background/Summary

CROSS-REFERENCE TO RELATED APPLICATIONS [0001] The present application is a continuation of co-pending U.S. patent application Ser. No. 18/589,671, filed Feb. 28, 2024, which is a continuation of U.S. patent application Ser. No. 17/829,836, filed Jun. 1, 2022, now abandoned, which is a continuation of U.S. patent application Ser. No. 17/157,038, filed Jan. 25, 2021, now abandoned, which is a continuation of U.S. patent application Ser. No. 16/809,971, filed Mar. 5, 2020, now abandoned, which is a continuation of U.S. patent application Ser. No. 16/456,014, filed Jun. 28, 2019, now abandoned, which is a continuation of U.S. patent application Ser. No. 16/124,646, filed Sep. 7, 2018, now abandoned, which is a continuation of U.S. patent application Ser. No. 15/693,996, filed Sep. 1, 2017, now abandoned, which is a continuation of U.S. patent application Ser. No. 14/870,439, filed Sep. 30, 2015, now U.S. Pat. No. 9,751,447, issued Sep. 5, 2017, which is a continuation of U.S. patent application Ser. No. 13/779,650, filed Feb. 27, 2013, now U.S. Pat. No. 9,321,387, issued Apr. 26, 2016, and is related to U.S. Pat. No. 8,915,407, issued Dec. 23, 2014, and entitled “MOBILE CONFECTIONARY APPARATUS WITH PROTECTIBLE DISPENSING SYSTEM,” and is also related to U.S. Pat. No. 8,157,136, issued Apr. 17, 2012, and entitled “MOBILE CONFECTIONARY APPARATUS WITH PROTECTIBLE DISPENSING SYSTEM,” each disclosure of which is expressly incorporated by reference herein in its entirety.

FIELD OF THE INVENTION

[0002] The present invention relates generally to a mobile apparatus for serving confections and, more particularly, to a mobile confectionary apparatus for dispensing beverages and/or frozen confections.

BACKGROUND OF THE INVENTION

[0003] Mobile confectionaries for selling confections (e.g., snow cones, shaved ice, ice cream, and beverages) have been around for years. Mobility may be provided via truck, trailer, or mobile kiosk and may bring confection sales to places that as a matter of general operation may not have any vending available. These locations may include, for example, festivals, parks, and residential neighborhoods. The dispensing of liquids, likes drinks and flavorings, has typically been done by a person within the truck/trailer, or by the customer at a kiosk.

[0004] Structurally, a mobile confectionery will typically include a box-like enclosure having an interior work space outfitted for the preparation and sale of the confections and at least one service window through which the confections are transferred to the customer and the transaction conducted. The work space is typically large enough for at least one person and contains apparatuses for preparing the confections and may include, for example, ice shaving or crushing equipment, slush making devices, ice cream/custard dispensing apparatuses, or the like.

[0005] It has been found that in this industry, profitability and customer satisfaction are largely dependent upon providing quality products and fast service. Profitability may also be time sensitive. This may be the case when crowds are present before or after a show or concert or during an intermission when people flood a given area and then depart that area in a short amount of time. In this situation, the length of a line at any individual vendor may be the determining factor for

people who arrive after the initial wave of people. A long line at one confectionary may drive later-arriving customers to another vendor with a shorter line. Fast service may drive profitability in this instance. Keeping the line short is an invitation to later-arriving potential customers.

[0006] Another factor in customer satisfaction, particularly for frozen confections, such as shaved ice, snow cones, and the like, is the quantity of topping or flavoring applied to the confection. More is most often better. Yet applying more flavoring requires more time and can cause the wait time to increase to the detriment of potential customers. Because confectionaries are a favorite of children, another factor that drives up wait time, and thus drives away potential customers, is waiting for a child to select their topping or flavoring.

[0007] Thus, what is sought is a mobile confectionary apparatus, which increases customer satisfaction and increases productivity, particularly for frozen confections, and which overcomes one or more of the shortcomings and problems set forth above.

SUMMARY OF THE INVENTION

[0008] The present invention overcomes the foregoing and other shortcomings and drawbacks of liquid toppings dispensing systems heretofore known for use in mobile confectionary apparatuses. While the invention will be described in connection with certain embodiments, it will be understood that the invention is not limited to these embodiments. On the contrary, the invention includes all alternatives, modifications and equivalents as may be included within the spirit and scope of the present invention.

[0009] In accordance with the principles of the present invention, a mobile confectionary apparatus comprises a vehicle that includes at least one upstanding side wall. An interior space is surrounded by the at least one upstanding side wall and is configured to receive at least one person. An opening extends through the at least one upstanding side wall and through which an item may be passed from the interior space to outside of the vehicle.

[0010] A liquid toppings dispensing system is attachable to the at least one upstanding side wall and includes a first plurality of liquid dispensers configured to dispense at least one liquid topping onto the item. The liquid toppings dispensing system is pivotable relative to the at least one upstanding side wall between a first position and a second position, with the liquid toppings dispensing system being located externally of the at least one upstanding side wall in each of the first and second positions.

[0011] According to one aspect of the present invention, the at least one upstanding side wall includes a pair of opposing side walls and a rear wall extending transversely between the pair of opposing side walls.

[0012] According to another aspect of the present invention, a longitudinal axis of the liquid toppings dispensing system is disposed generally parallel to one of the pair of opposing side walls in the first position.

[0013] According to another aspect of the present invention, a longitudinal axis of the liquid toppings dispensing system is disposed generally parallel to the rear wall in the second position.

[0014] According to another aspect of the present invention, the opening is provided in one of the opposing side walls and the liquid toppings dispensing system is oriented generally parallel to the one opposing side wall in the first position.

[0015] According to another aspect of the present invention, a mobile confectionary apparatus comprises a vehicle including at least one upstanding side wall and a liquid toppings dispensing system being supported by the at least one upstanding side wall. The liquid toppings dispensing system includes a plurality of liquid dispensers configured to dispense at least one liquid topping onto the item. The liquid toppings dispensing system is pivotable relative to the at least one upstanding side wall between a first position and a second position, with the liquid toppings dispensing system being located externally of the at least one upstanding side wall in each of the first and second positions.

[0016] The above and other objectives and advantages of the present invention shall be made apparent from the accompanying drawings and the description thereof.

Description

BRIEF DESCRIPTION OF THE DRAWINGS

[0017] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate embodiments of the invention and, together with a general description of the invention given above and the detailed description of the embodiments given below, serve to explain the principles of the invention.

[0018] FIG. 1 is a side view of a mobile confectionary apparatus including a liquid toppings dispensing system shown pivoted to a first position according to one embodiment of the present invention;

[0019] FIG. 2 is a view similar to FIG. 1 showing the liquid toppings dispensing system pivoted to a second position according to one embodiment of the present invention;

[0020] FIG. 3A is a perspective view of the liquid toppings dispensing system pivoted to the first position as illustrated in FIG. 1;

[0021] FIG. 3B is a top plan view of the liquid toppings dispensing system shown in FIG. 3A;

[0022] FIG. 4A is a perspective view of the liquid toppings dispensing system shown pivoted to the second position as illustrated in FIG. 2;

[0023] FIG. 4B is a top plan view of the liquid toppings dispensing system shown in FIG. 4A;

[0024] FIG. 5A is a front elevational view of the liquid toppings dispensing system shown in FIG. 1 according to one embodiment;

[0025] FIG. 5B is a side elevational view of the liquid toppings dispensing system shown in FIG. 1 according to one embodiment;

[0026] FIG. 5C is a rear elevational view of the liquid toppings dispensing system shown in FIG. 1 according to one embodiment;

[0027] FIG. 6 is a disassembled perspective view of the liquid toppings dispensing system shown in FIG. 1 according to one embodiment, showing fluid connection of the liquid toppings dispensing system with a mobile structure; and

[0028] FIG. 7 is a side elevational view of a mobile confectionary apparatus according to one embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0029] Referring now to the drawings, and to FIGS. 1 and 2 in particular, in one embodiment, a mobile confectionary apparatus 10 provides a mobile platform for making and serving frozen confections, such as, but not limited to, shaved ice and/or snow cones to customers. A liquid topping, such as a flavored syrup, may then be applied to the frozen confection by the customer. In this regard and according to embodiments of the present invention, the mobile confectionary apparatus 10 includes a liquid toppings dispensing system 12, described in detail below. Generally, the liquid toppings dispensing system 12 is configured to dispense one or more liquid toppings, such as flavored syrups, onto the frozen confections served to the customer. A customer having been previously served with a frozen confection may selectively self-serve one or more of the liquid toppings onto the frozen confection as desired from the liquid toppings dispensing system 12. The mobile confectionary apparatus 10 as described herein may advantageously increase the number of customers that may be served over any given period of time. Accordingly, embodiments of the present invention may increase revenues generated by the sales of frozen confections from the mobile confectionary apparatus 10 while also positively influencing customer satisfaction by reducing the possibility of potentially long wait lines.

[0030] To these and other ends and with continued reference to FIG. 1, in one embodiment, the

mobile confectionary apparatus **10** may include a vehicle chassis **14**. In the representative embodiment shown, the chassis **14** is a truck chassis and includes an engine and drive train (not shown) for rotating one or more wheels **16** in a conventional manner and for propelling the vehicle chassis **14** in both the forward and reverse directions over roads and the like to various destinations. As shown, the vehicle chassis **14** supports a mobile structure **18** that includes an upstanding side wall **20**. It will be appreciated that embodiments of the present invention are not limited to trucks. For example, the vehicle chassis **14** may include a trailer chassis (not shown) that is towable by a vehicle, such as a truck, as is known in the art. In this situation, the mobile structure **18** may be mounted onto the trailer chassis.

[0031] In one embodiment, as is described in more detail below, the liquid toppings dispensing system **12** may be releasably or removably attached to the upstanding side wall **20** and may be movable or pivotable to at least two different positions, such as first and second positions, as is shown according to one embodiment in FIGS. **1** and **2**, respectively. Visually, in the first position as shown in FIG. **1**, the liquid toppings dispensing system **12** may provide an overall lengthening of the mobile confectionary apparatus **10** relative to a second position as shown in FIG. **2**. While the liquid toppings dispensing system **12** may be pivoted to many different orientations, the system **12** may be operable by customers to self-serve a liquid topping when the system **12** is pivoted to the position shown in FIG. **1**, by way of example. In the second position as shown in FIG. **2**, the liquid toppings dispensing system **12** may not be operable, or may be oriented in this second position to change the location in which the customer accesses the system **12** for dispensing liquid toppings onto a frozen confection or simply as a transport position during movement of the mobile confectionary apparatus **10**. It will be appreciated that certain geographic locations at which the apparatus **10** is positioned for business may have a reduced space within which to operate, and the second position of the liquid toppings dispensing system **12** as shown in FIG. **2** may allow the mobile confectionary apparatus **10** to physically fit within the confines of a reduced area and still retain the improved throughput as set out above. Alternatively, the second position of the liquid toppings dispensing system **12** as shown in FIG. **2** may be a temporary storage position, which may be utilized during movement of the mobile confectionary apparatus **10** or in other situations.

[0032] As shown in FIG. **1**, the upstanding side wall **20** encloses an interior space **22** and separates the interior space **22** from the environment outside of the structure **18**. The interior space **22** is configured to hold equipment **23**, such as equipment for preparing shaved ice, snow cones, and/or other frozen confections. It will be appreciated that other equipment, in addition or as an alternative to equipment **23**, may be located within the interior space **22** including, but not limited to, a freezer and/or a cooler. Interior space **22** is sufficiently large for one or more people to operate the equipment **23** and to serve customers from within the structure **18**. It will be appreciated that the liquid toppings dispensing system **12** is not within the interior space **22**. Rather, in the embodiment shown, the liquid toppings dispensing system **12** may be only accessible from outside of the mobile structure **18**.

[0033] In the representative embodiment shown, the interior space **22** is bounded by the upstanding side wall **20**, a floor **25**, and a roof **27**. Roof **27** is spaced sufficiently above the floor **25** to allow a person to stand within the interior space **22**. In one embodiment, the upstanding side wall **20** includes a side wall **24**, a second side wall (not shown) opposite the side wall **24**, a rear wall **26** extending transversely between the pair of side walls that are joined at corners **28** (one corner shown), and a front wall **29**. As shown, the side wall **24** is generally parallel to the forward and reverse directions in which the mobile confectionary apparatus **10** moves. The rear wall **26** is generally perpendicular to the side wall **24**.

[0034] With continued reference to FIG. **1**, the wall **20** may include a service opening **30** through which a person in the interior space **22** can conduct business by passing frozen confections to customers and receiving money from customers outside of the structure **18**. The service opening **30** is located at a suitable elevation above the ground on which the mobile confectionary apparatus **10**

rests. A service window **32** may be operable by a person in the interior space **22** between an opened position (shown in FIG. **1**) in which the person in the interior space **22** may make transactions through the service opening **30** and a closed position (shown in FIG. **2**) in which the service opening **30** is closed or obstructed by the window **32**.

[0035] As described above with reference to FIGS. **1** and **2**, the liquid toppings dispensing system **12** may be movable or pivotable between at least two different positions relative to the structure **18**. That is, a person may swing or pivot the liquid toppings dispensing system **12** about its point of attachment to the structure **18** from at least one position to another position. Once the liquid toppings dispensing system **12** is positioned in either of the first or second positions, the customer, after having been served via the opening **30**, may simply follow the side wall **24** to the liquid toppings dispensing system **12** in order to self-serve liquid toppings from the system **12**. Thus, the location and orientation of the liquid toppings dispensing system **12** in either of the first or second positions as shown in FIGS. **1** and **2**, by way of example, may enhance the flow of customers through the service process, that is first the flow of customers to the opening **30** to receive a frozen confection or container and then from the opening **30** to the liquid toppings dispensing system **12** to dispense the liquid toppings onto the frozen confection or into the container.

[0036] In the first position, as is shown in FIGS. **1**, **3A**, and **3B**, the liquid toppings dispensing system **12** may extend outwardly from the rear wall **26** at a suitable height so as to be manually operable by a customer located outside of the mobile confectionary apparatus **10** for dispensing a liquid topping, such as flavored syrup, on a confection. That is, a longitudinal axis **36** (FIG. **3B**) or a major length dimension of the liquid toppings dispensing system **12** may extend in a generally transverse direction relative to the rear wall **26**. In the exemplary embodiment, the longitudinal axis **36** of the liquid toppings dispensing system **12** is oriented generally perpendicular to the rear wall **26**. Furthermore, when the liquid toppings dispensing system **12** is in the first position as shown in FIG. **1**, the longitudinal axis **36** of the liquid toppings dispensing system **12** extends in a direction that is generally parallel to the side wall **24**. As described above, the liquid toppings dispensing system **12** may be pivoted from the first position shown in FIG. **3A** to the second position shown in FIG. **4A** when there is insufficient room for the system **12** to extend transversely (e.g., perpendicularly) from the rear wall **26** or prior to moving the mobile confectionary apparatus **10**. In the second position, the longitudinal axis **36** of the liquid toppings dispensing system **12** may be oriented generally parallel to the rear wall **26**.

[0037] Further with regard to positioning of the liquid toppings dispensing system **12**, embodiments of the present invention are not limited to the system **12** being oriented at an approximately perpendicular angle relative to the rear wall **26** in the first position, and generally parallel with the rear wall **26** in the second position. Other orientations than those shown are possible in which a customer may self-serve the liquid toppings. For example, the longitudinal axis **36** of liquid toppings dispensing system **12** may extend at an angle that is not perpendicular to the rear wall **26**. In such an orientation, the liquid toppings dispensing system **12** may still provide an overall relative visual lengthening of the structure **18** and provide a natural flow to the self-serve liquid dispensing process from the opening **30** to the system **12**.

[0038] In addition to the angular orientation of the liquid toppings dispensing system **12**, the location on the wall **20** to which the system **12** is attached may vary. In the embodiment shown, and with reference to FIG. **3B**, the liquid toppings dispensing system **12** may be secured proximate to the corner **28** as shown. In this sense, the liquid toppings dispensing system **12** may be visible to customers standing at or near the opening **30**. Generally, the liquid toppings dispensing system **12** may be secured to the structure **18** nearer to the side wall **24** than to the centerline of the structure **18**. As described above, when the liquid toppings dispensing system **12** is positioned nearer to the corner **28**, customers may see and obtain easy access to the liquid toppings. By way of example, the liquid toppings dispensing system **12** may be secured to the rear wall **26** such that a front surface of the system **12** is substantially flush with the side wall **24**. It will be appreciated that the liquid

toppings dispensing system **12** may project beyond a plane defined by the side wall **24** and so the position of the system **12** is not specifically limited to the orientations shown.

[0039] In one embodiment of the present invention, the liquid toppings dispensing system **12** is movable or pivotable to at least one other position (e.g., the second position, as shown in FIGS. **2**, **4A**, and **4B**). Unlike the first position of the liquid toppings dispensing system **12** shown in FIG. **1**, the second position shown in FIG. **2** may orient the longitudinal axis **36** of the liquid toppings dispensing system **12** generally parallel to the rear wall **26** (shown best in FIG. **4B**). When the liquid toppings dispensing system **12** is in the second position shown in FIG. **2**, the system **12** may still be usable in that customers who have been served via the window **32** may proceed to the rear wall **26** of the mobile confectionary apparatus **10** to self-serve the liquid topping from the system **12**. In one embodiment of the present invention, the liquid toppings dispensing system **12** may not be operable in the second position shown in FIG. **4A**.

[0040] While the figures generally illustrate the liquid toppings dispensing system **12** as being removably attached to and pivotable relative to the rear wall **26** (see, for example, FIG. **6**), it will be appreciated that embodiments of the present invention are not limited to the liquid toppings dispensing system **12** being secured to the rear wall **26**. In this regard, the liquid toppings dispensing system **12** may be removably attached to, and pivotable with respect to, the side wall **24**.

[0041] With reference now to FIGS. **4A** and **5A**, in one embodiment, the liquid toppings dispensing system **12** may include a plurality of liquid dispensers **40** that are configured to selectively dispense the liquid toppings onto a frozen confection. In one embodiment, the liquid dispensers **40** are arranged along an axis **41** (FIG. **4A**) that is generally parallel to the longitudinal axis **36** of the liquid toppings dispensing system **12**. While liquid toppings, such as flavored syrups, are described herein, it will be appreciated that the liquid dispensers **40** may be configured to dispense a beverage into a container, such as a cup or the like. The plurality of liquid dispensers **40** may be arranged along and secured to a support panel **42** that includes a backsplash **43**. The support panel **42** and backsplash **43** may be enclosed within a housing **44**. A catch basin **45** may be disposed beneath the liquid dispensers **40** and configured to drain spilled liquid topping to a waste container (not shown). It will be appreciated that the number of liquid dispensers **40** may dictate the overall dimensions and thus the length of the longitudinal axis **36** of the liquid toppings dispensing system **12**. The liquid dispensers **40** may be accessed and operated by customers via an opening **46** in the housing **44**.

[0042] With reference to FIGS. **3A**, **5A**, **5B**, and **6**, in one embodiment, the housing **44** may further include one or more utility access openings **48** on one side of the housing **44** through which electrical and fluid connections may be made to equipment within the structure **18**. In one embodiment, the structure **18** includes a hookup panel **60** located on the rear wall **26** that includes a plurality of liquid dispensing ports **62** and an electrical outlet **63**. The panel **60** may align with one of the utility access openings **48** in the housing **44** when the liquid toppings dispensing system **12** is positioned as shown in FIG. **3A**. The number of liquid dispensing ports **62** may correspond to the number of liquid dispensers **40**. It will be appreciated that a plurality of fluid delivery conduits or tubes **64** may be releasably contacted to the individual liquid dispensing ports **62** via conventional quick connect/disconnect connectors, and extend between the liquid dispensing ports **62** and the corresponding liquid dispensers **40**. The liquid dispensing ports **62** may be fluidly coupled to one or more reservoirs **66** (shown in FIG. **1**) of the liquid toppings. As shown in FIG. **1**, the reservoirs **66** may be positioned within the structure **18**. The tubes **64** may direct liquid toppings from the reservoirs **66** to the corresponding liquid dispensers **40**, as needed, during operation of the mobile confectionary apparatus **10**. It will be appreciated that embodiments of the present invention are not limited to the reservoirs **66** being positioned within the structure **18**, as it may be beneficial to have a reservoir provided within the housing **44**. In addition, an electrical cable **65** may be releasably coupled in a conventional manner to the electrical outlet **63** for providing electrical power to

devices on or in the housing **44**. By way of example, the electrical cable **65** may be configured to power a plurality of display lights **67** (e.g., 12V LED lights) within the housing **44**. As shown in FIG. 5A, the display lights **67** are arranged to illuminate at least the liquid dispensers **40** during operation.

[0043] The structure **18** may further include a waste line port **68** that aligns with another one of the utility access openings **48** and the housing **44**, as shown in FIG. 3A. The waste line port **68** may be configured to transport any liquid topping drippings captured by the catch basin **45** from within the housing **44** back to the structure **18** via tube **64** (FIG. 6). Furthermore, the tubes **64** may be configured to be disconnected from the port **62** and/or the liquid dispensers **40**, the port **68** and/or the catch basin **45**, and the electrical cable **65** may be configured to be disconnected from the electrical outlet **63**, in situations in which the housing **44** is detached from the structure **18** as described in greater detail below.

[0044] Referring now to FIG. 5C, in one embodiment, the housing **44** further includes a utility access opening **50** in the side of the housing **44** opposite the opening **46**. A door **52** may close off the opening **50**. And, when the liquid dispensers **40** or other equipment enclosed by the housing **44** require service, the door **52** may be removed to allow access to within the housing **44**.

[0045] With reference to FIGS. 3A and 6, in one embodiment, one or more hinges **56** may be utilized to pivotably attach the housing **44** to the wall **20** of the structure **18**. In this regard, the hinges **56** provide an axis of rotation about which the liquid toppings dispensing system **12** may be pivoted relative to the structure **18** (indicated by arrow **58** in FIG. 3A). It will be appreciated that the hinges **56** may allow the liquid toppings dispensing system **12** to be oriented in any one of a number of orientations relative to the rear wall **26** and the side wall **24** as set out above. However, the hinges **56** may include a stop or another mechanism by which the housing **44** is held in a fixed position while customers operate the liquid dispensers **40**. In one embodiment, the liquid toppings dispensing system **12** is secured in place in the first position as shown in FIG. 1 using a fastening system, not shown.

[0046] Further in this regard, as shown in FIG. 6, in one embodiment, the individual leaves of the hinges **56** may be separable allowing the housing **44** to be easily disconnected from the structure **18**. By way of example and without limitation, the hinges **56** may be slip-joint or take-apart type hinges by which the corresponding leaves may be separately secured to the structure **18** and to the housing **44** when the hinge **56** is disassembled. In the embodiment shown, the housing **44** may further include a handle **70** to allow a person to lift the housing **44** and separate the individual leaves of hinges **56**. It will be appreciated that the housing **44**, once separated from the structure **18**, may be stored within the structure **18** should that be necessary prior to moving the mobile confectionary apparatus **10** or for another reason.

[0047] Alternatively, when the liquid toppings dispensing system **12** is oriented in the position shown in FIG. 4A, it may be releasably secured to the rear wall **26** by the hinges **56** provided on one end thereof and by a latch mechanism **72** provided at the other end thereof.

[0048] While hinges **56** are shown according to one embodiment, those of ordinary skill in the art will readily appreciate that other hinge structures, or other known structures for providing a pivotable or rotatable connection between two components, are possible as well without departing from the spirit and scope of the present invention.

[0049] In one embodiment, as shown in FIG. 1, the mobile confectionary apparatus **10** may include a second liquid toppings dispensing system **74** disposed in or on the side wall **24**. Similar to the liquid toppings dispensing system **12**, the liquid toppings dispensing system **74** may be configurable to selectively dispense a liquid topping onto a frozen confection or to fill a container with a beverage. The second liquid toppings dispensing system **74** may include a second plurality of liquid dispensers **76** that are arranged along an axis **73** (FIG. 2). As with the liquid dispensers **40**, a customer may self-serve a liquid topping with the dispensers **76**, because each dispenser **76** may be connected by a liquid line (not shown) to the reservoir **66**.

[0050] In one embodiment, as shown in FIGS. 1 and 3B, the longitudinal axis 36 of the liquid toppings dispensing system 12 may be arranged generally parallel with the side wall 24. In this arrangement, the plurality of liquid dispensers 76 may also be arranged generally parallel with the side wall 24 and with the longitudinal axis 36 of the liquid toppings dispensing system 12. This generally parallel arrangement may facilitate a uniform, quick flow of customers past the opening 30 and allow each customer more time within which to select and dispense a liquid topping from one or more of the liquid dispensers 40 and/or liquid dispensers 76 on to a frozen confection or dispense a beverage into a container.

[0051] With reference to FIG. 7, one or both of the liquid toppings dispensing systems 12, 74 may include a cover member 80, 82, respectively. Individually, cover members 80, 82 cover and protect the corresponding liquid dispensers 40, 76 during nonuse of the mobile confectionary apparatus 10. By way of example, the cover members 80, 82 may prevent natural elements, such as dirt, rain, road spray, and the like from depositing on the liquid dispensers 40, 76. The cover members 80, 82 may substantially prevent the liquid dispensers 40, 76 from being vandalized or intentionally misused. While the cover member 80 is generally usable in all positions of the liquid toppings dispensing system 12, including the position shown in FIG. 1, the cover member 80 may be used more often when the system 12 is in the position shown in FIG. 2. According to one embodiment, the plurality of liquid dispensers 40 are covered by cover members 80 in a storage position.

[0052] While the present invention has been illustrated by a description of various embodiments and while those embodiments have been described in considerable detail, it is not the intention of applicants to restrict or in any way limit the scope of the appended claims to such details. Additional advantages and modifications will readily appear to those skilled in the art. The invention in its broader aspects is therefore not limited to the specific details and illustrative examples shown and described. Accordingly, departures may be made from such details without departing from the spirit or scope of applicants' invention.

Claims

1. A mobile confectionary apparatus, comprising: a vehicle including at least one upstanding side wall; an interior space surrounded by the at least one upstanding side wall and configured to receive at least one person; an opening extending through the at least one upstanding side wall and through which an item may be passed from the interior space to outside of the vehicle; and a liquid toppings dispensing system including a housing being positioned adjacent to, and opposing, the at least one upstanding side wall and including a plurality of liquid dispensers configured to dispense at least one liquid topping onto the item, each of the plurality of liquid dispensers being in fluid communication with at least one reservoir holding the at least one liquid topping, with the liquid toppings dispensing system being located externally of the at least one upstanding side wall and spaced laterally therefrom by a gap.
2. The mobile confectionary apparatus of claim 1, wherein the plurality of liquid dispensers is arranged along an axis that is generally parallel to a longitudinal axis of the liquid toppings dispensing system.
3. The mobile confectionary apparatus of claim 1 further comprising at least one tube extending from the at least one reservoir and being coupled to at least one of the plurality of liquid dispensers.
4. The mobile confectionary apparatus of claim 1, wherein the vehicle is a truck.
5. The mobile confectionary apparatus of claim 1, wherein the vehicle is a trailer.
6. The mobile confectionary apparatus of claim 1, further comprising a cover member configured to cover the plurality of liquid dispensers.
7. The mobile confectionary apparatus of claim 1, further comprises a catch basin supported by the housing and located beneath the plurality of liquid dispensers.
8. The mobile confectionary apparatus of claim 1, wherein the liquid toppings dispensing system is

mounted so as to be pivotable relative to the at least one upstanding side wall.

9. The mobile confectionary apparatus of claim 8, wherein the liquid toppings dispensing system is pivotable relative to the at least one upstanding side wall between a first position and a second position such that, in the first position, the liquid toppings dispensing system is displaced away from the at least one upstanding side wall and, in the second position, an axis of the plurality of liquid dispensers is located generally parallel to the at least one upstanding side wall.

10. The mobile confectionary apparatus of claim 3, further comprising at least one port in the at least one upstanding side wall through which the at least one tube extends to couple the at least one reservoir to the at least one of the plurality of liquid dispensers.

11. The mobile confectionary apparatus of claim 9, further comprising at least one hinge supported by the at least one upstanding side wall and defining an axis about which the liquid toppings dispensing system is pivotable between the first position and the second position.
