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(54) METHOD FOR USING A SALES STAND FOR THE ORGANISATION AND INFLATION OF INFLATABLE ITEMS AND SIMILAR, A SALES STAND, AND PRODUCTION METHOD

(57) The utility of this present patent comprises a display stand and/or a sales method for utilizing a display stand for the organization and inflation of inflatables and the like. The display stand is intended to be used for the inflation and deflation of inflatables in a commercial set-

ting, where it is intended to protect the profits of retailers and the interests of consumers by allowing inflatables to be sold while deflated and subsequently inflated at the interactive display stand.

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CROSS REFERENCE TO RELATED APPLICATION

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[0001] This application is a continuation in part and claims priority to U.S. Patent Application 13/768,186, filed February 15, 2013, which is hereby incorporated herein as if fully set forth in its entirety.

FIELD OF THE INVENTION

[0002] The present application is directed to a display stand and/or a sales method for utilizing a display stand for the organization and inflation of inflatables and the like, in which customers interact with the display stand to select and purchase inflatables and to use the display stand to inflate and deflate a selected inflatable.

BACKGROUND OF THE INVENTION

[0003] In the current market there are well known difficulties involved in the sales and transportation of inflatables, for both consumers and retailers. Typically, inflatables, such as balls, are sold in container s and/or meshes where they are displayed fully inflated. In the most of cases, consumers find it difficult to obtain the desired inflatable due to the large number of inflated inflatables presented in the container. The system is similarly disadvantageous to retailers in regards to profitability, as fully inflated inflatables can render a large amount of space unusable. Additionally, when inflatables ae put to display fully inflated, children tend to play with them and the inflatables can end up dirty or perforated, generating further costs for retailers, who must pay to clean or repair them,. Retailers may be able to eliminate some transportation costs, as inflatables can be transported without air, but then staff time must be devoted to inflation. Customers struggle with transportation of inflatable as well, because they must devote more space to transport inflated inflatables, and may have to elect not to purchase an inflatable if they face space constraints.

[0004] The display stand of the present registration, however, preferably overcomes these problems and demonstrates additional benefits to retailers and consumers of inflatable.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005]

Figure 1- One embodiment of the display stand that may be provided as a method of the present invention wherein the trays are shown to be rotatable around an axis and are shown to stack atop one another.

Figure 2- One embodiment of the display stand that may be provided as a method of the present inven-

tion, where the top tray may have posts fastened atop it. The trop tray further may include a system of hanging rails on the underside to support deflated inflatables.

Figure 3- One embodiment of the display stand that may be provided as a method of the present invention, wherein the central module may comprise a refuse bin and may comprise a deflation device such a deflation needle and a depression which it may rest in.

Figure 4- One embodiment of the display stand that may be provided as a method of the present invention, wherein the inflation device may comprise a pump with a connector and a remote control device housed atop the pump.

Figured 5- One embodiment of the display stand that may be provided as a method of the present invention, where in the central axis of the at least one tray may rest on the top of the central module.

Figured 6- One embodiment of the display stand that may be provided as a method of the present invention, wherein the top tray may comprise pegs hooked into hotels at the top of the tray.

Figure 7- One embodiment of the display stand that may be provided as a method of the present invention, wherein the inflation device may be housed in a housing at the back of the central module.

Figure 8- one embodiment of the display stand that may be provided as a method of the present invention, wherein inflatables may be inflated and stored atop the top tray while contained by a multitude of posts strung through with cord.

Figure 9- one embodiment of the display stand that may be provided as a method of the presented invention, wherein the central module may comprise a back valve at the back of a spherical depression. The back valve may allow the pump to reach and inflate a selected inflatable placed in the spherical depression.

Figure 10- One embodiment of the display stand that may be provided as a method of the present invention, wherein a plurality of refuse bins may be housed in the upper portion of the central module.

Figure 11- One embodiment of the display stand that may be provided as a method of the presented invention, wherein the display stand may comprise a a bar configured to rotate in unison with the at least one tray and top tray such that the at least one tray and top tray can be rotated without making physical

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contact with the at least one tray and the top tray.

Figure 12- One embodiment of the display stand that may be provided as a method of the present invention, wherein the central module may also include a shaft in the center for a pole to enter, which can hold at least one tray and the top tray.

Figure 13- One embodiment of the inflatables that may be provided where in the inflatable is hung from the hanging rails by a hanging tag connected to a mesh bag, and where in the inflatable is held within the mesh bag.

Figure 14- The preferred method of shipping for one embodiment of the inflatables, wherein the inflatables are held with a mesh bag with a hang tag, and wherein the inflatables can be stored 100 to a box to facilitate transportation.

Figure 15- The preferred embodiment of the display stand when fully stocked may display up to 200 inflatables.

Figure 16- the preferred embodiment of the display stand wherein the inflatables can be hung in three levels and stored in an exhibitor, and wherein the trays are configured to rotate about a central axis.

Figure 17- The step of removing the inflatables from the trays for inflation, wherein refuse generated by that step may be deposited in refuse bins located in the central module.

Figure 18- One embodiment of the refuse bins, wherein the refuse bins are removable and where in the bins clip into place via clips.

Figure 19- A frontal view of one embodiment of the refuse bins, where in the refuse bins are removable.

Figure 20- A side view of one embodiment of the refuse bins, wherein the refuse bins are removable.

Figure 21- A side view of one embodiment of the connector, where in the connector comprises an inflation needle.

Figure 22- a perspective view of one embodiment of the connector, wherein the connector comprises an inflation needle.

Figure 23- One embodiment of the valve built into the inflatables, where in the upper portion is designated to receive the needle without releasing air.

Figure 24- A view of the inner portion of one embodiment of the valve built into the inflatables, where in

the inner portion of the valve is configured to allow air to flow out the needle uniformly.

Figure 25- The preferred embodiments of the connector and the valve in an inflatable, wherein the needle can fit snugly into the outer portion of the valve, to allow air to enter and to prohibit air from scape the inflatable.

Figure 26- The preferred method for the inflation of inflatables using the display stand, wherein the inflatable is placed on the inflation needle located in the upper portion of the central module, and wherein the pedal is repeatedly pumped to force air into the inflatable until the inflatable becomes fully inflated.

DETAILED DESCRIPTION OF THE INVENTION

[0006] Referring to Fig. 15, the display stand 10 in its preferred embodiment may take up only 23.6 in x 23.6 in of floor space, yet may store up to 200 deflated inflatables 22, such as balloon, balls or the like, therefore maximizing the profitability of store space. By storing deflated inflatables in this manner, retailers may avoid profits loss from dedicating staff time to inflation and from inflatables damaged and soiled by consumers. Further, the inflatables 22 may be easily transported and processed. Referring to Fig. 13, the inflatables 22 may be hung by a hanging tag and/or stored held in a mesh bag. Referring to Fig. 14, preferably up to 100 inflatables 22 may be placed in a box, having already been placed in a mesh bag and/or having already had a hanging tag affixed to them. The system may also benefits consumers, as an inflatables 22 can be selected and inflated or deflated easily, making transportation simpler for consumers. By utilizing space efficiently and facilitating consumer transportation of inflatables, the display stand may allow inflatables to be sold in untraditional locales including airports, train station, and bus depots.

[0007] The display stand, 10, preferably includes a central module 12. The central module 12 may function as a base for the display stand 10 and as housing for multiple aspects of the display stand. It is preferably made by the process of rotational molding. It is preferably shaped such that the upper portion is an oblate spheroid shape and transitions into a shaft which begins narrowly in the middle of the upper portion and broadens to create a circular base. Referring to Fig. 10, the central module 12 may have a large section of its rear portion cut away into a vertical, rectangular shape to house the inflation device 14. Referring to Fig. 1, the central module 12 may have spherical depression in which a selected inflatable 22 can rest during inflation. The central module 12 may also have a half-pipe shaped cutaway in which a deflation needle 24 may be housed. Referring to Fig. 7, the central module 12 preferably houses the inflation device 14 in a vertical position in a vertical, rectangular housing at the rear of the central module 12. Referring to Fig. 12, the

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central module may include a pedal which is can be used to activate the inflation device 14 and inflate the selected inflatable 22. The pedal may be pushed down into grooves cut into the central module 12. Referring to Fig. 1, the front face of the central module 12 may comprise a flatter shape to accommodate the pedal. The central module 12 may further comprise a small step below the pedal to better accommodate the pedal.

[0008] The inflation device 14 preferably housed in the central module 12 may be configured to rapidly inflate the selected inflatable 22. Referring to fig. 4, the inflation device 14 in its preferred embodiment may consist of a hydraulic pump in which water displaces a predetermined amount of air to inflate the selected inflatable while decreasing the risk of over inflation. The inflation device 14 in its preferred embodiment may further include two oneway check valves; the first which may allow air to leave through the connector and inflate the inflatable without the return of air and the second which may allow the recovery of air into the system. Referring to Fig. 12, second check valve may be located such that it can be closed by retailers to prevent unauthorized use of the displays stand. Referring to Fig. 4, the inflation device 14 in its preferred embodiment may further include a connector 20 mounted on top of the inflation device 14, to connect the inflation device 14 to the selected inflatable 22. The connector 20 is preferably comprised of Teflon-coated steel 4mm in diameter. Referring to Fig. 8, in its preferred embodiment the connector 20 may extend through the back valve 32 of the central module 12 to reach a selected inflatable 22 while housed atop the inflation device located inside the central module 12. Referring to Fig. 9, the connector 20 may protrude through a circular hole, known as the back valve 32, in the central module 12 to allow the connector 20 to reach the selected inflatable from its housing atop the inflation device 14 inside the central module 12. The size of the back valve 32 may be developed according to the diameter of the connector 20. The inflation device 14 may also include a system of remote control 28 to selectively activate and deactivate the inflation device 14. Referring to Fig. 4, the system pf remote control 28 in its preferred embodiment is housed on the inflation device 14 alongside the connector 20. The system of remote control 28 may use methods including a Wireless remote controller or auditory signals for the activation and deactivation of the inflation device

[0009] In addition to the inflation device 14, central module 12 may also house one or more refuse bins 26 which may be used as receptacles for the refuse generated by use the display stand 10. Referring to Fi. 17, the refuse generated by the display stand 10 may include hanging or mesh bags, which had been used to have the inflatables 22 from the hanging rails 30. Referring to Fig. 3, the refuse bins 26 may be locate in the upper portion of the central module 12. The refuse bins 26 may be circular in shape. Referring to Fig. 19, the refuse bins 26 may comprise 2 in number, which may be positioned on

opposite ends of the upper portion of the central module 12. Referring to Fig. 20, the refuse bins 26 may be removable, to allow for emptying. Referring to Fig. 18, the refuse bins 26 may comprise being fastened to the central module 12 and may further comprise buttons on the sides to fastened to the central module 12 and may further comprise buttons on the sides to unfasten the refuse bins 26 from central module 12. The central module may further house a deflation device 24 designed to deflate a selected inflatable 22. Referring to Fig. 3, itis preferred that the deflation device 24 be a deflation needle tethered to the central module 12. Referring to Fig. 12, the central module 12 may also include a shaft in the center for a pole to enter, which can hold at least one tray 16 and a top tray 18.

[0010] The display stand 10 preferably also includes an exhibitor module consisting of at least one tray. Referring to Fig. 1, there is at least one tray 16 designed to rotate around a central axis. The at least one tray may be generally shaped like a disc, and may have a short cylindrical protrusion on its top face for an upper tray to rest on. The at least one tray may also have a pseudocylindrical protrusion extending from its lower face preferably longer than the deflated inflatables 22 to create space between the tray 16 and a lower tray 16 of the central module 12. Referring to Fig. 6, the at least one tray 16 may also comprise a plurality of holes in the tray Surface into which hanging rails 30 and posts 34 may fir into. Referring to Fig. 5, more than one of these trays 16 may rest top a lower tray 16, with the lowest tray 16 resting atop the central module 12. Referring to Fig. 2, the trays 16 may be configured to allow deflated inflatables 22 to hang from the underside of the at least one trays 16 and the top tray 18. In the preferred embodiment, the system of hanging comprises a series of rails 30 which slant gently downward from the central axis toward a periphery such that hung inflatables 22 are biased toward the periphery. Referring to Fig. 10, the top tray 18 is preferably configured to accommodate posts 34 which allow inflated inflatables 22 to rest atop the top tray 18. Referring, to Fig. 6, in the preferred embodiment the post 34 may slant upwards and outwards and lock into place atop the top tray 18. Referring to Fig. 11, in the preferred embodiment the posts 34 may be interwoven by clave to create a basket shape. Referring to Fig. 16, the basket shape may create o fourth layer for display, known as the exhibitor. [0011] The display stand 10 may be configured to organize inflatables 22 for selection and to inflate a selected inflatable 22. The display stand 10 may include a central module 12 having housing with a bottom surface. The housing is preferably configured to form a base of the display stand, and a top surface. The central module 12 may be formed via rotational molding.

[0012] However, the central module 12 may further comprise a deflation device 24, such as a deflation needle, which is tethered thereto. The housing of the central module 12 can define a deflation needle groove configured to detachably receive the deflation needle therein.

The central module 12 may further define a plurality of opposed recesses configured to hold refuse. The central module 12 may further define a concave depression configured to inflate the selected inflatable 22 when positioned therein via the connector 20. This concave depression may further define a bore, or back valve 32, within which the connector 20 is positioned for engagement with a deflated inflatable 22.

The display stand 10 may also include an inflation device 14 such as a pump locatable within the housing and configured to provide a predetermined amount of air to facilitate inflation of the selected inflatable 22 while reducing the possibility of over inflation thereof. This inflation device 14 may have a check valve to prevent deflation via the connector after air is inserted into the selected inflatable 22. Referring to Fig. 26, the inflation device 14 may be activated by a pedal located on the central module 12, which is configured to activate the inflation device 14 and to inflate the selected inflatable 22. The pedal may be repeatedly pressed to gradually force air into the inflatable 22 until inflation is complete. The inflation device 14 may also be activated by wireless remote control 28 in communication with a controller located in the central module 12 and configured to activate the inflation device 14 to inflate the selected inflatable 22. The wireless remote control 28 may also be configured to selectively deactivate the inflation device 14 to prevent inflation. The inflation device 14 may work in unison with a connector 20 configured to allow engagement between the selected inflatable 22 and the inflation device 14. Referring to Fig. 21, the connector 20 may comprise an inflation needle. The needle may have a protrusion on the back, over which a tube may fit to connect the needle to the pump. Referring to Fig. 22 the needle is preferably configured to be too dull to puncture inflatables. Referring to Fig. 25, the needle is ideally configured to fit snugly into valves which may be found in inflatables 22. Referring to Fig. 23, these valves may be configured such that the outer portion of the valves built into inflatables 22 would offer a hole which the needle may fit in snugly to prevent air from escaping the inflatables 22. Referring to Fig. 24, the inner portion of the valve forming a hole several times the size of the needle.

[0013] The display stand 10 may also include an exhibitor module disposed on the top surface of the central module. The exhibitor module may include a first tray 16 spaced apart from the central module 12 which may be configured to allow deflated inflatables 22 to be hung therefrom. The exhibitor module may be configured for rotation about an axis that is generally perpendicular to the bottom surface of the central module 12, allowing the deflated inflatables 22 to be rotated in order to facilitate viewing by routing the first tray 16 prior to selection of one of the deflated inflatables 22 for inflation by the inflation device 14.

[0014] The exhibitor module may further induce a second tray 16 disposed a side of the first tray 16 opposite from the central module 12 and which may be configured

for rotation about the axis. The second tray 16 may be configured to allow deflated inflatables 22 to be a hung therefrom to create a second level of hanging deflated inflatables 22 positioned above the central module 12. The exhibitor module may further include a third tray 18 disposed a side of the second try 16 opposite from the first tray 16 and may be configured for rotation about the axis

[0015] The third tray 18 may be configured to allow deflated inflatables 22 to hang therefrom to create a third level of hanging deflated inflatables 22 positioned above the central module 12. Of these three trays, any one or more of the first tray, the second tray, and the third tray may further comprise posts 34 thereon to allow inflated inflatables 22 to be securely positioned thereon. Additionally, any one or more of the first tray, the second tray, and the third tray may further comprise rails 30 that slope generally downwardly toward the central module 12 and generally outwardly from the axis. These rails 30 may be configured to bias hanging deflated inflatables 22 to slide toward a periphery of the tray. A cylindrical rod may be included to connect the first tray 16 to the central module 12 while allowing for rotation therebetween.

[0016] The present invention includes methods of utilizing the display stand 10 the steps of the methods need not be performed in the recited order or can be omitted altogether without departing from scope of the present invention. The methods of the present invention preferably use the display stand 10 described above. However, the methods may be performed using a display stand 10 with similar components to those described above.

[0017] A first step for the preferred method for utilizing a display stand 10 for the organization and inflation or inflatables 22 and the like may include providing a central module 12 having a housing defining a base and being configured to selectively inflate a selected inflatable 22. The step of providing the central module 12 may further comprise the central module 12 being configured for selective deflation of the selected inflatable 22; this may comprise providing a deflation needle 24 connected to the central module 12 and configured for the selective deflation of a selected inflatable 22. The step of providing the central module 12 may further comprise providing a method for remote controlled activation of the inflation device 14. The method of remote control may comprise providing remote activation of the inflation device via auditory stimuli. The step of providing the central module 12 may further comprise providing a method of remote controlled activation of the inflation device 14. The method of remote control may comprise providing remote activation of the inflation device via auditory stimuli. The step of providing the central module 12 may further comprise providing a method of remote controlled deactivation of the inflation device 14. The step of providing the central module 12 may further comprise providing a wireless remote control 28 in communication with a controller configured to selectively activate and deactivate the inflation device 14. The step of providing the central module

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12 may further comprise providing an automatic shut off for the inflation device 14 following the inflation of a selected inflatable 22 or of providing a hydraulic pump configured to shutoff after a predetermined amount of air has been released. Additionally, the step of providing a central module 12 may further comprise providing refuse bins 26 housed therein. The step of providing a central module 12 may include providing a light configured to activate when the selected inflatable 22 has been fully inflated.

[0018] The first step may further include providing at least one tray 16 positioned on the central module 12 and having a periphery, while being configured to support deflated inflatables 22 therefrom such that the deflated inflatables 22 are biased to move toward the periphery of the tray while hanging therefrom. The at least one tray 16 may further include providing the at least one tray 16 which is rotatable about an axis generally perpendicular to the base of the housing 12.

[0019] The first step may additionally include providing a top tray that is positioned on the at least one tray, that is configured to support inflated inflatables 22 thereon, and that is rotatable about the axis. The step of providing the at least one tray 16 may further comprises providing a bar configured to rotate in unison with the at least one tray 16 an top tray 18 such that the at least one tray 16 and top tray 18 can be rotated without making physical contact with the at least one tray at 16 and top tray 18. A second step for the preferred method for utilizing a display stand 10 for the organization and inflation of inflatables 22 and the like may comprise the step of removing the selected inflatable 22 from the at least one tray 16 and the top tray 18. The second step for the preferred method for utilizing a display stand 10 for the organization and inflation of inflatables 22 and the like may alternately comprise the step of removing the selected inflatable 22 from the top tray 18 for deflation.

A third step for the preferred method for utilizing a display stand 10 for the organization and inflation of inflatables 22 and the like may comprise the step of inflating the selected inflatable 22, wherein the central module 12 is used to inflate the inflatable 22. The step of inflating the selected inflatable 22 may further include the step of activating the inflation device 14 14 remotely. The step of inflating the selected inflatable 22 may further include the step of deactivating the inflation device 14 remotely. Alternately, the third step for the preferred method for utilizing a display stand 10 for the organization and inflation of inflatables 22 and the like may comprise the step of deflating the selected inflatable 22. This may comprise the step of deflating the selected inflatable 22, wherein the central module 12 is used to inflate the inflatable 22 and wherein the central module 12 is used to deflate the inflatable 22 or this may comprise the step of using the deflation needle 24 to deflate a selected inflatable 22, wherein the inflatable 22 is selected from the at least one tray 16 and the top tray 18. Various details, forms, dimensions and other accessory elements, as well as materials used in manufacturing the display stand have been

disclosed. However, those with ordinary skill of art will appreciate that these may be conveniently replaced by technically similar parts without departing from the scope of the present invention. Further, those with ordinary skill of art will be aware that the steps of the methods disclosed need not be follow in that order to fall within the scope of the invention. It is understood that the invention is not limited to the embodiments and methods disclosed but is intended to cover all modifications within the spirit and scope of the invention, as defined by its claims.

Claims

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- **1.** A method for providing a display stand configured to market inflatables, comprising the steps of:
 - a) Providing a central module having a housing defining a base, the central module being configured to selectively inflate a selected inflatable; b) Providing at least one tray positioned on the central module, the at least one tray having a periphery and being configured to support deflated inflatables therefrom such that the deflated inflatables are biased to move toward the periphery of the tray while hanging therefrom, the at least one tray being rotatable about an axis generally perpendicular to the base of the housing; and providing a top tray positioned on the at least one tray, the top tray being configured to support inflated inflatables thereon, the top tray being rotatable about the axis.
- **1.** The method of claim 1, further comprising the step of removing the selected inflatable from the at least one tray and the top tray.
- 2. The method of claim 2, further comprising the step of inflating the selected inflatable, wherein the central module is used to inflate the inflatable.
- **3.** The method of claim 1, wherein the step of providing the central module further comprises the central module being configured for selective deflation of the selected inflatable.
- **4.** The method of claim 4, further comprising the step of removing the selected inflatable from the top tray for deflation.
- **5.** The method of claim 5, further comprising the step of deflating the selected inflatable.
- **6.** The method of claim 4, further comprising the step of deflating the selected inflatable, wherein the central module is used to inflate and wherein the central module is used to deflate the inflatable.

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- 7. The method of claim 4, wherein the step pf providing the central module further comprises providing a deflation needle connected to the central module and configured for the selective deflation of a selected inflatable.
- **8.** The method of claim 8, further comprising the step of using the deflation needle deflate a selected inflatable, wherein the inflatable is selected from the at least one tray and the top tray.
- **9.** The method of claim 1, wherein the step of providing the central module further comprises providing a method of remote controlled activation of the inflation device.
- **10.** The method of claim 10, wherein the step of providing a method of remote controlled activation of the inflation device further comprises providing a method of remote controlled deactivation of the inflation device.
- **11.** The method of claim 10, further comprising the step of activating the inflation device remotely.
- **12.** The method of claim 11, further comprising the step of deactivating the inflation device remotely.
- **13.** The method of claim 10, wherein the step of providing a method of remote control further comprises providing remote activation of the inflation device via auditory stimuli.
- **14.** The method of claim 10, wherein the step of providing a method remote control further comprises a wireless remote control in communication with a controller configured to selectively activate and deactivate the inflation device.
- **15.** The method of claim 10, wherein the step of providing a method of remote activation of the inflation device further comprises providing an automatic shut off for the inflation device following the inflation of a selected inflatable.
- **16.** The method of claim 1, wherein the step of providing a central module further comprises providing a hydraulic pump configured to shutoff after a predetermined amount of air as been released.
- **17.** The method of claim 1, wherein the step of providing a central module further comprises providing refuse containers housed therein.
- **18.** The method of claim 1, wherein the step of providing a central module further comprises providing a light configured to activate when the selected inflatable has been fully inflated and wherein the step

- of providing the at least one tray further comprises providing a bar configured to rotate in unison with the at least one tray and top tray such that the at least one tray and top tray can be rotated without making physical contact with the at least one tray and the top tray.
- **19.** A method for providing a display stand configured to market inflatables, comprising the steps of:
- **20.** Providing a central module having a housing defining a base the central module being configured to selectively inflate a selected inflatable;

Providing at least one tray positioned on the central module, the at least one tray having a periphery an being configured to support deflated inflatables therefrom such that the deflated inflatables are biased to move toward the periphery of the tray while hanging therefrom when the at least one tray is rotated; and

Providing a top tray positioned on the at least one tray, the top tray being configured to support inflated inflatables thereon, the top tray being rotatable about the axis.

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FIG. 1

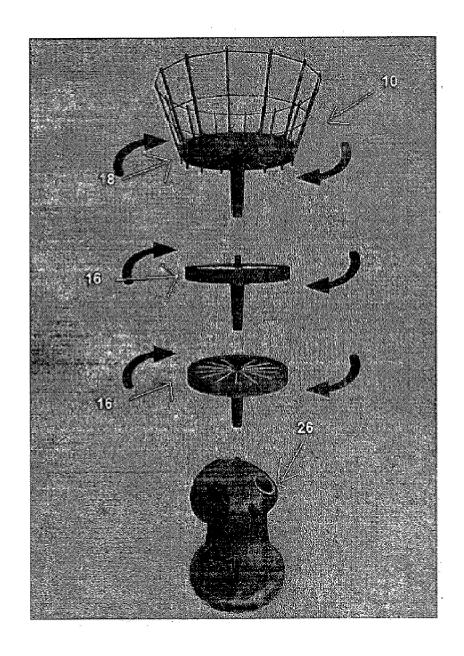


FIG. 2

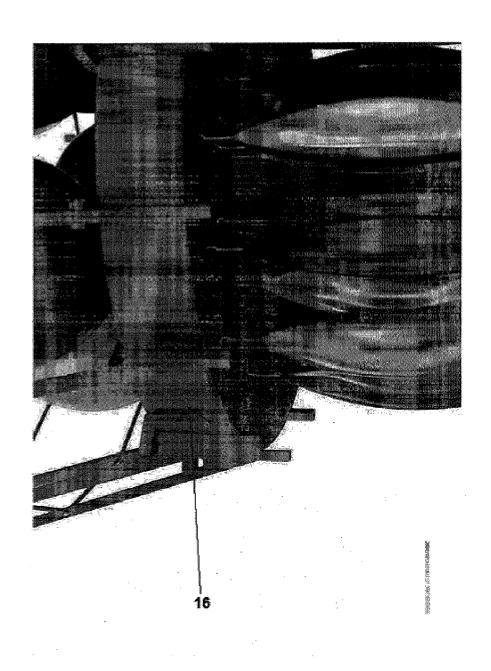


FIG. 3

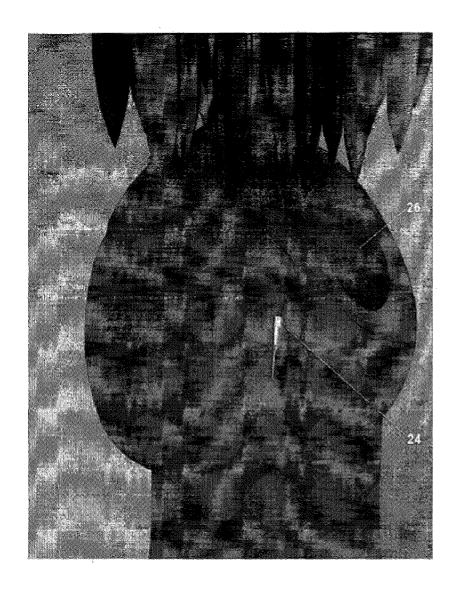


FIG. 4

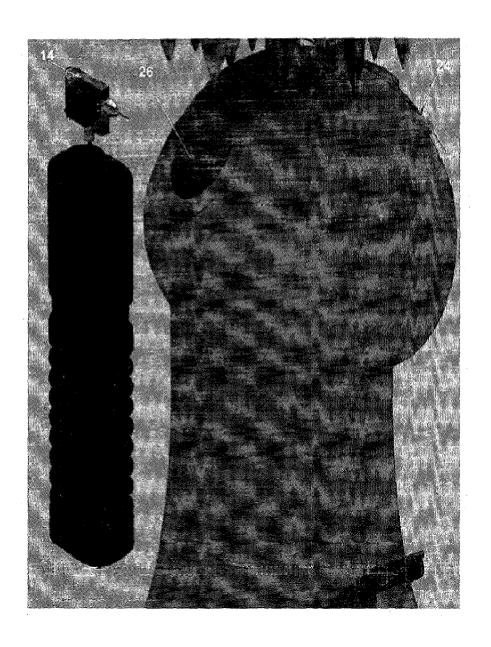


FIG. 5

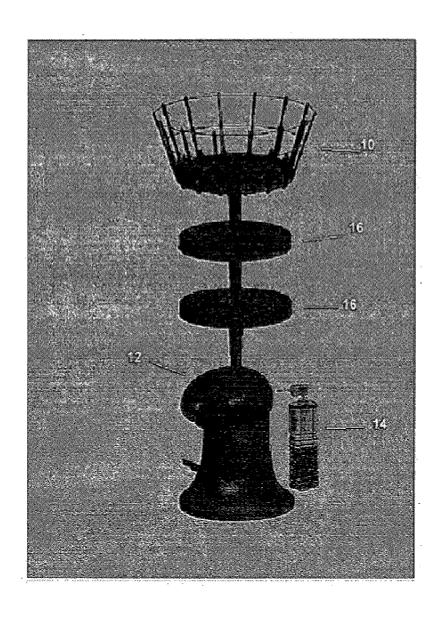


FIG. 6

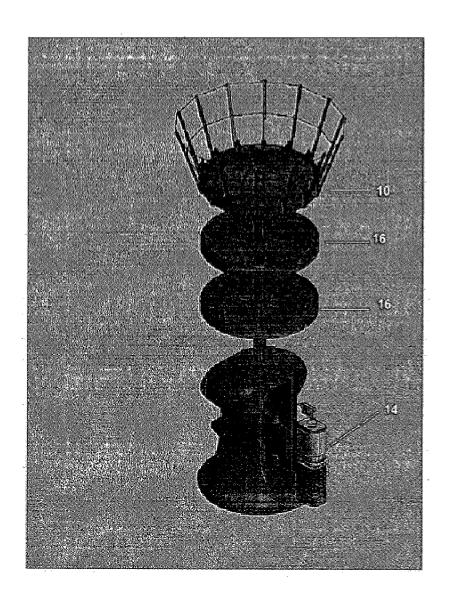


FIG. 7

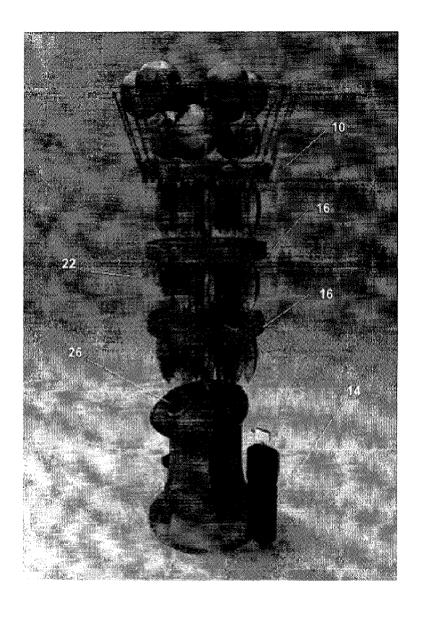


FIG. 8

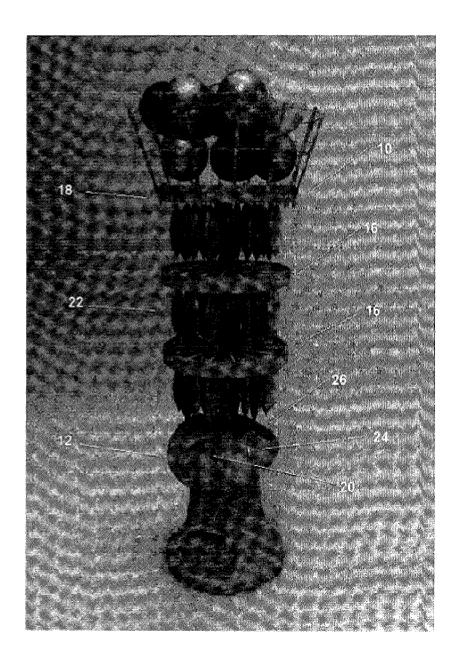


FIG. 9

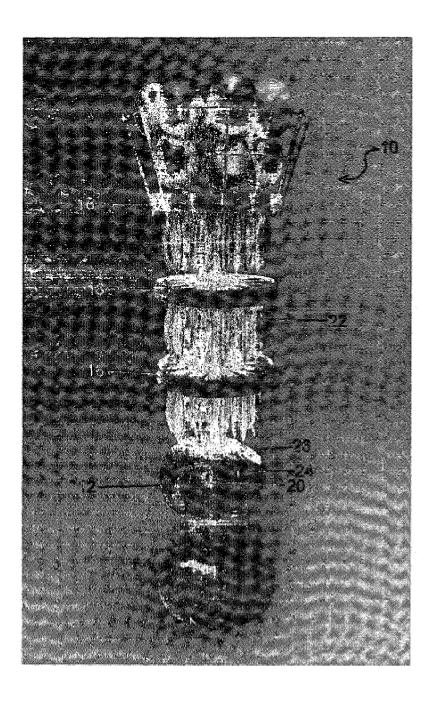


FIG.10

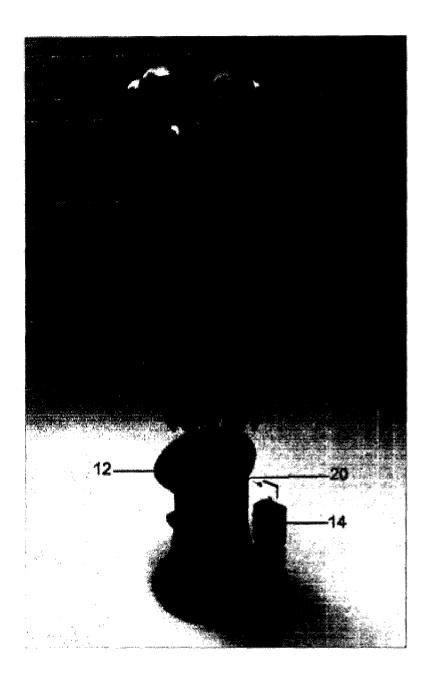


FIG.11

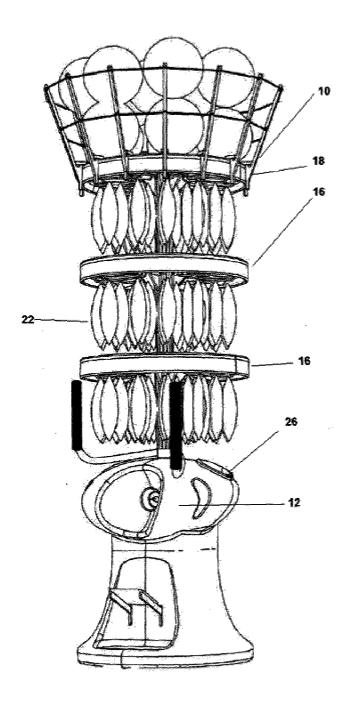


FIG.12

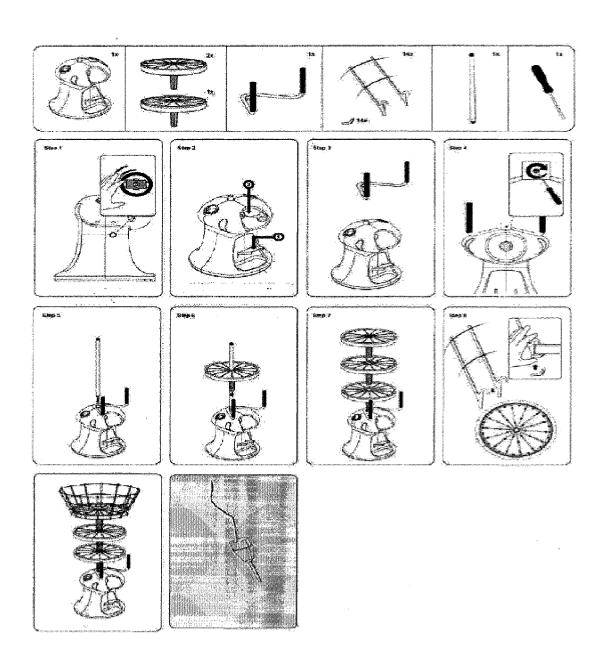


FIG.13

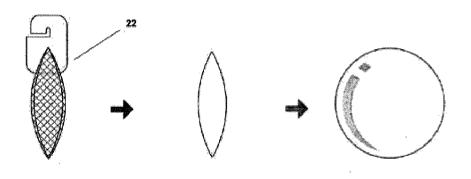


FIG.14

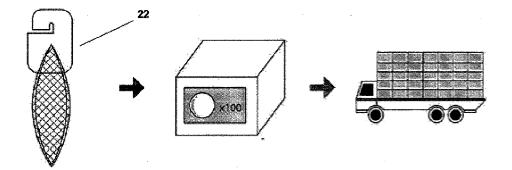


FIG.15

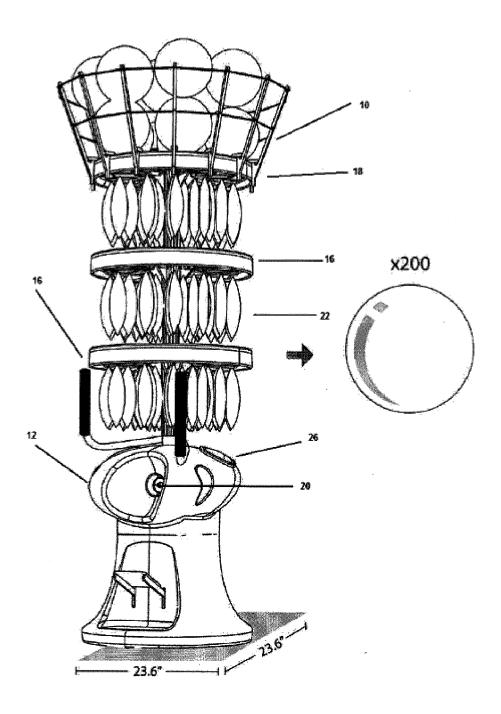


FIG.16

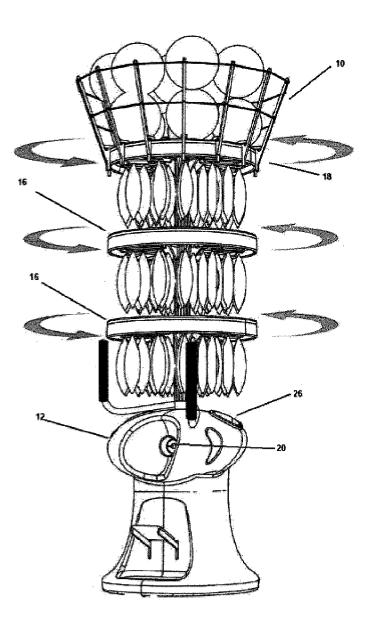
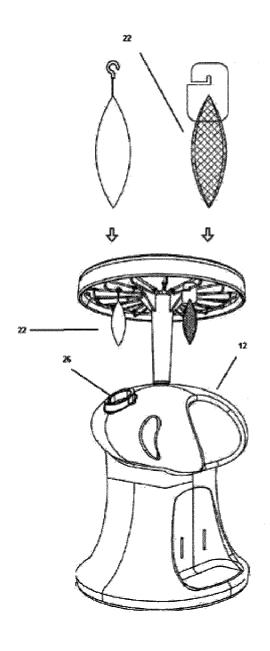


FIG.17



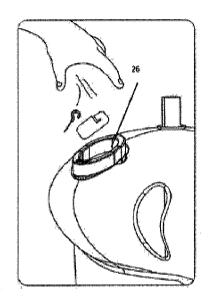


FIG.18

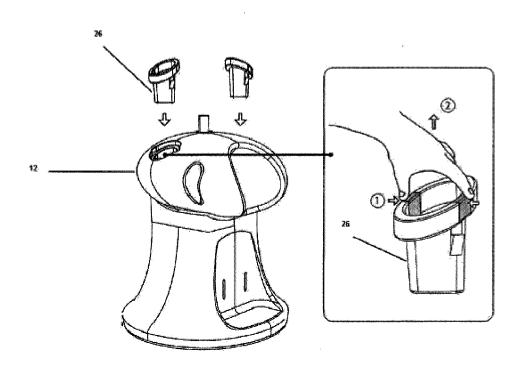


FIG.19

FIG.20

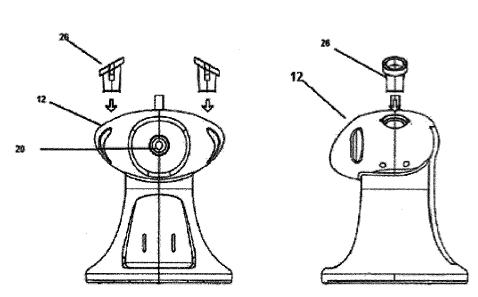


FIG.21

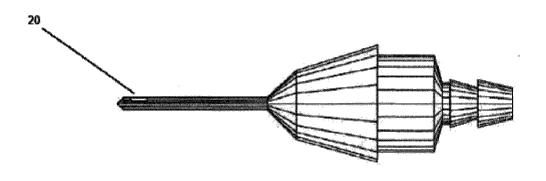
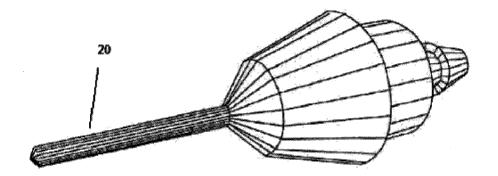
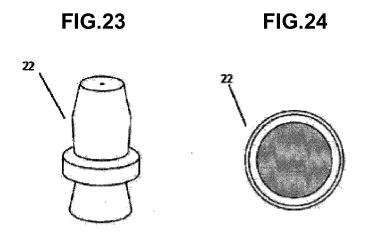


FIG.22







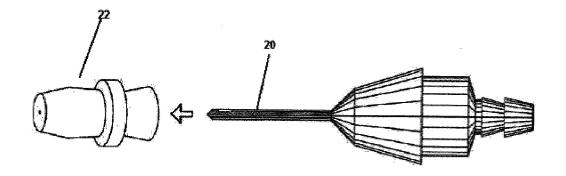
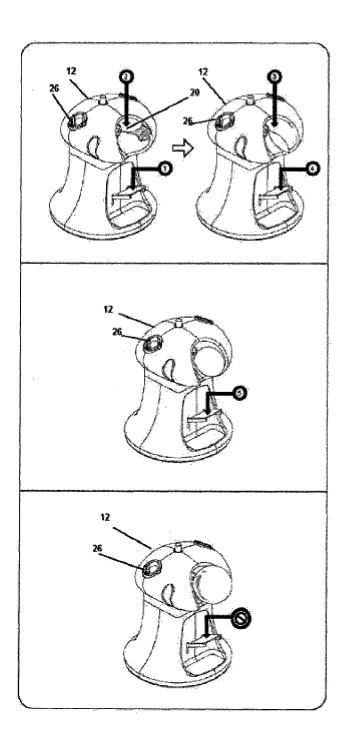


FIG.26



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INTERNATIONAL SEARCH REPORT

International application No. PCT/MX2014/000123

| A63B41/12 (2006.01) According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A63B Documentation searched other than minimum documentation to the extent that such documents are included in the | the fields searched | | | | |
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| B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A63B | the fields searched | | | | |
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| Documentation searched other than minimum documentation to the extent that such documents are included in the | the fields searched | | | | |
| | the fields searched | | | | |
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| Electronic data base consulted during the international search (name of data base and, where practicable, search to | data base consulted during the international search (name of data base and, where practicable, search terms used) | | | | |
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| C. DOCUMENTS CONSIDERED TO BE RELEVANT | C. DOCUMENTS CONSIDERED TO BE RELEVANT | | | | |
| Category* Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. | | | | |
| A WO 2009002138 A2 (MICHEL ONTIVEROS PABLO IGNACIO) 31/12/2008, page 2, line 35 - page 3, | 1 | | | | |
| line 23; figures. | | | | | |
| A US 5370161 A (SHAFER ERIK J) 06/12/1994, column 2, line 54 - column 10, line 4; figures. | | | | | |
| A US 3911974 A (KUYKENDALL CLAUDE W) 14/10/1975, | | | | | |
| column 2, line 54 - column 7, line 21; figures. | | | | | |
| A US 4088161 A (IKEMOTO KIKUJI) 09/05/1978, column 2, line 17 - column 6, line 60; figures. | | | | | |
| A US 3616823 A (DELLO JOHN G) 02/11/1971, column 3, line 25 - column 9, line 7; figures. | olumn | | | | |
| | | | | | |
| Further documents are listed in the continuation of Box C. See patent family annex. | | | | | |
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| Name and mailing address of the ISA/ Authorized officer M. Cuenca González | , | | | | |
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| Fasco de la Castellana, 73 - 260/1 Matria (España) Facsimile No. 91 349 53 04 Form PCT/ISA/210 (second sheet) (July 2009) Telephone No. 91 3493074 | | | | | |

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| | INTERNATIONAL SEARCH REPORT Information on patent family members | | International application No. PCT/MX2014/000123 | |
|----|---|------------------|--|--|
| 5 | Patent document cited in the search report | Publication date | Patent family member(s) | Publication date |
| 10 | WO2009002138 A2 | 31.12.2008 | CR11154 A HN2009003379 A ECSMU099787U U GT200900017U U US2010180984 A1 CA2691741 A1 | 20.04.2010 01.06.2012 30.04.2010 04.06.2010 22.07.2010 31.12.2008 |
| 15 | US5370161 A | 06.12.1994 | NONE | |
| | US3911974 A | 14.10.1975 | NONE | |
| 20 | US4088161 A | 09.05.1978 | JPS5266497 A JPS5310479B B2 | 01.06.1977 13.04.1978 |
| | US3616823 A | 02.11.1971 | NONE | |
| 25 | | | | |
| 30 | | | | |
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| 40 | | | | |
| 45 | | | | |
| 50 | | | | |
| 55 | | | | |

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Patent documents cited in the description

• US 76818613 A [0001]