FLUID DISPENSING VESSEL

A fluid dispensing vessel is described and which includes a container body which has a top dispensing opening, and a longitudinal axis; and a removable lid for selectively occluding the top dispensing opening of the container body. The removable lid has a first aperture which allows fluid to flow from the container body out through the removable lid, and a fluid flowing regulating valve which is slideably borne by the removable lid, and which may be moved by a user from a first position which prohibits fluid flow from the container body, to a second position which allows fluid flow from the container body and through the removable lid.
FLUID DISPENSING VESSEL

TECHNICAL FIELD

[0001] The present invention relates generally to fluid dispensing vessels, and a mechanism for sealing and unsealing such vessels, and more particularly to an arrangement for opening and closing a drinking vessel with a single touch.

BACKGROUND OF THE INVENTION

[0002] Drinking containers of various types including travel mugs are well known in the art. Such drinking vessels have been designed for various purposes such as to be used on bicycles, while hiking, and doing various indoor and outdoor activities. In this art field much effort has been undertaken to design various removable lids, closure devices, or other mechanisms for opening and closing a drinking orifice of a drinking container in a convenient manner and to prohibit the spilling of the drink contained within the drinking vessel should it be accidentally overturned. One example of a drinking vessel of this type is exemplified by U.S. Pat. No. 7,546,935, the subject matter of which is incorporated by reference herein. In this particular piece of prior art, the drinking vessel has a container body and a removable lid which covers the cavity of the drinking container, and which further has a trigger mechanism which operates various apertures in the lid so as to conveniently dispense the drink to the user thereof.

[0003] While the aforementioned U.S. Patent, and others have operated with various degrees of success, there are shortcomings with such designs which have prohibited their commercial implementation. For example, in the prior art device noted above, the prior art product, when delivered, is readily operable to open and close a drink orifice with a single touch. However, a thorough review of the patent will reveal that the mechanism is quite complex in its overall design. Further, because of its complexity, and the fact that most of the mechanism is enclosed within the removable cover, such components inevitably become exposed to various different drinks which might be consumed by the user. For example, these drinking vessels may routinely be used to carry hot beverages, such as coffee. However, on occasion, such vessels may also be used for soft drink beverages, and even alcoholic beverages such as wine. When the internal components of these removable lids are exposed to such diverse fluids, often trace amounts of the fluid becomes deposited on these components. Later, when the liquid portion evaporates, it leaves behind a sticky residue or other deposit which will eventually cause the mechanism to malfunction. Further, such deposits within the removable caps also create an unsanitary condition which, before long, will make the drinking vessel unsafe to use.

[0004] Therefore, it has long been known that it would be desirable to have a fluid dispensing vessel which can be opened and closed by a single touch, and which is easy to maintain, sanitary, and provides numerous benefits not achievable with the prior art devices known heretofore.

SUMMARY OF THE INVENTION

[0005] The present invention relates to a fluid dispensing vessel which includes a container body for enclosing a fluid to be dispensed, and wherein the container body has a top dispensing opening, and a longitudinal axis; and a removable lid for selectively occluding the top dispensing opening of the container body, and wherein the removable lid has a first aperture which allows fluid to flow from the container body out through the removable lid, and a fluid flowing regulating valve which is slideably borne by the removable lid, and which may be moved by a user with a single touch from a first position which prohibits fluid flow from the container body, to a second position which allows fluid flow from the container body and through the removable lid.

[0006] Another aspect of the present invention relates to a fluid dispensing vessel which includes a container body defining an internal cavity for enclosing a fluid to be dispensed, and wherein the container body defines a top dispensing opening, and is further defined by a longitudinal axis; a removable lid which releasably engages the container body and which selectively occludes the top dispensing opening, and wherein the removable lid has a main body which has an outside facing surface, and an opposite inside facing surface, and wherein the main body further defines a first aperture which allows the source of fluid held in the internal cavity of the container body to pass therethrough, and a second aperture which couples an ambient atmospheric environment surrounding the container body with the internal cavity; and a fluid flowing regulating valve movably supported in a cantilevered orientation on the inside facing surface of the main body of the movable lid, and wherein the fluid flowing regulating valve may be forcibly moved by a user from a first position which prohibits fluid flow from the internal cavity of the container body, to a second position, which allows fluid flow from the internal cavity of the container body.

[0007] Still another aspect of the present invention relates to a fluid dispensing vessel which includes a container body defining an internal cavity for enclosing a fluid to be dispensed, and wherein the container body defines a top dispensing opening, and is further defined by a longitudinal axis; a removable lid which releasably engages the container body and which selectively occludes the top dispensing opening, and wherein the removable lid has a main body which has an outside facing surface, and an opposite inside facing surface, and wherein the main body further defines a first aperture which allows the source of fluid held in the internal cavity of the container body to pass therethrough, and a second aperture which couples an ambient atmospheric environment surrounding the container body with the internal cavity; a support member depending downwardly from the inside facing surface of the removable lid; and a fluid flowing regulating valve movably supported on the support member and in spaced relation relative to the inside facing surface of the removable lid, and wherein the fluid flowing regulating valve may be forcibly moved by a user with a single touch along a linear path of travel from a first position which prohibits fluid flow from the internal cavity of the container body, to a second position, which allows fluid flow from the internal cavity of the container body.

[0008] These and other aspects of the present invention will be described in greater detail hereinafter.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] Preferred embodiments of the invention are described below with reference to the following accompanying drawings.

[0010] FIG. 1 is a transverse, longitudinal, sectional view taken through the fluid dispensing vessel of the present invention.

[0011] FIG. 2 is a perspective view of a first form of a removable lid which is a feature of the present invention.
FIG. 3 is a greatly enlarged, longitudinal, sectional view which is taken from a position along 3-3 of FIG. 2 and through a first form of a removable lid which forms a feature of the present invention.

FIG. 4 is a second greatly enlarged, transverse, vertical, sectional view which is taken from a position along 4-4 of FIG. 2 and through a first form of a removable lid which is a feature of the present invention.

FIG. 5 is a greatly enlarged, longitudinal, sectional view which is taken from a position along 5-5 of FIG. 2 and which shows a second, alternative form of the removable lid which forms a feature of the present invention.

FIG. 6 is a greatly enlarged, longitudinal, sectional view which is taken from a position along 6-6 of FIG. 2 and which shows a second, alternative form of the removable lid which is a feature of the present invention, and which shows the fluid flowing regulating valve in a second position.

FIG. 7 is a bottom plan view of the removable lid as seen in FIG. 6 and which is a feature of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

This disclosure of the invention is submitted in furtherance of the constitutional purposes of the U.S. Patent Laws “to promote the progress of science and useful arts” (Article 1, Section 8).

The present invention is best appreciated by the study of FIG. 1, and following. As seen therein, the fluid dispensing vessel 10 of the present invention generally includes a container body which is indicated by the numeral 11. The container body has a first end 12, and an opposite, second end 13. The container body 11 is further defined by a generally circular and continuous sidewall 14, and a bottom surface 15 is provided, and which is suitably coupled to the continuous sidewall 14 to form the resulting container body 11. As seen in FIG. 1, the sidewall 14 has an outside facing surface 20, and an inside facing surface 21. As will be appreciated by those skilled in the art, and as appreciated by a study of the drawings, the outside facing surface 20 of the sidewall 14, in the region of the second end 13, may provide, in one form of the invention, a smooth curvilinear surface with which a removable lid may releasably and sealably engage. On the other hand, the present drawings show this outside facing surface 20 as bearing screw threads 33. Those skilled in the art will recognize that this outside facing surface may have other conventional means (not shown) formed therein by which an accompanying removable lid may be releasably secured in a convenient manner to the second end of the container body 11. The removable lid, which forms a feature of the present invention, will be discussed in greater detail, hereinafter. The inside facing surface 21, of the sidewall 14, defines an internal cavity 22 of given dimensions. Still further, the sidewall 14 at the second end 13, of the container body 11, defines a peripheral edge 23. This peripheral edge 23 further defines a dispensing opening 24. Additionally, the container body 11 is defined by a longitudinal axis which is generally indicated by the line labeled 25. It should be understood that the internal cavity 22 is operable to enclose a liquid, or liquid to be dispensed 26. This liquid or liquid to be dispensed moves into, and out of, the internal cavity 22 by means of the dispensing opening 24 in the manner which will be discussed in greater detail, hereinafter. As seen in FIG. 2, and in one possible form of the invention, the internal cavity 22 includes a second internal sidewall 30 as is well known in the fashion of a thermal insulating container. The internal sidewall 30 is positioned in spaced relationship from the inside facing surface 21, and a gap 31 is defined therebetween the inside facing surface 21 and the internal wall 30. Still further, and as seen in the drawings, the container body 11 includes a circumscribing and circumferentially enlarged abutment 32 which is spaced from the second end 13, and which provides a convenient visual means for indicating to the user of the vessel 10 that the removable lid (as will be described below) is fully seated and positioned in a correct sealably occluding relationship relative to the dispensing opening 24 of the container body 11.

With reference to FIG. 1, and following, it will be understood that the present invention 10 includes a removable lid which is generally indicated by the numeral 40. The removable lid, as a general matter, is useful for selectively occluding the top dispensing opening 24 of the container body 11. In this regard, the removable lid has a main body 41 which has an outside facing surface 42, and an opposite inside facing surface 43. Still further, the outside facing surface is defined, at least in part, by an upwardly extending drinking spout which is generally indicated by the numeral 44. Still further, a cavity 45 that is defined by a plurality of sidewalls 46 is formed in the outside facing surface 42. The significance of this cavity will be discussed in greater detail in the paragraphs which follow.

As best seen by reference to FIG. 3 and following, the main body 41 of the removable lid 40 has a downwardly depending and substantially circular sidewall 50 which defines a cavity 51 which is operable to telescopically and threadably receive or otherwise releasably and sealably cooperate with the second end 13, of the container body 11, in a manner as conventionally known in the art. In this regard, the inside facing surface 43 of the main body 41 defines inwardly oriented and mating threads 52 which are operable to threadably engage the screw threads 33 which are formed in the outside facing surface 20 of the container body 11. Further, formed in the inside facing surface 43 of the main body 41 is a seal seat 53 which is operable to receive a fluid impervious seal 54 which allows the removable lid 40 to be threadably advanced and then sealably engage the container body 11 in a manner so as to prevent any leakage of the liquid to be dispensed 26 from the cavity 22 of the container body 11. Additionally, as will be seen in FIG. 3 and following, in the several forms of the invention 10, as shown, a first channel 55, of given dimensions, is formed in the main body 41, and extends generally radially inwardly relative to the main body 41. This first channel 55 is operable to slidably receive a fluid flowing regulating valve as will be discussed in greater detail, hereinafter.

As seen in FIG. 3 and following, it will be understood that a first aperture 61 is formed in the main body 41 of the removable lid 40 and the region of the upwardly extending spout 44. Still further, a second aperture 62 is formed in the main body 41 and is located in the region of the cavity 45. The second aperture is provided so as to allow a surrounding ambient environment to communicate directly with the internal cavity 22 as defined by the container body 11 so as to allow the convenient dispensing of the liquid 26 from the internal cavity 22, and to prevent a vacuum from developing within same by the drinking action of a user, not shown. The operation of the second aperture will be discussed in greater detail, below. As will be seen from the drawings, the second aperture 62 is coupled in fluid flowing relation relative to the
first channel 55. As further seen FIG. 3, and following, a fluid passageway 63 depends downwardly from the inside surface 43 of the main body 41. This fluid passageway 63 has a proximal end 64 which is coupled in fluid flowing relation relative to the first aperture 61, and further has an opposite, second, or distal end 65. In one form of the invention as best understood by reference to FIG. 5, a post of given dimensions 66 is mounted on, and depends downwardly from, the inside facing surface 43 and is operable to define the path of movement for the fluid flowing regulating valve which will be discussed in greater detail hereinafter. The post 66 has a distal end 67 as indicated in FIG. 5.

In one form of the invention as seen in FIGS. 3 and 4, a support member which is generally indicated by the numeral 70 has a first end 72 which is affixed to the inside facing surface 43 of the main body 41, and depends downwardly therefrom. The main body 71 of the support member 70 has a first end 72 which is affixed to the inside facing surface 43, and an opposite, second, or distal end 73. A bottom supporting surface 74 is provided, and a cavity 75 is defined internally of the main body and which is sized so as to slideably receive and support the fluid flowing regulating valve which will be discussed in greater detail, below. As best seen by reference to FIG. 3, the trailing edge 76 (FIG. 3) of the bottom supporting surface 74 includes an abutment 77 which operably engages the fluid flowing regulating valve as will be discussed in greater detail, hereinafter, and defines at least in part, a course of travel for the fluid flowing regulating valve.

As mentioned above, the present invention 10 includes a fluid flowing regulating valve 80 which is slideably borne by the removable lid 40, and which may be moved by a single touch of a user along a path of travel which will be described below. The fluid flowing regulating valve reliably controls the flow of the liquid to be dispensed 26 from the container body 11, and also prevents the dispensing of same in the event that the fluid dispensing vessel 10 is inadvertently overturned. In this regard, the fluid flowing regulating valve 80 is shown in the drawings as in a first form 81, (as seen in FIG. 3) and in a second form 82 (as seen in FIG. 5.) The respective forms of the fluid flowing regulating valve 80 each have a main body 83 which has a first or proximal end 84 and an opposite distal end 85. Each of the forms 81 and 82 of the fluid flowing regulating valve 80 also have a top surface 90, and an opposite bottom surface 91. As seen most clearly by reference to FIG. 3 and following, a notch or gap 92 is formed in the second or distal end 85 and provides a convenient means by which liquid to be dispensed 26 may pass by or around the second or distal end 85 and be received in the distal end 65 of the fluid passageway 63 when the fluid flowing regulating valve 80 is appropriately positioned along the path of travel which will be described. As best seen by a study of FIG. 4, it will be understood that the main body 83 includes a pair of depending sidewalls 93 extending downwardly from the top surface 90. Still further, as seen in the sectional view of FIG. 5, for example, a continuous seal race 94 is formed into the top and bottom surfaces 90 and 91 and is operable to receive a first fluid imperious seal 95 which operably engages the first channel 55 formed in the main body 41 of the removable lid 40 and substantially prevents the movement of liquid past same. Depending upon the position of the fluid flowing regulating valve 80, this first fluid imperious seal 95 may either prevent or permit the second aperture 62 to be coupled in fluid flowing or air pressure transferring relation relative to the internal cavity 22 as defined by the container body 11. Those skilled in the art will recognize that by coupling the ambient atmosphere through the second aperture 62 to the internal cavity 22 the movement of fluid or liquid to be dispensed out of the internal cavity 22 will go easily because it will substantially prevent the creation of a vacuum within the internal cavity 22 of the container body.

As seen in FIG. 3 and following, it will also be noted that a second fluid imperious seal 96 is received thereabout the distal end 65 of the fluid passageway 63, and is operable to sealably mate, and cooperate with the top surface 90 of the fluid flowing regulating valve 80. The operation of these two fluid imperious seals, 95 and 96 will be discussed in greater detail, hereinafter.

As seen in FIG. 3 and following, it will be understood that the fluid flowing regulating valve 80 has a proximal end wall 100 which is located in substantial alignment with and in coaxially orientation relative to an uppermost circumscirling outside facing surface of the main body 41 when the fluid flowing regulating valve 80 is in a first position which will be described hereinafter; and further is located in a spaced, radially outwardly oriented position relative to the uppermost circumscirling outside facing surface when the fluid flowing regulating valve 80 is in a second position as seen most clearly by reference to FIG. 6. This proximal end wall 100 has an inside facing surface 101 which provides a convenient location whereby the finger of the user may be placed in order to apply force, with a single touch, to cause the fluid flowing regulating valve 80 to move along a course of travel, which will be discussed below. The inside facing surface 101 forms one of the surfaces which defines the cavity 45 which is formed, at least in part, by the outside facing surface 42 of the removable lid 40. As seen most clearly in FIG. 3, the first form of the invention 81 has a movement limiting post 102 extending downwardly relative to the main body 83. The movement limiting post 102 is operable to engage the abutment 77 which is made integral with the support member 70 thereby defining, at least in part, the course of travel of the fluid flowing regulating valve 80 as it moves along the course of travel which will be discussed, below.

As seen by reference to FIGS. 5 and 7, it will be understood that in the second form 82 of the fluid flowing regulating valve 80 that an elongated second channel 103 is formed in the main body 83. The elongated main channel has a first end 104, and an opposite second end 105. The elongated second channel 103 receives and cooperates with the depending post 66. The engagement of the post 66 relative to the first and second ends 104 and 105, respectively defines a linear course of travel for the fluid flowing regulating valve 80. As will be recognized by a study of FIG. 5, for example, it will be understood that the main body 83 of the second form 82 of the fluid flowing regulating valve 80 is supported for linear travel and perpendicular to the longitudinal axis 25 in a cantilevered manner by way of the first channel 55. In contrast, and referring to FIG. 3, it will be seen in this form of the invention that the fluid flowing regulating valve 80 is supported at both the proximal and distal ends hereof by other supporting structures, but similarly is moveable along a path of travel, as described below, substantially perpendicular relative to the longitudinal axis 25 as seen in FIG. 1.

As discussed above, the present invention 10, and more specifically the fluid flowing regulating valve 80 thereof, is moveable along a path of travel 110 (FIG. 6) which is substantially perpendicular relative to the longitudinal axis.
25 from a first position 111, as best seen by reference to FIGS. 3 and 5, and where the fluid flowing regulating valve 80, in the first position 111, substantially prevents the dispensing of any liquid or fluid 26 from the internal cavity 22 of the container body 11. In this first position, 111, the second fluid impervious seal 96 engages the top surface 90 of the fluid flowing regulating valve 80 so as to prevent fluid from passing through the notch or gap 92 from reaching the fluid passageway 63 which is coupled to the first aperture 61. Further, it will be recognized by studying FIGS. 3 and 5 that the first fluid impervious seal 94 is positioned such that the ambient atmosphere cannot readily communicate with the internal cavity 22. Moreover, the first fluid impervious seal is in a blocking or sealing position such that if the fluid dispensing vessel 10 is turned or knocked over, fluid or liquid may not escape from the internal cavity 22 and pass by the first fluid impervious seal and escape from the container body 11, by way of the second aperture 62.

[0027] When force is applied to the proximal end wall 100 of the fluid flowing regulating valve 80, the main body 83 is caused to move along the path of travel 110 from the first position 111 to the second position 112, which is best understood by reference to FIG. 6. In the second position 112, the proximal end 84 is positioned radially outwardly relative to the main body 83. Still further, the notch or gap 92 which is formed in the distal end 85 of the fluid flowing regulating valve 80 is located in a position such that fluid or liquid 26 may move from the internal cavity 22 through the gap or notch and enter into the proximal end 64 of the fluid passageway 63. Once received, the liquid or fluid then escapes out from the first aperture 61. Additionally, it will be recognized that the first fluid impervious seal 95 is now located in a position such that the ambient atmosphere may readily communicate through the second aperture 62 with the cavity 22 thereby preventing a vacuum from being created and prohibiting the dispensing of the liquid 26 from the internal cavity 22. As will be recognized, in the second form 82 of the fluid flowing regulating valve 80, the main body 83 is supported in a cantilevered orientation relative to the main body 41 of the remarkable lid 40. On the other hand, in the first form 81 thereof, the proximal and distal ends 84 and 85 are both supported by other structures which have been described above. In the present invention, and in both forms of the invention as shown, the communication of the ambient environment to the internal cavity 22, by way of the second aperture 62 is by means of the movement of the fluid flowing to other similarly designed drinking vessels.

Operation

[0028] The operation of the described embodiment of the present invention is believed to be readily apparent and is briefly summarized at this point.

[0029] In its broadest aspects, a fluid dispensing vessel 10 of the present invention includes a container body 11 for enclosing a fluid 26 to be dispensed, and wherein the container body 11 has a top dispensing opening 24, and a longitudinal axis 25. Still further, the invention includes a removable lid 40 for selectively occluding the top dispensing opening 24 of the container body 11, and wherein the removable lid 40 has a first aperture 61 which allows fluid 26 to flow from the container body 11 out through the removable lid 40, and a fluid flowing regulating valve 80 which is slidably borne by the removable lid 40, and which may be moved by a user from a first position 111 which prohibits fluid flow from the container body 11, to a second position 112 which allows fluid flow from the container body 11 and through the removable lid 40. As earlier discussed, the path of travel 110 is perpendicularly oriented relative to the longitudinal axis 25 as described in the specification. In the invention 10 as shown in the drawings, the container body 11 further defines an internal cavity 22 which encloses a fluid 26 to be dispensed. The removable lid 40 further defines a second aperture 62 which couples an ambient atmospheric environment surrounding the container body 11 with the internal cavity 22 when the fluid flowing regulating valve 80 is in the second position 112 and which allows fluid flow from the container body 11, and through the removable lid 40. As discussed above, fluid flowing regulating valve 80 has a proximal end 84 which may be grasped or pressed upon by a user’s fingers, and moved alternatively, and reciprocally, radially outwardly, and inwardly, relative to the longitudinal axis 25 so as to move the fluid flowing regulating valve 80 between the first and the second positions 111 and 112, respectively, and along the course of travel 110.

[0030] In the arrangement as shown in the drawings, the removable lid 40 defines a fluid passageway 63 which is coupled in fluid flow relation relative to the first aperture 61 formed in the removable lid 40. The first passageway allows fluid to flow from the container body 11 out through the removable lid 40. The passageway 63 has a distal end 65, and a fluid impervious seal 96 is mounted on the distal end of the passageway 63 and further sealably cooperates with the slideable, fluid flowing regulating valve 80. As earlier discussed, the fluid flowing regulating valve 80 also mounts another fluid impervious seal 95 which prevents fluid 26 from escaping from the container body 11, and passing through the second aperture 62 when the fluid flowing regulating valve 80 is located in the first or closed position 111. In one form of the invention, a support member 70 is provided, and which slideably supports the fluid flowing regulating valve 80 in a perpendicular orientation relative to the longitudinal axis 25 of the container body 11. In yet another form of the invention, a post 102 is borne by the fluid flowing regulating valve 80 and cooperates with the support member so as to define the first and second positions 111 and 112 of the fluid flowing regulating valve 80 as it moves along a course of travel 110. As described above, the invention 10 includes a post 66 which is mounted on the removable lid 40, and which cooperates with the fluid flowing regulating valve 80 so as to define the first and second positions 111 and 112 of the fluid flowing regulating valve 80 as it moves along the course of travel 110.

[0031] Still another aspect of the present invention relates to a fluid dispensing vessel 10 which comprises a container body 11 defining an internal cavity 22 for enclosing a fluid to be dispensed 26. The container body 11 defines a top dispensing opening 24, and is further defined by a longitudinal axis 25. A removable lid 40 is provided and which releasably engages the container body 11, and which selectively occludes the top dispensing opening 24. The removable lid has a main body 41 which has an outside facing surface 42, and an opposite inside facing surface 43. The main body 41 further defines a first aperture 61 which allows the source of fluid 26 held in the internal cavity 22 of the container body to pass therethrough. Still further, a second aperture 62 is provided and which couples an ambient atmospheric environment surrounding the container body 11 with the internal cavity 22. The invention 10 also includes a fluid flowing regulating valve 80 which is moveably supported in a cantilevered orientation relative to the longitudinal axis 25, and further sealably cooperates with the slideable, fluid flowing regulating valve 80.
levered orientation 82 on the inside facing surface 43 of the main body 41. The fluid flowing regulating valve 80 may be forcibly moved by a user with a single touch from a first position 111 which prohibits fluid flow from the internal cavity 22 of the container body 11, to a second position 112, which allows fluid flow from the internal cavity of the container body 11.

[0032] Yet still another aspect of the present invention relates to a fluid dispensing vessel 10 comprising a container body 11 defining an internal cavity 22 for enclosing a fluid to be dispensed 26. The container body 11 defines a top dispensing opening 24, and is further defined by a longitudinal axis 25. A removable lid 40 releasably engages the container body 11 and selectively occludes the top dispensing opening 24. The removable lid 40 has a main body 41 which has an outside facing surface 42, and an opposite inside facing surface 43. The main body further defines a first aperture 61 which allows the source of fluid 26 held in the internal cavity 22 of the container body 11 to pass therethrough. Further, a second aperture 62 couples an ambient atmospheric environment surrounding the container body with the internal cavity. A support member 70 depending downwardly from the inside facing surface 43 of the removable lid 40 is provided. Further, a fluid flowing regulating valve 80 is moveably supported on the support member 70 and is disposed in spaced relation relative to the inside facing surface 43 of the removable lid 40.

The fluid flowing regulating valve 80 may be forcibly moved by a user along a linear path of travel 110 from a first position 111 which prohibits fluid flow from the internal cavity 22 of the container body 11, to a second position 112, which allows fluid flow from the internal cavity of the container body 11.

[0033] Therefore, it will be seen that the fluid dispensing vessel of the present invention 10 provides many conveniences and other advantages not present in the prior art vessels which have been used, heretofore.

[0034] In compliance with the statute, the invention has been described in language more or less specific as to structural and methodical features. It is to be understood, however, that the invention is not limited to the specific features shown and described, since the means herein disclosed comprise preferred forms of putting the invention into effect. The invention is, therefore, claimed in any of its forms or modifications within the proper scope of the appended claims appropriately interpreted in accordance with the doctrine of equivalents.

1. A fluid dispensing vessel, comprising:
   a container body for enclosing a fluid to be dispensed, and wherein the container body has a top dispensing opening, and a longitudinal axis; and
   a removable lid for selectively occluding the top dispensing opening of the container body, and wherein the removable lid has a first aperture which allows fluid to flow from the container body out through the removable lid, and a fluid flowing regulating valve which is slideably borne by the removable lid, and which may be moved by a user from a first position which prohibits fluid flow from the container body, to a second position which allows fluid flow from the container body and through the removable lid.

2. A fluid dispensing vessel as claimed in claim 1, and wherein the movement of the fluid flowing regulating valve is along a path of travel defined between the first and second positions, and wherein the path of travel is perpendicularly orientated relative to the longitudinal axis, and wherein the location of the fluid flowing regulating valve in the second position simultaneously couples the container body to the ambient environment.

3. A fluid dispensing vessel as claimed in claim 1, and wherein the container body further defines an internal cavity which encloses a fluid to be dispensed, and wherein the removable lid further defines a second aperture which couples an ambient atmospheric environment surrounding the container body with the internal cavity when the fluid flowing regulating valve is in the second position and which allows fluid flow from the container body, and through the removable lid, and wherein the second aperture substantially prevents ambient atmospheric communication with the internal cavity of the container body when the fluid flowing regulating valve is located in the first position.

4. A fluid dispensing vessel as claimed in claim 1, and wherein the fluid flowing regulating valve has a proximal end which may be grasped by a user's fingers, and moved alternately, and reciprocally, radially outwardly, and inwardly, relative to the longitudinal axis so as to move the fluid flowing regulating valve between the first and the second positions.

5. A fluid dispensing vessel as claimed in claim 1, and wherein the removable lid has an uppermost circumscribing, and outside facing surface, and wherein the fluid flowing regulating valve has a proximal end which is located in substantial alignment with, and in coaxial orientation relative to, the uppermost circumscribing outside facing surface when the fluid flowing regulating valve is in the first position, and which is further located in a spaced, radially outwardly oriented position relative to the uppermost circumscribing, outside facing surface when the fluid flowing regulating valve is in the second position.

6. A fluid dispensing vessel as claimed in claim 1, and wherein the removable lid defines a passageway which is coupled in fluid flowing relation relative to the first aperture formed in the removable lid, and which further allows fluid to flow from the container body out through the removable lid, and wherein the passageway has a distal end, and a fluid impervious seal is mounted on the distal end of the passageway and further sealably cooperates with the slideable, fluid flowing regulating valve.

7. A fluid dispensing vessel as claimed in claim 6, and wherein the fluid flowing regulating valve mounts another fluid impervious seal which sealably cooperates with the removable lid so as to prevent fluid from escaping from the container body and passing through the second aperture when the fluid flowing regulating valve is located in the first position.

8. A fluid dispensing vessel as claimed in claim 1, and further comprising:
   a support member borne by the removable lid and slideably supporting the fluid flowing regulating valve in a perpendicular orientation relative to the longitudinal axis of the container body.

9. A fluid dispensing vessel as claimed in claim 8, and further comprising:
   a post borne by the fluid flowing regulating valve and cooperating with the support member so as to define the first and second positions of the fluid flowing regulating valve.

10. A fluid dispensing vessel as claimed in claim 1, and further comprising:
a post mounted on removable lid and which cooperates with the fluid flowing regulating valve so as to define the first and second positions of the fluid flowing regulating valve.

11. A fluid dispensing vessel, comprising:
a container body defining an internal cavity for enclosing a fluid to be dispensed, and wherein the container body defines a top dispensing opening, and is further defined by a longitudinal axis;
a removable lid which releasably engages the container body and which selectively occludes the top dispensing opening, and wherein the removable lid has a main body which has an outside facing surface, and an opposite inside facing surface, and wherein the main body further defines a first aperture which allows the source of fluid held in the internal cavity of the container body to pass therethrough, and a second aperture which couples an ambient atmospheric environment surrounding the container body with the internal cavity; and
a fluid flowing regulating valve moveably supported in a cantilevered orientation on the inside facing surface of the main body, and wherein the fluid flowing regulating valve may be forcibly moved by a user from a first position which prohibits fluid flow from the internal cavity of the container body, to a second position, which allows fluid flow from the internal cavity of the container body.

12. A fluid dispensing valve as claimed in claim 11, and wherein the outside facing surface of the removable lid defines an upwardly extending sipping spout, and the first aperture is formed in the sipping spout, and wherein the outside facing surface further defines a cavity which is defined by a sidewall, and the second aperture is located in the cavity.

13. A fluid dispensing valve as claimed in claim 12, and wherein a first channel is formed in the main body of the removable lid, and which receives, and supports the fluid flowing regulating valve in a cantilevered orientation relative to the removable lid, and wherein the first channel supports the fluid flowing regulating valve in a perpendicular orientation relative to the longitudinal axis of the container body.

14. A fluid dispensing valve as claimed in claim 13, and wherein the fluid flowing regulating valve has a main body with a proximal end which may be grasped by the fingers of a user, and a distal end, and wherein an elongated second channel is formed in the main body of the fluid flowing regulating valve; and wherein a fluid impervious seal is borne by the fluid flowing regulating valve and engages the first channel which is formed in the main body of the removable lid.

15. A fluid dispensing valve as claimed in claim 14, and further comprising:
a post which is made integral with the inside facing surface of the main body of the fluid flowing regulating valve, and which extends downwardly and extends through the elongated second channel as defined by fluid flowing regulating valve, and wherein the post cooperates with the fluid flowing regulating valve so as to define a linear path of travel for the fluid flowing regulating valve between the first and second positions.

16. A fluid dispensing vessel as claimed in claim 15, and further comprising:
a fluid passageway made integral with the main body of the removable lid and extending downwardly relative to the inside facing surface thereof, and wherein the fluid passageway has a proximal end which is coupled in fluid flowing relation relative to the first aperture formed in the removable lid, and an opposite, distal end, and wherein a another fluid impervious seal is mounted on the distal end of the fluid passageway and sealably engages the distal end of the fluid flowing regulating valve when the fluid flowing regulating valve moves linearly along the path of travel between the first and second positions.

17. A fluid dispensing vessel as claimed in claim 16, and wherein, in the first position, the first and second fluid impervious seals prevents any of the source of fluid contained within the container body from being dispensed from the fluid dispensing vessel through either the first or second apertures, and wherein when the fluid flowing regulating valve is moved from the first position to the second position, the source of fluid may move from the container body past the distal end of the fluid flowing regulating valve and through the fluid passageway for dispensing through the first aperture, and wherein the first mentioned fluid impervious seal permits the cavity of the container body to communicate with the surrounding ambient environment.

18. A fluid dispensing vessel, comprising:
a container body defining an internal cavity for enclosing a fluid to be dispensed, and wherein the container body defines a top dispensing opening, and is further defined by a longitudinal axis;
a removable lid which releasably engages the container body and which selectively occludes the top dispensing opening, and wherein the removable lid has a main body which has an outside facing surface, and an opposite inside facing surface, and wherein the main body further defines a first aperture which allows the source of fluid held in the internal cavity of the container body to pass therethrough, and a second aperture which couples an ambient atmospheric environment surrounding the container body with the internal cavity;
a support member depending downwardly from the inside facing surface of the removable lid; and
a fluid flowing regulating valve moveably supported on the support member and in spaced relation relative to the inside facing surface of the removable lid, and wherein the fluid flowing regulating valve may be forcibly moved by a user along a linear path of travel from a first position which prohibits fluid flow from the internal cavity of the container body, to a second position, which allows fluid flow from the internal cavity of the container body.

19. A fluid dispensing vessel as claimed in claim 18, and wherein the outside facing surface of the removable lid defines an upwardly extending sipping spout, and the first aperture is formed in the sipping spout, and wherein the outside facing surface further defines a cavity which is defined by a sidewall, and the second aperture is located in the cavity.

20. A fluid dispensing vessel as claimed in claim 19, and wherein a first channel is formed in the main body of the removable lid, and which receives, and supports, at least in part, the fluid flowing regulating valve in a perpendicular orientation relative to the longitudinal axis of the container body.

21. A fluid dispensing vessel as claimed in claim 20, and wherein the fluid flowing regulating valve has a main body with a proximal end which may be grasped by the fingers of
a user, and a distal end, and wherein a post is made integral
with the main body of the fluid flowing regulating valve and
extends downwardly therefrom, and wherein a first fluid
impervious seal is borne by the fluid flowing regulating valve
and engages the first channel which is formed in the main
body of the removable lid.

22. A fluid dispensing vessel as claimed in claim 21, and
further comprising:

a fluid passageway made integral with the main body of the
removable lid and extending downwardly relative to the
inside facing surface thereof, and wherein the fluid pas-
sageway has a proximal end which is coupled in fluid
flowing relation relative to the first aperture formed in
the removable lid, and an opposite, distal end, and
wherein a second fluid impervious seal is mounted on
the distal end of the fluid passageway and sealably
engages the distal end of the fluid flowing regulating valve
when the fluid flowing regulating valve moves
linearly along the path of travel between the first and
second positions.

23. A fluid dispensing vessel as claimed in claim 22, and
wherein, in the first position, the first and second fluid
impervious seals prevents the source of fluid contained within the
container body from being dispensed from the fluid dispens-
ing vessel through either the first or second apertures, and
wherein when the fluid flowing regulating valve is moved
from the first position to the second position, the source of
fluid may move from the container body past the distal end of
the fluid flowing regulating valve and through the fluid pas-
sage for dispensing through the first aperture, and wherein the
first fluid impervious seal permits the cavity of the container
body to communicate with the surrounding ambient environ-
ment.

24. A fluid dispensing vessel as claimed in claim 23, and
wherein the support member defines a cavity which receives
the post which depends downwardly from the fluid flowing
regulating valve, and wherein the post cooperates, at least in
part, with the support member to define the course of travel of
the fluid flowing regulating valve between, the first and sec-
ond positions.

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