Claims

[Claim 1] A refillable container, comprising:

a liquid inner container, which has a suction port formed at a center of an upper surface and a bottom portion formed into a pyramid shape having a deepest portion at a center of the bottom portion, and is configured to contain a liquid inside and be replaced when the liquid has been exhausted;

a support member configured to hold the bottom portion of the liquid inner container to support the liquid inner container in a standing state;

a lid member, which is fitted from above to an outer periphery of the liquid inner container supported by the support member to accommodate the liquid inner container, and has a distal end portion configured to be locked to the support member;

a discharge pump, which is provided on a top surface portion of the lid member, and is configured to discharge the liquid to an outside by sucking the liquid through a suction tube that is inserted, and through the suction port of the liquid inner container supported by the support member, into the liquid inner container, the suction tube of the discharge pump being inserted into the suction port of the liquid inner container when the lid member is fitted from above to the outer periphery of the liquid inner container; and

positioning means for positioning, at a position at which the distal end portion of the lid member fitted to the outer periphery

of the liquid inner container supported by the support member is locked to the support member, a position of the liquid inner container supported by the support member in a vertical direction is determined such that a distal end of the suction tube of the discharge pump inserted through the suction port of the liquid inner container is located in the pyramid shape of the bottom portion of the liquid inner container and such that a seal portion at the bottom portion is prevented from coming into contact with the support member.

[Claim 2] The refillable container according to claim 1,

wherein the support member includes:

a support frame portion configured to accommodate the bottom portion of the liquid inner container to support the liquid inner container in the vertical direction; and

a pedestal, which is provided in the support frame portion so as to protrude from an inner wall of the support frame portion toward a center, and is configured to bring an outer peripheral edge of the bottom portion of the liquid inner container accommodated in the support frame portion into abutment against an upper surface of the pedestal,

wherein the support frame portion has an upper end portion which is configured to be locked to the distal end portion of the lid member fitted to the outer periphery of the liquid inner container supported by the support frame portion, and

wherein the positioning means is formed by the distal end

portion of the lid member, the upper end portion of the support frame portion, and the upper surface of the pedestal.

[Claim 3] The refillable container according to claim 1,

wherein the support member includes:

a support frame portion configured to accommodate the bottom portion of the liquid inner container to support the liquid inner container in the vertical direction; and

a pedestal, which is provided in the support frame portion so as to protrude from an inner wall of the support frame portion toward a center, and is configured to bring an outer peripheral edge of the bottom portion of the liquid inner container accommodated in the support frame portion into abutment against an upper surface thereof,

wherein the lid member is configured to fit, together with the liquid inner container, to an outer periphery of the support frame portion supporting the liquid inner container,

wherein the support frame portion has, on an outer surface side thereof, a locking step portion configured to lock the distal end portion of the lid member, and

wherein the distal end portion of the lid member, the locking step portion of the support frame portion, and the upper surface of the pedestal form the positioning means.

[Claim 4] The refillable container according to claim 1,

wherein the support member includes:

a support frame portion configured to accommodate the bottom portion of the liquid inner container to support the liquid inner container in the vertical direction;

a pedestal, which is provided in the support frame portion so as to protrude from an inner wall of the support frame portion toward a center, and is configured to bring an outer peripheral edge of the bottom portion of the liquid inner container accommodated in the support frame portion into abutment against an upper surface of the pedestal; and

a support base configured to allow the support frame portion to be provided upright on the upper surface,

wherein the lid member is made of an elastically deformable material, and is configured to fit, together with the support frame portion and the liquid inner container, to the outer periphery of the support base supporting the liquid inner container,

wherein the lid member has a protrusion formed on an inner side surface thereof on a distal end side, and the support base has a recess formed in an outer side surface thereof on the distal end side of the lid member so as to allow the protrusion to be engaged therewith and removed therefrom, and

wherein the protrusion formed on the inner side surface of the lid member on the distal end side and the recess formed in the outer side surface of the support base form the positioning means.

[Claim 5] The refillable container according to any one of claims 2 to 4,

wherein the upper surface of the pedestal is inclined downwardly toward the center, and

wherein an inclination angle of the upper surface of the pedestal with respect to a horizontal direction is an angle which is equal to an inclination angle of the bottom portion of the liquid inner container formed into the pyramid shape or larger than the inclination angle of the bottom portion.

[Claim 6] The refillable container according to any one of claims 2 to 5, wherein the pedestal is formed of a plurality of pedestal pieces, which are arranged in the support frame portion in a standing state at predetermined intervals in a circumferential direction, and respective upper sides of the plurality of pedestal pieces serve as the upper surface of the pedestal.

[Claim 7] The refillable container according to any one of claims 2 to 6, wherein, in the support frame portion, a height of protruding upwardly from the pedestal in contact with an inner wall of the support frame portion is a height which is equal to or larger than 5% of a body height of the liquid inner container and is smaller than the body height of the liquid inner container.

[Claim 8] The refillable container according to claim 1, wherein

the liquid inner container includes a skirt portion, which is provided at a lower portion of the liquid inner container main body, and is configured to cover the bottom portion formed into the pyramid shape and enable the liquid inner container to stand.

[Claim 9] The refillable container according to claim 8, wherein the skirt portion is set to such a length that, at a position at which the distal end portion of the lid member fitted to the outer periphery of the liquid inner container supported by the support member is locked to the support member, a position of the liquid inner container supported by the support member in the vertical direction is determined such that the distal end of the suction tube of the discharge pump inserted through the suction port is located in the pyramid shape of the bottom portion, thereby forming the positioning means.