Claims

1. A spray dispenser comprising a container for holding a liquid to be dispensed and a dispensing assembly for extracting liquid from said container, the dispensing assembly comprising a pressure-relief valve for release of excessive pressure in the container and a filter arranged to permit egress of gas from the container through the filter and through the pressure-relief valve, the filter inhibiting egress of liquid from the container through the filter, the pressure-relief valve being a one-way valve which permits egress of gas associated with excessive pressure in the container, the pressure-relief valve being closed in the absence of excessive pressure to inhibit ingress of air and contaminants into the container wherein:
   the filter is in a gas flow path between the interior of the container and the pressure-relief valve, or
   the pressure-relief valve is in a gas flow path between the interior of the container and the filter.

2. A spray dispenser according to claim 1, wherein the filter inhibits ingress of particulate into the container.

3. A spray dispenser according to claim 2, wherein the filter comprises pores which permit passage therethrough of gas, but inhibit passage therethrough of particulate.

4. A spray dispenser according to any preceding claim, wherein the filter is located within a filter housing.

5. A spray dispenser according to any preceding claim, wherein the container comprises a fluid containment portion which is collapsible.

6. A spray dispenser according to claim 5, wherein the container comprises a collar which is more rigid than the fluid containment portion.

7. A spray dispenser according to any preceding claim, wherein the container comprises a container seal-forming surface and the spray dispenser comprises a sealing member for forming a seal against the container seal-forming surface to inhibit ingress of air into the container.

8. A spray dispenser according to claim 7, wherein the dispenser assembly comprises the sealing member.

9. A spray dispenser according to claim 7 or claim 8, wherein the sealing member is annular.

10. A spray dispenser according to any preceding claim, wherein the pressure-relief valve comprises a diaphragm valve, a spring valve, a butterfly valve, a swing valve, a ball check valve or a duckbill valve.

11. A spray dispenser according to any preceding claim, wherein the spray dispenser is provided with a closure means for inhibiting access to the container.

12. A spray dispenser according to claim 11, wherein the dispensing assembly comprises the closure means.

13. A spray dispenser according to claim 11 or claim 12, wherein the closure means is provided with both the pressure-relief valve and the filter.

14. A spray dispenser according to any preceding claim comprising a housing for enclosing the container.

15. A spray dispenser according to claim 14, wherein the housing supports the container.

16. A spray dispenser according to either of claim 14 and claim 15 when dependent on one of claims 11 to 13, the closure means being removably attachable to the housing.

17. A spray dispenser according to any preceding claim, the dispensing assembly comprising a pressure means for creating a differential pressure to dispense fluid from the container.

18. A spray dispenser according to any preceding claim, the dispensing assembly comprising a dispensing line.

19. A spray dispenser according to claim 18, wherein the dispensing line is in a gas-tight sealing engagement with a dispensing line sealing means.

20. A spray dispenser according to claim 19, wherein the dispensing line sealing means is in the form of an apertured plate, the plate being provided with an aperture which receives the dispensing line in sealing engagement.

21. A spray dispenser according to claim 20 when dependent on claim 12 or claim 13, wherein the apertured plate is associated with the closure means.

22. A spray dispenser according to any preceding claim, wherein the dispensing assembly is mountable onto, and dismountable from, the container.

23. A spray dispenser according to any preceding claim, the filter comprising a hydrophobic membrane.

24. A dispensing assembly for use in the spray dispenser assembly of any preceding claim.

25. A dispensing assembly for use in a spray dispenser to dispense liquid from a container comprising a collapsible fluid containment portion, thereby collapsing the collapsible fluid containment portion, the dispensing assembly comprising a pressure-relief valve for release of excessive pressure in a container to which the dispensing assembly is fitted and a filter arranged to permit egress of gas from the container through the filter and through the pressure-relief valve, the filter inhibiting egress of liquid from a container to which the dispensing assembly is fitted, the pressure-relief valve being a one-way valve which permits egress of gas associated with excessive pressure in a container to which the dispensing assembly is fitted, the pressure-relief valve being closed in the absence of excessive pressure in a container to which the dispensing assembly is fitted so as to inhibit ingress of air and contaminants into a container to which the dispensing assembly is fitted, wherein

the filter is in a gas flow path between the interior of ~~the~~ a container to which the dispensing assembly is fitted and the pressure-relief valve, or
the pressure-relief valve is in a gas flow path between the interior of ~~the~~ a container to which the dispensing assembly is fitted and the filter.

26. A dispensing assembly according to claim 25, wherein the filter inhibits ingress of particulate into the container.

27. A dispensing assembly according to claim 26, wherein the filter comprises pores which permit passage therethrough of gas, but inhibit passage therethrough of particulate.

28. A dispensing assembly according to claims 25 to 27, wherein the filter is located within a filter housing.

29. A dispensing assembly according claims 25 to 28, wherein the dispensing assembly comprises a sealing member for forming a seal against a container seal-forming surface to inhibit ingress of air into a container to which the dispensing assembly is fitted.

30. A dispensing assembly according to claim 29, wherein the sealing member is annular.

31. A dispensing assembly according to claims 25 to 30, wherein the pressure-relief valve comprises a diaphragm valve, a spring valve, a butterfly valve, a swing valve, a ball check valve or a duckbill valve.

32. A dispensing assembly according to claims 25 to 31, wherein the dispensing assembly comprises a closure means for inhibiting access to a container to which the dispensing assembly is fitted.

33. A dispensing assembly according to claim 32, wherein the closure means is provided with both the pressure-relief valve and the filter.

34. A dispensing assembly according to claims 25 to 33, the dispensing assembly comprising a pressure means for creating a differential pressure to dispense fluid from a container to which the dispensing assembly is fitted.

35. A dispensing assembly according to claims 25 to 34, comprising a dispensing line.

36. A dispensing assembly according to claim 35, wherein the dispensing line is in a gas-tight sealing engagement with a dispensing line sealing means.

37. A dispensing assembly according to claim 36, wherein the dispensing line sealing means is in the form of an apertured plate, the plate being provided with an aperture which receives the dispensing line in sealing engagement.

38. A dispensing assembly according to claim 37 when dependent on claim 32 or claim 33, wherein the apertured plate is associated with the closure means.

39. A dispensing assembly according to claims 25 to 38,

wherein the filter comprises a hydrophobic membrane.

40. A dispensing assembly according to claims 25 to 39, wherein the filter is located in a filter housing, the filter housing being located in a space formed in a valve housing, the valve housing trapping the pressure relief valve in place.

41. A spray dispenser comprising a container for holding a liquid to be dispensed and a dispensing assembly according to claims 25 to 40 for extracting liquid from said container, wherein the container comprises a collapsible fluid containment portion.

42. A spray dispenser according to claim 41 wherein the collapsible fluid containment portion comprises a collapsible bag.

43. A spray dispenser according to claim 41 or 42 comprising a housing for enclosing the container.

44. A spray dispenser according to claim 43 wherein the housing is provided with an aperture to permit air to enter the space between the container and the housing.

45. A dispensing assembly substantially as hereinbefore described with reference to Figs. 2 to 6.

46. A spray dispenser substantially as hereinbefore described with reference to Figs. 2 to 6.