the second volume is no more than 1% the first volume.

5. The fitting of claim 4 wherein the second dead space includes one or more volumes in a region that is:

transversely coextensive with contact between the surface and the detent; and

longitudinally extensive between the surface and the detent.

6. The fitting of claim 4 wherein the second dead space is within the seal.

7. The fitting of claim 3 wherein the sealing contact is sufficient to prevent leakage of fluid from the dispenser to the region when the dispenser is actuated to dispense the fluid.

8. The fitting of claim 2 wherein:

the dispenser is pre-filled with an initial volume of fluid; and

the body defines a void that is in fluid communication with the opening, the void having a void volume that is not less than 10% the initial volume.

9. The fitting of claim 8 wherein the void volume is selected from not less than 25%, 50%, 75% or 90% of the initial volume.

10. A fluid dispenser, the dispenser having a longitudinal axis and a distal end, the distal end comprising:

a detent transverse to the longitudinal axis, the detent configured to limit longitudinal insertion of the dispenser into a fitting by applying a longitudinal contact force against a surface of the fitting;

a seal that is configured to be deformed by the surface, into sealing contact against the surface, when the detent abuts the surface; and

a terminal portion that is configured to:

support the detent and the seal; and

be received by the fitting.

11. The dispenser of claim 10 wherein the detent defines an aperture in fluid communication with a bore of the dispenser.

12. The dispenser of claim 11 wherein the fitting defines an opening configured to be placed in fluid communication with the aperture.

13. The dispenser of claim 12 wherein:

the terminal portion includes a lateral wall; and

the fitting includes an interior wall;

such that, when the seal is in sealing contact against the surface, and the detent abuts the surface, the lateral wall, the interior wall and the seal define a region that is isolated from fluid communication with the bore.

14. The dispenser of claim 13 wherein:the region is a first dead space having a first volume;

the detent, when in contact with the surface, defines a second dead space having a second volume; and

the second volume is no more than 1% the first volume.

15. The dispenser of claim 14 wherein the second dead space includes one or more volumes in a region that is:

transversely coextensive with contact between the surface and the detent; and

longitudinally extensive between the surface and the detent.

16. The dispenser of claim 14 wherein the second dead space is within the seal.

17. The dispenser of claim 13 wherein the sealing contact is sufficient to prevent leakage of fluid from the dispenser to the region when the dispenser is actuated to dispense the fluid.

18. The dispenser of claim 10 wherein the detent and the seal extend longitudinally in a distal direction from the terminal portion, the detent including a bottom, the seal, in a relaxed state, extending distally beyond the bottom.

19. The dispenser of claim 18 wherein the seal does not extend transversely under the bottom.

20. The dispenser of claim 19 wherein the terminal portion defines a recess configured to secure the seal such that a distal end of the seal is not drawn laterally under the bottom.