

FLUID DISPENSE SYSTEM

This Sheet Has Been Replaced

ABSTRACT

Disclosed herein is a method of and apparatus for negative pressure dispensing of fluids wherein a dispense valve assembly (12) seals a container (18) and has valves (26) for ingress of ambient air and (38) for egress of dispensed fluid respectively, and a coupling head (58) mates with the dispense valve assembly and has means (62, 74, 84) operative to open the air and fluid valves and form a sealed connection (52, 84) solely with the fluid valve; by this means fluid can be pumped out of the container via the fluid valve and the coupling head, whilst ambient air flows into the container via the air valve. In a preferred embodiment, the engagement (24, 66, 68, 70) between the coupling head body (64) and the dispense valve body (20) is arranged to provide an unsealed air flow path between the coupling head (58) and the dispense valve assembly (12); a one-way valve (96, 98) is fitted in the air flow path within the dispense valve assembly (12), to prevent fluid from leaking out of the container through the air valve (26) when the coupling head (58) is mated to the dispense valve assembly; and the coupling head (58) and the dispense valve assembly (12) are mainly comprised of moulded plastics component.

Figure 3