

Title (en)
IMPROVEMENTS IN OR RELATING TO PUMP-ACTION NOZZLE DEVICES

Title (de)
VERBESSERUNGEN AN ODER BEZÜGLICH DER PUMPBETÄTIGBAREN SPRÜHVORRICHTUNGEN

Title (fr)
AMELIORATIONS DANS DES DISPOSITIFS DE BUSE COMMANDES PAR POMPE

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Application
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Abstract (en)
[origin: WO2004054723A1] In a first aspect, the present invention concerns a pump-action nozzle device (100) adapted to be fitted to a container and to enable fluid stored in the interior of said container to be dispensed during use, which has a body which defines: an internal chamber (107); an outlet (112) through which fluid dispensed from said chamber (107) is ejected from the device(100, said outlet (112) further comprising an outlet valve (105) configured to only open and permit fluid to be dispensed from the chamber (107) when the pressure therein exceeds a predetermined minimum threshold pressure; and an inlet (110) through which fluid can be drawn into said chamber, said inlet (110) further comprising a valve (108a) configured to only open and permit fluid to be drawn into the chamber (107) when the pressure within the chamber (107) falls below the external pressure. The body of the device comprises a base portion (101) and a housing portion (162), said base portion (101) and housing (102) portions together defining the internal chamber (107) of the device (100) and being slidably mounted to one another such that said housing portion (102) can be slid towards the base portion (101) to reduce the internal volume of the chamber (107) during a first stage of operation, thereby causing the pressure within the chamber (102) to increase and any fluid stored therein to be dispensed through said outlet (112) to be dispensed if the pressure therein exceeds the predetermined minimum threshold pressure required to open the outlet valve (105), and then slid away from the base to increase the volume of the chamber (107) during a second stage of operation, thereby causing the pressure within the chamber (107) to reduce and fluid to be drawn into the chamber through the inlet (110). In another aspect the present invention relates to a pump-action nozzle device which additionally comprises an air chamber (203) configured to co-eject a stream of air with liquid dispensed from the device in the usual manner.

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