Title (en)
SPRAY OR DOSAGE PUMP

Publication
EP 0098939 B1 19871216 (DE)

Application
EP 83104927 A 19830519

Priority
DE 3225910 A 19820710

Abstract (en)
[origin: EP0098939A2] The cylindrical pump housing (13) which may be screwed on top of a bottle carries a stack of discs (22) above which projects the piston rod (15) of the pump. A cylindrical skirt (17) forming a cap (11), extends downwards from a flat top with a central opening connected by a side outlet to a dispensing nozzle projecting radially outwards. When the cap is pressed, the contents of the bottle are forced upwards through the central opening and through the nozzle due to the pumping action. The cap can be rotated about its vertical axis to control the discharge. In one position, the bottom of the skirt is blocked by the top disc, so that it cannot be pushed down. By rotating the cap until a vertical rib (19) inside is aligned with grooves (20,23) on the vertical outside faces of the discs, the cap can be pushed down.

IPC 1-7
B05B 11/00; F04B 9/14

IPC 8 full level
B05B 11/00 (2006.01); **F04B 9/14** (2006.01)

CPC (source: EP)
B05B 11/1008 (2023.01); **B05B 11/1059** (2023.01)

Cited by
US5516006A; EP2216261A3; DE4027669A1; EP3492172A1; DE102004046768A1; FR2658486A1; DE4027672A1; CN106477154A; FR2573819A1; RU2703248C1; EP0636421A1; US5433343A; EP0553546A1; DE4027670A1; US5289946A; CN105457783A; DE10159692A1; DE4008068A1; US5427280A; GB2238088A; CN102958617A; US8556130B2; US9199258B2; US7854353B2; US9649455B2; WO8702976A1; WO2012001374A1; WO2014128007A1; WO2017193150A1; WO2007031614A1; WO2006032506A1; US7306116B2; US8528795B2; US9211559B2; WO2023094337A1; US8939323B2; US9010584B2; US9346068B2; US9656032B2; US10639660B2; US9433960B2; US9968748B2; US10950149B2

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