

Title (en)  
Finger operated spray pump

Title (de)  
Fingerbetätigte Zerstäuberpumpe

Title (fr)  
Pompe de pulvérisation actionné par un doigt

Publication  
**EP 1386670 B1 20060426 (EN)**

Application  
**EP 03015730 A 20030710**

Priority  
GB 0217866 A 20020801

Abstract (en)  
[origin: EP1386670A2] A finger operated spray pump comprises a liquid reservoir (1) intended to contain a supply of liquid (2), a cylinder (3) connected at one end to an atomiser (5) and intended to contain a portion of liquid from the reservoir (1), a part of which is to be ejected through the atomiser (5), a piston (6) sealingly mounted within the cylinder (3) and movable within and relative to the cylinder (3) in a spray stroke a passageway means (7) connecting the cylinder (3) with the supply of liquid (2) in the liquid reservoir (1), a one way valve means (8) at the passageway means (7) allowing a flow of liquid only from the supply of liquid (2) into the cylinder (3), and a finger operated actuator (9) displaceable by finger pressure relative to the liquid reservoir (1) in the spray stroke. Here the outer diameter of the piston (6) and the corresponding inner diameter of the cylinder (3) is between about 0,5 mm and about 4,0 mm the nozzle-diameter of the atomiser (5) is between 15  $\mu$ m and 150  $\mu$ m the operating pressure within the cylinder (3) during the spray stroke with average finger force is between 10 bar and 400 bar preferably between about 50 bar and about 100 bar, and the atomiser (5), the cylinder (3), the piston (6) and the one way valve means (8) are manufactured from materials and in a way to withstand the elevated operating pressure. <IMAGE>

IPC 8 full level  
**B05B 11/00** (2006.01); **B65D 83/76** (2006.01)

CPC (source: EP)  
**B05B 11/1001** (2023.01); **B05B 11/106** (2023.01)

Cited by  
CN103817033A; DE102022104802A1; DE202017002851U1; US11179465B2; DE202015009408U1; EP3097981A1; EP3315207A1; DE202013002874U1; DE202013011596U1; US10588914B2; US10905697B2; DE202019000718U1; WO2020165356A1

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