

Title (en)

Upright/inverted sprayer

Title (de)

In normaler und umgekehrter Position arbeitender Zerstäuber

Title (fr)

Pulvérisateur utilisable en position normale et inversée

Publication

EP 0875296 A2 19981104 (EN)

Application

EP 98302447 A 19980330

Priority

- US 84803097 A 19970428
- US 86162497 A 19970522

Abstract (en)

A manually actuated liquid pump sprayer is capable of use in both upright and inverted positions without leakage through the vent port (35) by the provision of an auxiliary inlet passage including an inlet port (38) in the path of a slider valve (39). In accordance with one embodiment a vent port is likewise located in the path of that slider valve. The vent port (35) is open while the inlet port (38) is closed while the slider valve (39) is in the upright attitude of the sprayer, while the converse is effected by the slider valve (39) when operating the sprayer in an inverted position. In accordance with another embodiment a second slider valve (75) is located within the pump body for uncovering the vent port (58) which is in the pump cylinder in the upright position of spray, and for uncovering that vent port (58) in the inverted position to avoid leakage.

IPC 1-7

B05B 11/00

IPC 8 full level

B65D 47/34 (2006.01); **B05B 11/00** (2006.01)

CPC (source: EP)

B05B 11/0044 (2018.07); **B05B 11/0059** (2013.01); **B05B 11/1011** (2023.01); **B05B 11/1095** (2023.01)

Citation (applicant)

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EP 0875296 A2 19981104; **EP 0875296 A3 19990407**; AU 5949798 A 19981029; AU 724771 B2 20000928; BR 9801460 A 19990928; CA 2234193 A1 19981028; CN 1197894 A 19981104; ID 20194 A 19981029; JP H10323591 A 19981208; TW 384276 B 20000311

DOCDB simple family (application)

EP 98302447 A 19980330; AU 5949798 A 19980324; BR 9801460 A 19980427; CA 2234193 A 19980407; CN 98101556 A 19980417; ID 980560 A 19980415; JP 13464298 A 19980428; TW 87105052 A 19980402