

Title (en)

Plastic dosing pump for low viscosity materials, in particular pasty materials

Title (de)

Dosierpumpe aus Kunststoff für niederviskose, insbesondere pastenartige Medien

Title (fr)

Pompe doseuse en matière synthétique pour matériaux à faible viscosité, en particulier des matériaux pâteux

Publication

EP 0565977 B1 19960605 (DE)

Application

EP 93105558 A 19930403

Priority

DE 4212413 A 19920414

Abstract (en)

[origin: EP0565977A2] The metering pump (1) made of plastics for delivering metered quantities of paste-like media consists of a bottle-like, can-like or tube-like container (60) with a spring-elastic bellows (4) as a pumping member which is arranged in a communicating manner between an upper housing part (2) and a lower housing part (3) which is coaxial thereto and is movable in the manner of a telescope and whose interior (32) forms a pump chamber. Its upper end section (38) is connected to an annular wall (35) of the upper housing part (2). Its lower end section (45) bears in a sealing manner against an annular collar (46) of a radial partition (19) of the lower housing part (3). A second pump chamber (33, 33/1) for a second medium is formed by two annular wall nozzles (30, 31) which are guided telescopically one inside the other, surround the bellows (4) concentrically with radial spacing and are moulded in each case onto one of the two housing parts (2, 3), which second pump chamber communicates through a second outlet valve and/or at least one passage opening (34) in the intermediate wall (13) with the outlet aperture (10) of the upper housing part. On the suction side, it communicates via at least one eccentric suction channel (82) in the radial wall (19) of the lower housing part (3) with an annular chamber (81) of a container (61) or with a second container. <IMAGE>

IPC 1-7

B65D 47/34; B05B 11/00; F04B 13/02

IPC 8 full level

B05B 11/00 (2006.01); **B65D 47/34** (2006.01); **B65D 81/32** (2006.01); **F04B 9/14** (2006.01); **F04B 13/02** (2006.01); **F04B 43/08** (2006.01)

CPC (source: EP KR US)

B05B 11/0038 (2018.07 - EP US); **B05B 11/0054** (2013.01 - EP US); **B05B 11/028** (2023.01 - EP US); **B05B 11/1035** (2023.01 - EP US); **B05B 11/1046** (2023.01 - EP US); **B05B 11/1085** (2023.01 - EP US); **B65D 81/325** (2013.01 - EP US); **F04B 9/00** (2013.01 - KR)

Cited by

CN103693281A; CN107044629A; EP0751077A1; US5813573A; WO9630126A1; WO9727121A1

Designated contracting state (EPC)

FR GB IT

DOCDB simple family (publication)

EP 0565977 A2 19931020; **EP 0565977 A3 19940302**; **EP 0565977 B1 19960605**; DE 4212413 A1 19931021; DE 4212413 C2 19960912; JP 3373248 B2 20030204; JP H0642449 A 19940215; KR 930021941 A 19931123; TW 222608 B 19940421; US 5351862 A 19941004

DOCDB simple family (application)

EP 93105558 A 19930403; DE 4212413 A 19920414; JP 8425493 A 19930412; KR 930006306 A 19930414; TW 82102726 A 19930412; US 4664893 A 19930413