

Title (en)
DELIVERY DEVICE FOR FREE-FLOWING MEDIA

Publication
EP 0189549 B1 19911016 (DE)

Application
EP 85115117 A 19851128

Priority
DE 3503354 A 19850201

Abstract (en)
[origin: US4694976A] The discharge pump of a discharge apparatus for flowable media is provided with a ventilating channel for the ventilation of the active substance dispenser and the resulting ventilation connection along the channel passes through a bacteria filter. The filter is arranged on a casing of the pump disposed within the reservoir, the filter facing an opening on the casing for the ventilating passage, at a slight spacing from the pump casing. Thus, bacteria which otherwise could penetrate with the ventilating air passing along the ventilating channel from the discharge pump into the reservoir, is held back within the discharge pump.

IPC 1-7
A45D 34/00; A61J 1/00

IPC 8 full level
F04B 53/16 (2006.01); **A45D 34/00** (2006.01); **A61J 1/00** (2006.01); **A61M 5/165** (2006.01); **B05B 11/00** (2006.01); **B65D 47/34** (2006.01);
B65D 83/44 (2006.01); **B67D 7/02** (2010.01); **F04B 9/14** (2006.01)

CPC (source: EP US)
A45D 34/00 (2013.01 - EP US); **B05B 11/0044** (2018.07 - EP US); **B05B 11/00444** (2018.07 - EP US); **B05B 11/1026** (2023.01 - EP US);
B67D 7/0205 (2013.01 - EP US)

Citation (examination)
EP 0126718 A2 19841128 - GUSTAVSSON BENGT

Cited by
DE102016109612B4; FR2762589A1; US5727715A; US6082592A; DE102016109612A1; EP0487412A1; FR2669379A1; WO0117690A1;
FR2781767A1; WO9411115A1; WO9848943A1; FR2781768A1

Designated contracting state (EPC)
CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0189549 A2 19860806; EP 0189549 A3 19870819; EP 0189549 B1 19911016; DE 3503354 A1 19860807; DE 3584441 D1 19911121;
JP S61178570 A 19860811; US 4694976 A 19870922

DOCDB simple family (application)
EP 85115117 A 19851128; DE 3503354 A 19850201; DE 3584441 T 19851128; JP 28954785 A 19851224; US 81556986 A 19860102