

Title (en)
APPLICATOR CARTRIDGE WITH A DISPENSING PISTON

Publication
EP 0281755 B1 19901107 (DE)

Application
EP 88101393 A 19880201

Priority
CH 55587 A 19870213

Abstract (en)
[origin: US4834268A] In dispensing cartridges with a plunger-actuated delivery piston, the afterflow of cartridge content through the outlet, which typically occurs after each advance step of the delivery piston, is prevented. This usually occurs in double cartridges for two-component substances, in which a connected flow mixer causes high outflow resistance and correspondingly high pressure inside the cartridge during dispensing; concomitant "breathing" of the thin-walled cartridge cylinder is recognized as the primary cause of uncontrolled afterflow. The delivery piston of the invention is built with a sealing ring which is elastically deformable when acted upon by plunger force, in order to permit the delivery piston to recede in the direction opposite to the advance direction when the stress on the plunger is removed. Due to the axial volume expansion connected to it, the internal pressure can be reduced immediately after the stress is removed from the piston before the cartridge content shows afterflow through the outlet. In addition, through temporary squeezing during each advance, the sealing ring can be increasingly pressed against the cylinder wall in order to increase the sealing effect; in the unstressed resting position, pressing and hence the piston friction is far less and only the practically pressure-less cartridge content is to be sealed.

IPC 1-7
B65D 83/00

IPC 8 full level
F16J 1/00 (2006.01); **B05C 5/00** (2006.01); **B05C 5/02** (2006.01); **B05C 11/10** (2006.01); **B05C 17/005** (2006.01); **B05C 17/01** (2006.01); **B65D 83/00** (2006.01); **E04F 21/165** (2006.01); **F04B 53/14** (2006.01); **F16J 9/00** (2006.01)

CPC (source: EP US)
B05C 17/00576 (2013.01 - EP US); **B05C 17/01** (2013.01 - EP US); **B65D 83/0005** (2013.01 - EP US); **B05C 17/014** (2013.01 - EP US)

Cited by
WO2009068311A1; DE10342090B4; DE102005007055A1; CN115502035A; CN111517013A; EP1514611A2; US7353972B2; US8496140B2

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

DOCDB simple family (publication)
EP 0281755 A1 19880914; **EP 0281755 B1 19901107**; DE 3860957 D1 19901213; ES 2019410 B3 19910616; JP H067940 B2 19940202; JP S63221867 A 19880914; US 4834268 A 19890530

DOCDB simple family (application)
EP 88101393 A 19880201; DE 3860957 T 19880201; ES 88101393 T 19880201; JP 2898588 A 19880212; US 15529588 A 19880212