

Title (en)
PRECOMPRESSION DOSING PUMP WITH IMPROVED PRIMING ACTION

Publication
EP 0345132 B1 19930922 (FR)

Application
EP 89401449 A 19890526

Priority
• FR 8807337 A 19880602
• FR 8816722 A 19881219
• FR 8906817 A 19890524

Abstract (en)
[origin: EP0345132A1] An especially useful precompression metering pump belonging to the prior art is difficult to prime because of the high compressibility of the air initially contained in its chamber. In order to overcome this difficulty in its operation, the present invention provides, next to the pump's usual output valve, elastic means 20 and at least one cylindrical part 10, which supplementary components form a second output valve. <??>In one particular embodiment, these two latter components are housed one on top of the other inside the outlet channel 33 of the pump-activating rod 31. To this end they press when at rest against, respectively, a constriction 32 in the form of a spur and a shoulder 34, both of which are formed in this channel. In the course of normal operation, it is the pump's differential piston 4 which draws back, so that the metering pump operates just as in the prior art. In the priming phase, however, the actuating rod 31 can be driven fully in, with the result that the part 10 lifts off the constriction 32. This modification thus makes it possible to expel the air initially contained inside the pump chamber 23 to the outside. <IMAGE>

IPC 1-7
B05B 11/00

IPC 8 full level
B65D 83/76 (2006.01); **B05B 11/00** (2006.01); **F04B 9/14** (2006.01)

CPC (source: EP US)
B05B 11/1018 (2023.01 - EP US); **B05B 11/1061** (2023.01 - EP US)

Cited by
FR2674747A1; FR2906233A1; US5443185A; EP0437139A1; FR2656901A1; EP0882516A1; US6059150A; KR100559101B1; US7770759B2; WO2008037910A1

Designated contracting state (EPC)
AT BE CH DE ES GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0345132 A1 19891206; EP 0345132 B1 19930922; DE 68909310 D1 19931028; DE 68909310 T2 19940324; JP H02127270 A 19900515; US 4930999 A 19900605

DOCDB simple family (application)
EP 89401449 A 19890526; DE 68909310 T 19890526; JP 13937189 A 19890602; US 36069389 A 19890602