

Title (en)
FUEL DISTRIBUTION INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES.

Title (de)
KRAFTSTOFFVERTEILEREINSPRITZPUMPE FÜR BRENNKRAFTMASCHINEN.

Title (fr)
POMPE D'INJECTION DISTRIBUTRICE DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE.

Publication
EP 0489740 B1 19940413

Application
EP 90910549 A 19900726

Priority
• DE 3928612 A 19890830
• DE 9000576 W 19900726

Abstract (en)
[origin: WO9103639A1] As is known, a fuel injection pump of the distributor type for internal combustion engines has a piston (20) guided in a cylinder (19) which delimits a working chamber (22) and is driven with a reciprocating and rotary motion by a drive system (16) enclosed in a bath of lubricant. The piston (20) has a distribution drilling (27) which communicates with the working chamber (22) and connects it in turn with injection nozzles on the pressure stroke of the piston (20). The working chamber (22) is filled with fuel via a magnetic valve (21) opened during the intake stroke of the piston (20) and closed during the pressure stroke. In order to increase the filling cross-section during the intake stroke without enlarging the aperture of the magnetic valve (21), there is a relief bore (28) in the piston (20) serving to compensate the forces during the pressure stroke, which communicates with a filler bore (30) connected to the diaphragm (23) store during the intake stroke.

IPC 1-7
F02M 41/12; **F02M 63/00**; **F02M 59/44**; **F02M 55/04**

IPC 8 full level
F02M 41/12 (2006.01); **F02M 55/04** (2006.01); **F02M 59/44** (2006.01); **F02M 63/00** (2006.01)

CPC (source: EP KR US)
F02M 41/12 (2013.01 - EP KR US); **F02M 41/125** (2013.01 - EP US); **F02M 55/04** (2013.01 - EP US); **F02M 59/44** (2013.01 - EP US);
F02M 63/0001 (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 3928612 A1 19910307; DE 59005382 D1 19940519; EP 0489740 A1 19920617; EP 0489740 B1 19940413; JP H05500697 A 19930212;
KR 0167112 B1 19981215; KR 920702750 A 19921006; US 5207201 A 19930504; WO 9103639 A1 19910321

DOCDB simple family (application)
DE 3928612 A 19890830; DE 59005382 T 19900726; DE 9000576 W 19900726; EP 90910549 A 19900726; JP 51026290 A 19900726;
KR 910701924 A 19911220; US 83626292 A 19920228