

Title (en)

FUEL INJECTION PUMP FOR INTERNAL COMBUSTION ENGINES.

Title (de)

KRAFTSTOFFEINSPRITZPUMPE FÜR BRENNKRAFTMASCHINEN.

Title (fr)

POMPE D'INJECTION DE CARBURANT POUR MOTEURS A COMBUSTION INTERNE.

Publication

EP 0543805 B1 19941005

Application

EP 90910587 A 19900726

Priority

- DE 3927742 A 19890823
- DE 9000573 W 19900726

Abstract (en)

[origin: WO9102897A1] A fuel injection pump, in particular for direct injection of fuel in externally ignited internal combustion engines, has at least one pump that generates a current of fuel under pressure and a rotary slide valve (2) that moves in synchronicity with the motor shaft of the internal combustion engine in order to link the current of fuel to at least one injection inlet (18) of the internal combustion engine and/or to deviate the current of fuel subject to the pressure of the pump into a return pipe (13). The movement of the rotary slide valve (2) in the direction of its axis of rotation (14) is limited and/or the rotary slide valve (2) is mounted in such a way that its rotation in relation to its rotary drive is limited. Preferably, the rotary or displacement position of the rotary slide valve can be set depending on a running parameter of the internal combustion engine. The axial mobility of the rotary slide valve prevents it from being jammed in its guide (3) and the running parameter-dependent regulation allows the moment of injection to be adjusted over a wider angular range than would be usually possible, given the geometric limitations in the design of the rotary slide valve.

IPC 1-7

F02M 59/36

IPC 8 full level

F02M 41/14 (2006.01); **F02M 41/06** (2006.01); **F02M 59/36** (2006.01)

CPC (source: EP KR US)

F02M 41/06 (2013.01 - EP US); **F02M 41/063** (2013.01 - EP US); **F02M 59/366** (2013.01 - EP US); **F02M 59/38** (2013.01 - KR); **F02M 63/0038** (2013.01 - EP US)

Citation (examination)

WO 8809870 A1 19881215 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 9102897 A1 19910307; DE 3927742 A1 19910228; DE 59007406 D1 19941110; EP 0543805 A1 19930602; EP 0543805 B1 19941005; JP H04501451 A 19920312; KR 0167113 B1 19981215; KR 920701662 A 19920812; US 5245971 A 19930921

DOCDB simple family (application)

DE 9000573 W 19900726; DE 3927742 A 19890823; DE 59007406 T 19900726; EP 90910587 A 19900726; JP 51064590 A 19900726; KR 910700399 A 19910422; US 66392691 A 19910325