

Title (en)

FUEL INJECTION PUMP FOR INTERNAL-COMBUSTION ENGINES, PARTICULARLY FOR DIESEL ENGINES

Publication

EP 0319707 B1 19910925 (DE)

Application

EP 88118279 A 19881103

Priority

DE 3741638 A 19871209

Abstract (en)

[origin: JPH01193037A] PURPOSE: To enhance responsiveness to acceleration and deceleration by connecting a rpm adjusting lever with an adjusting spring via a drag spring and communicating a plurality of throttles in a damping member with a valve interior respectively via a plurality of check valves. CONSTITUTION: A drag spring 36 is supported by a rpm adjusting lever 32 of an injection quantity adjusting device 28 on one hand, and supporter by a lever arm combined with an adjusting spring 31 of a damping lever 37 rotating with a shaft 35 of the rpm adjusting lever 32 as the center on the other hand. The rpm adjusting lever 32 is abutted to a stopper 38 arranged on the damping lever 37. A throttle 47 of a damping piston 44 is connected to a pump interior 11, of a pump piston 13 via a check valve 46 opening toward a damping chamber 45. The damping chamber 45 is connected to the pump interior 11 by another throttle 48 via another check valve 49 closing toward the damping chamber 45.

IPC 1-7

F02D 1/00; **F02D 11/02**

IPC 8 full level

F02D 1/02 (2006.01); **F02D 1/00** (2006.01); **F02D 1/04** (2006.01); **F02D 11/02** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP US)

F02D 1/04 (2013.01 - EP US); **F02B 3/06** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

DE 3741638 C1 19881201; DE 3865185 D1 19911031; EP 0319707 A2 19890614; EP 0319707 A3 19900613; EP 0319707 B1 19910925; JP H01193037 A 19890803; US 4884542 A 19891205

DOCDB simple family (application)

DE 3741638 A 19871209; DE 3865185 T 19881103; EP 88118279 A 19881103; JP 31028488 A 19881209; US 28086488 A 19881207