

Title (en)

FUEL INJECTION PUMP WITH A TIMING-DEVICE PISTON FOR TIMING BEGINNING OF INJECTION

Title (de)

KRAFTSTOFFEINSPRITZPUMPE MIT EINEM DER SPRITZBEGINNVERSTELLUNG DIENENDEN SPRITZVERSTELLKOLBEN

Title (fr)

POMPE D'INJECTION DE CARBURANT COMPORTANT UN PISTON REGULATEUR D'INJECTION DESTINE A REGLER LE DEBUT DE L'INJECTION

Publication

EP 0864037 A1 19980916 (DE)

Application

EP 97930329 A 19970617

Priority

- DE 9701225 W 19970617
- DE 19640678 A 19961002

Abstract (en)

[origin: DE19640678A1] Disclosed is a fuel injection pump provided with a timing device piston (16) for timing beginning of injection and designed as a slaved piston for a slide valve (28) located therein. Said piston encompasses a working chamber (20) on one of its sides and is driven by pressure in said working chamber in opposition to the force of a return spring (23) and connected to a substantially fixed part of fuel injection pump cam drive. In order to avoid the effects of pressure backlash arising from kickback on the slide valve (28) and its setting, the inlet cross-section of connecting conduit is designed as an extended elongated cross-section which extends in the sliding direction of said slide valve. This enables trouble-free setting of the slide valve (28) and more precise vibration-free setting of timing device piston (16) and beginning of injection.

IPC 1-7

F02D 1/18

IPC 8 full level

F02D 1/18 (2006.01); **F02M 41/12** (2006.01); **F02M 41/14** (2006.01)

CPC (source: EP KR US)

F02D 1/18 (2013.01 - KR); **F02D 1/183** (2013.01 - EP US); **F02M 41/128** (2013.01 - EP US); **F02M 41/1411** (2013.01 - EP US); **F02D 2001/186** (2013.01 - EP US)

Cited by

GB2367591B; CN102305140A

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

US 6041760 A 20000328; CN 1079897 C 20020227; CN 1205048 A 19990113; DE 19640678 A1 19980409; DE 59706678 D1 20020425; EP 0864037 A1 19980916; EP 0864037 B1 20020320; HU 222147 B1 20030428; HU P9901493 A2 19990830; HU P9901493 A3 20000328; JP 2000501478 A 20000208; KR 100453752 B1 20041223; KR 19990071634 A 19990927; WO 9814695 A1 19980409

DOCDB simple family (application)

US 6879398 A 19980518; CN 97191327 A 19970617; DE 19640678 A 19961002; DE 59706678 T 19970617; DE 9701225 W 19970617; EP 97930329 A 19970617; HU P9901493 A 19970617; JP 51608898 A 19970617; KR 19980703910 A 19980526