

Title (en)
FUEL INJECTION PUMP

Title (de)
KRAFTSTOFFEINSPRITZPUMPE

Title (fr)
POMPE D'INJECTION DE CARBURANT

Publication
EP 1045965 B1 20040714 (DE)

Application
EP 99971490 A 19991013

Priority
• DE 9903282 W 19991013
• DE 19849925 A 19981029

Abstract (en)
[origin: DE19849925A1] Disclosed is a fuel injection pump having an injection timing mechanism whose piston (10) is impinged upon by a return spring (16) and a pressure controlled by a pilot valve (24) on one front face (12) and is constantly exposed to a pressurized fluid source on the other front face (13) preferably supplying a speed-dependent pressure. The pilot valve (24) is moved in positive fit by a control piston (29) actuated by a control pressure and alters the pressure exerted on one front face (12) in a first closed pressure chamber (14). The injection timing piston (10) is not exposed to higher setting pressures exerted on said piston crosswise in relation to its direction of movement.

IPC 1-7
F02D 1/18; F02M 41/14

IPC 8 full level
F02D 1/04 (2006.01); **F02D 1/18** (2006.01); **F02M 41/12** (2006.01); **F02M 41/14** (2006.01)

CPC (source: EP US)
F02D 1/183 (2013.01 - EP US); **F02M 41/1416** (2013.01 - EP US); **F02D 2001/186** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 19849925 A1 20000504; DE 59909958 D1 20040819; EP 1045965 A1 20001025; EP 1045965 B1 20040714; JP 2002529637 A 20020910; US 6453880 B1 20020924; WO 0026520 A1 20000511

DOCDB simple family (application)
DE 19849925 A 19981029; DE 59909958 T 19991013; DE 9903282 W 19991013; EP 99971490 A 19991013; JP 2000579878 A 19991013; US 58261900 A 20000825