

Title (en)

SINGLE-PLUNGER INJECTION PUMP FOR A COMMON RAIL FUEL INJECTION SYSTEM

Title (de)

EINSTEMPEL-EINSPRITZPUMPE FÜR EIN COMMON-RAIL-KRAFTSTOFFEINSPRITZSYSTEM

Title (fr)

POMPE D'INJECTION A UN PISTON POUR SYSTEME D'INJECTION DE CARBURANT PAR ACCUMULATION DE PRESSION

Publication

EP 1379784 A1 20040114 (DE)

Application

EP 02740228 A 20020405

Priority

- DE 0201237 W 20020405
- DE 10117093 A 20010406
- DE 10138362 A 20010804

Abstract (en)

[origin: WO02081920A1] The invention relates to a single-plunger injection pump for high-speed internal combustion engines which, due to its compact design and to its good volumetric efficiency in conjunction with a high oscillation frequency of the piston, has a flow rate comparable to that of a multi-plunger injection pump without the torque peaks becoming impermissibly high during actuation of the single-plunger injection pump.

IPC 1-7

F04B 49/24; **F02M 63/02**

IPC 8 full level

F02M 59/20 (2006.01); **F02M 51/00** (2006.01); **F02M 59/02** (2006.01); **F02M 59/10** (2006.01); **F02M 59/44** (2006.01); **F02M 63/02** (2006.01); **F04B 9/04** (2006.01); **F04B 49/24** (2006.01)

CPC (source: EP US)

F02M 59/02 (2013.01 - EP US); **F02M 63/0225** (2013.01 - EP US); **F04B 49/243** (2013.01 - EP US); **F04B 2201/0207** (2013.01 - EP US); **F04B 2203/0605** (2013.01 - EP US)

Citation (search report)

See references of WO 02081920A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 02081920 A1 20021017; CN 100420853 C 20080924; CN 1460154 A 20031203; DE 50211835 D1 20080417; EP 1379784 A1 20040114; EP 1379784 B1 20080305; JP 2004518901 A 20040624; US 2004013538 A1 20040122; US 6874474 B2 20050405

DOCDB simple family (application)

DE 0201237 W 20020405; CN 02801110 A 20020405; DE 50211835 T 20020405; EP 02740228 A 20020405; JP 2002579660 A 20020405; US 29742703 A 20030721