

Title (en)

HP PUMP FOR DIESEL INJECTION SYSTEMS

Title (de)

HP-PUMPE FÜR DIESELEINSPRITZSYSTEME

Title (fr)

POMPE HP POUR SYSTÈMES D'INJECTION DE DIESEL

Publication

EP 3635240 A1 20200415 (EN)

Application

EP 18729676 A 20180607

Priority

- GB 201709139 A 20170608
- EP 2018065097 W 20180607

Abstract (en)

[origin: GB2563263A] A high pressure (HP) pump 10 of a diesel injection system comprises a compression chamber 16 in which the pump pressurises fuel. The compression chamber is defined by a coaxial arrangement of a bore 14 extending along a main axis X, a piston 18 guided in the bore and an inlet valve member 32 axially controlling an inlet 24 at an end of the bore. The piston has a recess (40, fig 2) at its end partially defining the compression chamber. The recess defines a peripheral wall (44) and a bottom face (42). The inlet valve member has a head member (50) that complementary engages in the recess when the piston reaches a top dead centre (TDC) position. The peripheral wall may radially expand. The recess may be a cylindrical hollow. The head member may be smaller than the recess, with a clearance between them of about 0.5mm.

IPC 8 full level

F02M 59/02 (2006.01); **F02M 59/10** (2006.01); **F02M 59/44** (2006.01)

CPC (source: EP GB)

F02M 59/02 (2013.01 - EP); **F02M 59/102** (2013.01 - EP); **F02M 59/44** (2013.01 - EP); **F02M 59/442** (2013.01 - EP GB);
F02M 59/464 (2013.01 - EP GB); **F02M 61/167** (2013.01 - GB); **F04B 1/0408** (2013.01 - EP); **F04B 1/0452** (2013.01 - EP);
F04B 53/144 (2013.01 - EP GB); **F02M 59/366** (2013.01 - EP); **F02M 63/0035** (2013.01 - EP)

Citation (search report)

See references of WO 2018224624A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

GB 201709139 D0 20170726; GB 2563263 A 20181212; GB 2563263 B 20190612; EP 3635240 A1 20200415; EP 3635240 B1 20210811;
WO 2018224624 A1 20181213

DOCDB simple family (application)

GB 201709139 A 20170608; EP 18729676 A 20180607; EP 2018065097 W 20180607