Title (en)

HIGH-PRESSURE RADIAL PISTON PUMP

Title (de

HOCHDRUCK-RADIALKOLBENPUMPE

Title (fr)

POMPE HAUTE PRESSION À PISTONS RADIAUX

Publication

EP 2331821 B1 20120215 (DE)

Application

EP 09780508 A 20090713

Priority

- EP 2009058918 W 20090713
- DE 102008041751 A 20080902

Abstract (en)

[origin: WO2010025981A1] The invention relates to a high-pressure radial piston pump for the fuel supply of an internal combustion engine, comprising a housing (1) having a drive shaft (2) that is accommodated therein, rotates about an axis and has a cam or eccentric disk (3) projecting in the radial direction by means of which multiple pistons (5) accommodated in cylinders (4) are engaged, which can be successively displaced in the radial direction by the cam or eccentric disk (3), wherein the housing (1) is equipped with a mounting flange for mounting the same to the internal combustion engine, wherein the cylinders (4) are connected via fuel lines, which are proportionately accommodated in the housing (1). The mounting flange (6) and the housing (1) are formed by separate parts. A low-pressure unit (7) is attached to the side of the housing (1) facing away from the mounting flange (6), wherein the mounting flange (6) and the low-pressure unit (7) are connected to the housing such that they can rotate relative to each other and to the housing (1) and together with the housing (1) limit annular channels (8) which concentrically surround the drive shaft (2), and wherein the fuel lines comprise lines that are proportionately formed by means of the annular channels (8).

IPC 8 full level

F04B 53/16 (2006.01)

CPC (source: EP KR)

F04B 1/04 (2013.01 - EP KR); F04B 9/04 (2013.01 - KR); F04B 53/16 (2013.01 - EP KR)

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

**DE 102008041751 A1 20100304**; AT E545785 T1 20120315; CN 102144096 A 20110803; CN 102144096 B 20140430; EP 2331821 A1 20110615; EP 2331821 B1 20120215; ES 2379516 T3 20120426; JP 2012501409 A 20120119; JP 5135473 B2 20130206; KR 20110047210 A 20110506; RU 2011112307 A 20121010; RU 2500923 C2 20131210; WO 2010025981 A1 20100311

DOCDB simple family (application)

**DE 102008041751 A 20080902**; AT 09780508 T 20090713; CN 200980134389 A 20090713; EP 09780508 A 20090713; EP 2009058918 W 20090713; ES 09780508 T 20090713; JP 2011525479 A 20090713; KR 20117004681 A 20090713; RU 2011112307 A 20090713