

Title (en)

HIGH PRESSURE PUMP IN PARTICULAR FOR A FUEL INJECTION DEVICE ON AN INTERNAL COMBUSTION ENGINE

Title (de)

HOCHDRUCKPUMPE, INSBESONDERE FÜR EINE KRAFTSTOFFEINSPRITZEINRICHTUNG EINER BRENNKRAFTMASCHINE

Title (fr)

POMPE HAUTE PRESSION CONÇUE EN PARTICULIER POUR UN DISPOSITIF D'INJECTION DE CARBURANT D'UN MOTEUR À COMBUSTION INTERNE

Publication

**EP 2032850 B1 20110316 (DE)**

Application

**EP 07726234 A 20070126**

Priority

- EP 2007050762 W 20070126
- DE 102006007697 A 20060220
- DE 102006041673 A 20060906

Abstract (en)

[origin: US2008295807A1] The high pressure pump comprises a drive shaft (12) with at least one cam (16) or eccentric and at least one pump element (18) with a pump piston (20), driven in the reciprocating direction by the cam (16) or eccentric on the driveshaft (12) in a reciprocating motion. A support element (44) is arranged between the pump piston (20) and the cam (16) or eccentric on the driveshaft (12) and also a roller (46) running on the cam (16) or eccentric is mounted to rotate therein. A support (60) for the roller (46) in the direction of rotation is arranged adjacent to the same in the direction of the rotational axis (47) of the roller (46). The roller (46) and/or the support (60) comprises a surface with high wear resistance at least in the contact region between the roller (46) and the support (60).

IPC 8 full level

**F04B 1/04** (2006.01); **F04B 1/053** (2006.01)

CPC (source: EP KR US)

**F02M 59/102** (2013.01 - EP KR US); **F02M 59/44** (2013.01 - EP KR US); **F04B 1/0413** (2013.01 - EP KR US); **F04B 1/053** (2013.01 - EP KR US); **F04B 1/0531** (2013.01 - EP KR US); **F02M 2200/02** (2013.01 - EP KR US); **F05B 2210/11** (2013.01 - KR); **Y10S 415/00** (2013.01 - KR); **Y10S 417/00** (2013.01 - KR)

Cited by

CN105473845A; US10060420B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2008295807 A1 20081204**; **US 8191459 B2 20120605**; AT E502209 T1 20110415; BR PI0706556 A2 20110329; CN 101389858 A 20090318; CN 101389858 B 20110406; DE 102006041673 A1 20070823; DE 502007006731 D1 20110428; EP 2032850 A1 20090311; EP 2032850 B1 20110316; JP 2009527675 A 20090730; JP 4768826 B2 20110907; KR 101076170 B1 20111021; KR 20080093131 A 20081020; WO 2007096224 A1 20070830

DOCDB simple family (application)

**US 9609007 A 20070126**; AT 07726234 T 20070126; BR PI0706556 A 20070126; CN 200780006131 A 20070126; DE 102006041673 A 20060906; DE 502007006731 T 20070126; EP 07726234 A 20070126; EP 2007050762 W 20070126; JP 2008554719 A 20070126; KR 20087020204 A 20070126