

Title (en)
HIGH-PRESSURE PUMP

Title (de)
HOCHDRUCKPUMPE

Title (fr)
POMPE HAUTE PRESSION

Publication
EP 2783099 A1 20141001 (DE)

Application
EP 12786954 A 20121108

Priority
• DE 102011086703 A 20111121
• EP 2012072105 W 20121108

Abstract (en)
[origin: WO2013075949A1] The invention relates to a high-pressure pump for a fuel injection arrangement of an internal combustion engine. The high-pressure pump (2) has a pump housing (4) with a pump housing interior (6) charged with a fuel (100). At least one pump element having a pump piston (8) is arranged in the pump housing (4). The pump piston (8) is indirectly supported by a plunger body (10) and a roller (12) on a cam (14) or on an eccentric of a drive shaft (16). The plunger body (10) can be driven in an oscillating motion (Z) in the direction of a centre axis (I) via the cam (14) or the eccentric. A roller shoe (18) is firmly connected to the plunger body (10) in the direction of the centre axis (I). The roller shoe (18) has a substantially partially cylindrical recess (20) for partially accommodating the roller (12). According to the invention, the roller shoe (18) has at least one lubrication chamber (22), fuel (100) being fed out of the pump housing interior (6) through the at least one lubricating chamber (22) during the oscillating motion (Z) of the plunger body (10) of the roller (12).

IPC 8 full level
F02M 63/00 (2006.01); **F02M 59/10** (2006.01); **F04B 27/10** (2006.01)

CPC (source: EP)
F02M 59/102 (2013.01); **F02M 63/0001** (2013.01); **F04B 27/0428** (2013.01); **F04B 39/02** (2013.01)

Citation (search report)
See references of WO 2013075949A1

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)
DE 102011086703 A1 20130523; BR 112014012071 A2 20170613; BR 112014012071 A8 20170620; CN 103946535 A 20140723; CN 103946535 B 20161109; EP 2783099 A1 20141001; EP 2783099 B1 20160831; JP 2015502484 A 20150122; JP 5897730 B2 20160330; WO 2013075949 A1 20130530

DOCDB simple family (application)
DE 102011086703 A 20111121; BR 112014012071 A 20121108; CN 201280056396 A 20121108; EP 12786954 A 20121108; EP 2012072105 W 20121108; JP 2014542761 A 20121108