

Title (en)
HIGH PRESSURE PUMP

Title (de)
HOCHDRUCKPUMPE

Title (fr)
POMPE HAUTE PRESSION

Publication
EP 2598743 B1 20141105 (DE)

Application
EP 11728881 A 20110704

Priority
• DE 102010038468 A 20100727
• EP 2011061222 W 20110704

Abstract (en)
[origin: WO2012013452A1] The invention relates to a high pressure pump (1), which is used in particular as a radial or series piston pump for fuel injection systems of air-compressing, self-igniting internal combustion engines, comprising at least one pump assembly (6) and one drive shaft (3) which comprises at least one cam (5) assigned to the pump assembly (6). The pump assembly (6) comprises a roller (23) running on the running surface (24) of the cam (5), a roller shoe (22) which receives the roller (23), a tappet body (20) in which the roller shoe (22) is introduced, a pump piston (11) which can be actuated in an actuating direction (13) by the cam (5) by means of the roller (23) and the roller shoe (22) and a carrier element (25) which carries the pump piston (11) opposite the actuating direction (13). According to the invention, the carrier element (25) is designed as a partially elastically deformable carrier element (25). The carrier element (25) according to the invention further comprises at least one elevation (37) facing the roller shoe (22) on which the pump piston (11) is supported. A play between the pump piston (11) and the roller shoe (22) can thus be reduced according to the invention in such a manner that undesired noises can be reduced.

IPC 8 full level
F02M 59/10 (2006.01); **F04B 1/04** (2006.01)

CPC (source: EP)
F02M 59/102 (2013.01); **F04B 1/0426** (2013.01)

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 102010038468 A1 20120202; CN 103026048 A 20130403; CN 103026048 B 20151216; EP 2598743 A1 20130605; EP 2598743 B1 20141105; JP 2013532792 A 20130819; JP 6042809 B2 20161214; RU 2013108357 A 20140910; RU 2568359 C2 20151120; WO 2012013452 A1 20120202

DOCDB simple family (application)
DE 102010038468 A 20100727; CN 201180036724 A 20110704; EP 11728881 A 20110704; EP 2011061222 W 20110704; JP 2013521038 A 20110704; RU 2013108357 A 20110704