

Title (en)
HIGH-PRESSURE PUMP

Title (de)
HOCHDRUCKPUMPE

Title (fr)
POMPE HAUTE PRESSION

Publication
EP 2558708 A1 20130220 (DE)

Application
EP 11709035 A 20110302

Priority
• DE 102010027745 A 20100414
• EP 2011053101 W 20110302

Abstract (en)
[origin: WO2011128150A1] A high-pressure pump (1), which serves in particular as a radial or in-line piston pump for fuel injection systems of air-compressing, auto-ignition internal combustion engines, comprises a cylinder head (2) and a pump assembly (6). Here, the cylinder head (2) has a cylinder bore (4) in which a pump piston (5) of the pump assembly (6) is guided. Here, the pump piston (5) delimits, in the cylinder bore (4), a pump working chamber (12). Also provided is an inlet valve (20) which is integrated into the cylinder head (2) and via which fuel can be conducted into the pump working chamber (12). Metering of the fuel conducted into the pump working chamber (12) can be achieved by actuation of the inlet valve (20). Here, full charging of the pump working chamber (12) may take place. It is however also possible for partial charging of the pump working chamber (12) to be achieved by means of suitable actuation of the inlet valve (20).

IPC 8 full level
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CPC (source: EP KR US)
F02D 41/3845 (2013.01 - EP KR US); **F02M 55/04** (2013.01 - EP KR US); **F02M 59/102** (2013.01 - EP KR US); **F02M 59/366** (2013.01 - EP KR US); **F02M 59/367** (2013.01 - EP KR US); **F02M 59/466** (2013.01 - EP KR US); **F02M 59/48** (2013.01 - EP KR US); **F02M 63/0035** (2013.01 - EP US); **F04B 49/225** (2013.01 - EP KR US); **F04B 53/007** (2013.01 - EP KR US); **F04B 53/10** (2013.01 - EP KR US); **F04B 53/22** (2013.01 - EP KR US); **F02M 2200/315** (2013.01 - EP US)

Citation (search report)
See references of WO 2011128150A1

Citation (examination)
DE 19834121 A1 20000203 - BOSCH GMBH ROBERT [DE]

Cited by
CN104763569A

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

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DE 102010027745 A1 20111020; CN 102859178 A 20130102; CN 102859178 B 20160120; EP 2558708 A1 20130220; JP 2013527365 A 20130627; JP 5886830 B2 20160316; KR 20130056858 A 20130530; RU 2012148170 A 20140610; RU 2559095 C2 20150810; US 2013022484 A1 20130124; WO 2011128150 A1 20111020

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