

Title (en)
INJECTION PUMP

Title (de)
EINSPRITZPUMPE

Title (fr)
POMPE D'INJECTION

Publication
EP 2635796 B1 20150826 (EN)

Application
EP 11770842 A 20110922

Priority
• FI 20106161 A 20101105
• FI 2011050815 W 20110922

Abstract (en)
[origin: WO2012059623A2] An injection pump (1) for an internal combustion engine, comprising a pump body (2), a first fluid chamber (15) and a second fluid chamber (16) inside the pump body (2) in mutual fluid communication, a first reciprocating plunger (3) protruding into the first fluid chamber (15), a second plunger (4) at least partly inside the second fluid chamber (16), a first fluid port (11) in fluid communication with the first fluid chamber (15) and a second fluid port (12) in fluid communication with the second fluid chamber (16). A fluid supply channel (10) is in fluid communication with the first fluid chamber (15) and/or the second fluid chamber (16) via the first fluid port (11) and/or the second fluid port (12), and a fluid outlet (14) is in fluid communication with the first fluid chamber (15) and/or the second fluid chamber (16). The first plunger (3) and the second plunger (4) have different diameters.

IPC 8 full level
F02M 59/04 (2006.01); **F02M 59/10** (2006.01); **F02M 59/26** (2006.01); **F02M 59/28** (2006.01)

CPC (source: EP FI KR)
F02M 59/04 (2013.01 - EP KR); **F02M 59/10** (2013.01 - KR); **F02M 59/102** (2013.01 - EP); **F02M 59/26** (2013.01 - FI KR); **F02M 59/265** (2013.01 - EP); **F02M 59/28** (2013.01 - EP KR)

Citation (examination)
US 3294075 A 19661227 - LOUIS GRATZMULLER JEAN

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)
WO 2012059623 A2 20120510; WO 2012059623 A3 20121004; CN 103228903 A 20130731; CN 103228903 B 20151216; EP 2635796 A2 20130911; EP 2635796 B1 20150826; FI 20106161 A0 20101105; FI 20106161 A 20120506; KR 101692231 B1 20170103; KR 20130103768 A 20130924

DOCDB simple family (application)
FI 2011050815 W 20110922; CN 201180052175 A 20110922; EP 11770842 A 20110922; FI 20106161 A 20101105; KR 20137014444 A 20110922