

Title (en)
FUEL INJECTOR

Title (de)
KRAFTSTOFFINJEKTOR

Title (fr)
INJECTEUR DE CARBURANT

Publication
EP 2959155 A1 20151230 (DE)

Application
EP 13818660 A 20131213

Priority
• DE 102013002969 A 20130222
• EP 2013003767 W 20131213

Abstract (en)
[origin: WO2014127794A1] Disclosed is a fuel injector (10) for a fuel injection device, wherein the injector (10) has a control chamber (28), which can be selectively relieved of pressure by means of a pilot valve (54) of the injector (10) in order to control the nozzle needle stroke of an axially displaceable nozzle needle (12) of the injector (10), wherein the fuel injector (10) has at least one nozzle (20) on a first end (12a) of the nozzle needle (12) and has the control chamber (28) on a second end (12b) of the nozzle needle (12), wherein the control chamber (28) is sub-divided by a throttle plate (38) accommodated therein into a first chamber (40), which is further away from the nozzle, and a second chamber (42), which is closer to the nozzle, said chambers communicating with each other via the throttle plate (38), wherein a first resilient element (46) and a second resilient element (48) are each accommodated in a pre-stressed manner against the throttle plate (38) in the first chamber (40) and in the second chamber (42) respectively, which resilient elements (46, 48) axially displaceably bear the throttle plate (38), and wherein a high-pressure inflow line (50) into the control chamber (28) and a relief outflow line (52) out of the control chamber (28) lead into and out of the first chamber (40) respectively.

IPC 8 full level
F02M 47/02 (2006.01)

CPC (source: EP US)
F02M 47/02 (2013.01 - EP US); **F02M 61/04** (2013.01 - US); **F02M 61/18** (2013.01 - US); **F02M 2547/008** (2013.01 - EP US)

Citation (search report)
See references of WO 2014127794A1

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102013002969 B3 20140522; CN 104995395 A 20151021; EP 2959155 A1 20151230; HK 1216550 A1 20161118;
KR 20150120360 A 20151027; US 2016003204 A1 20160107; US 9765737 B2 20170919; WO 2014127794 A1 20140828

DOCDB simple family (application)
DE 102013002969 A 20130222; CN 201380073568 A 20131213; EP 13818660 A 20131213; EP 2013003767 W 20131213;
HK 16104361 A 20160418; KR 20157022122 A 20131213; US 201314769768 A 20131213