

Title (en)

FUEL INJECTION DEVICE WITH QUANTITY DIFFERENCE CONTROL FOR AN ELECTRIC PRE-SUPPLY PUMP

Title (de)

KRAFTSTOFFEINSPRITZVORRICHTUNG MIT DIFFERENZMENGENREGELUNG BEI ELEKTRISCHER VORFÖRDERPUMPE

Title (fr)

DISPOSITIF D'INJECTION DE CARBURANT AVEC RÉGLAGE DE LA QUANTITÉ DIFFÉRENTIELLE SUR UNE POMPE DE PRÉ-ALIMENTATION ÉLECTRIQUE

Publication

EP 2507503 A1 20121010 (DE)

Application

EP 10761005 A 20101004

Priority

- DE 102009047376 A 20091202
- EP 2010064710 W 20101004

Abstract (en)

[origin: WO2011067008A1] In a fuel injection device (10) for an internal combustion engine comprising a fuel pre-supply pump (13), which delivers fuel from a fuel tank (11) via a delivery line (18) on the pressure side to a high pressure fuel pump (12), the pre-supply pump (13) comprises a drive (13a) that is independent of the high pressure pump (12), in particular an electric drive. According to the invention, the delivery line (18) on the pressure side is connected via an electrically actuated quantity difference valve (21) having an adjustable valve cross-section to a return line (17).

IPC 8 full level

F02M 59/34 (2006.01); **F02M 59/36** (2006.01); **F02M 63/02** (2006.01)

CPC (source: EP)

F02D 41/3854 (2013.01); **F02M 37/0052** (2013.01); **F02M 37/04** (2013.01); **F02M 59/34** (2013.01); **F02M 59/36** (2013.01); **F02M 59/366** (2013.01); **F02M 63/0215** (2013.01); **F02M 37/041** (2013.01)

Citation (search report)

See references of WO 2011067008A1

Cited by

DE102015016656A1

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 102009047376 A1 20110609; CN 102770658 A 20121107; CN 102770658 B 20150128; EP 2507503 A1 20121010; EP 2507503 B1 20150701; IN 2867DEN2012 A 20150724; WO 2011067008 A1 20110609

DOCDB simple family (application)

DE 102009047376 A 20091202; CN 201080054550 A 20101004; EP 10761005 A 20101004; EP 2010064710 W 20101004; IN 2867DEN2012 A 20120403