

Title (en)
ELECTRONICALLY CONTROLLED FUEL INJECTION VALVE

Title (de)
ELEKTRONISCH GESTEUERTES KRAFTSTOFFEINSPRITZVENTIL

Title (fr)
INJECTEUR DE CARBURANT À COMMANDE ÉLECTRONIQUE

Publication
EP 2660460 A4 20160504 (EN)

Application
EP 11852720 A 20111226

Priority
• KR 20100136404 A 20101228
• KR 20100136406 A 20101228
• KR 2011010120 W 20111226

Abstract (en)
[origin: EP2660460A2] An electronically controlled fuel injection valve can independently control the time to inject fuel and the amount of fuel to be injected in response to a control signal sent from the operating condition of an engine unlike a traditional mechanical fuel injection valve, and employs a control method for fuel injection that increases the force of lifting up a cutoff needle of an injection controller by delivering high-pressure fuel to a lower pressure chamber via a control needle, thereby rapidly controlling fuel injection. The electronically controlled fuel injection valve prevents a nozzle part from being constantly subjected to high pressure due to the nozzle part being not supplied with fuel when fuel is not injected, prevents a large amount of fuel from leaking into a combustion chamber when a part such as a needle is damaged, and simplifies the structure of a second flow path, thereby facilitating fabrication.

IPC 8 full level
F02M 61/10 (2006.01); **F02M 47/04** (2006.01); **F02M 47/06** (2006.01); **F02M 51/06** (2006.01); **F02M 61/16** (2006.01); **F02M 61/18** (2006.01)

CPC (source: EP)
F02M 47/046 (2013.01); **F02M 47/06** (2013.01)

Citation (search report)
• [A] WO 0153688 A2 20010726 - FEV MOTORENTECH GMBH [DE], et al
• [A] DE 19701879 A1 19980723 - BOSCH GMBH ROBERT [DE]
• [A] US 2004011331 A1 20040122 - BROCCO DOUGLAS S [US], et al
• See references of WO 2012091393A2

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)
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EP 11852720 A 20111226; CN 201180062787 A 20111226; JP 2013547325 A 20111226; KR 2011010120 W 20111226