

Title (en)

INTERNAL COMBUSTION ENGINE AND METHOD OF DIRECT FUEL INJECTION

Title (de)

BRENNKRAFTMASCHINE UND VERFAHREN ZUR KRAFTSTOFFDIREKTEINSPRITZUNG

Title (fr)

MOTEUR À COMBUSTION INTERNE ET PROCÉDÉ D'INJECTION DIRECTE DE CARBURANT

Publication

EP 3066331 A4 20170705 (EN)

Application

EP 13896918 A 20131107

Priority

US 2013068990 W 20131107

Abstract (en)

[origin: WO2015069265A1] A direct fuel injection method and an internal combustion engine provided with appropriate sensors and data input lines to an Engine Control Unit (ECU) for performing this method. The method includes inputting at least data inputs representing a piston position, a rotational speed of the internal combustion engine, and a torque demand into an ECU, calculating in the ECU a calculated start of injection (SOI) for the direct fuel injection that is next based on the data inputs, calculating based on the data inputs and the calculated SOI a desired fuel temperature prior to the direct fuel injection that is next, heating fuel with a system delay not to exceed 5 seconds to the desired heated fuel temperature prior to a direct fuel injection, injecting the heated fuel, and repeating the aforementioned method steps for subsequent direct fuel injections.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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- [Y] DE 10045753 A1 20020328 - DAIMLER CHRYSLER AG [DE]
- [Y] US 2013104543 A1 20130502 - ZOLDAK PHILIP [US], et al
- See references of WO 2015069265A1

Designated contracting state (EPC)

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