

Title (en)

FUEL INJECTION DEVICE HAVING NEEDLE POSITION DETERMINATION

Title (de)

KRAFTSTOFFEINSPRITZVORRICHTUNG MIT NADELPOSITIONSBESTIMMUNG

Title (fr)

SYSTÈME D'INJECTION DE CARBURANT AVEC DÉTERMINATION DE LA POSITION DE L'AIGUILLE

Publication

EP 2510216 A1 20121017 (DE)

Application

EP 10768730 A 20101013

Priority

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- EP 2010065323 W 20101013

Abstract (en)

[origin: WO2011069717A1] The present invention relates to a fuel injection device, comprising a nozzle needle (2), an actuator (3) for actuating the nozzle needle (2), a force sensor (6) for detecting a force applied by the actuator (3), and a control unit (11) that is connected to the force sensor (6), wherein the force sensor (6) feeds signals to the control unit (11), and wherein the control unit (11) is designed to determine the position of the nozzle needle (2) and to precisely determined a fuel amount that is injected on the basis of the fed signal.

IPC 8 full level

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CPC (source: EP US)

F02M 51/0603 (2013.01 - EP US); **F02M 57/005** (2013.01 - EP US); **F02M 61/08** (2013.01 - EP US); **F02M 65/005** (2013.01 - EP US)

Citation (search report)

See references of WO 2011069717A1

Citation (examination)

- DE 19939456 A1 20001116 - BOSCH GMBH ROBERT [DE]
- US 2009289131 A1 20091126 - SHINGU AKIO [JP], et al

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DOCDB simple family (publication)

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DOCDB simple family (application)

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