

Title (en)

Electrical drive arrangement for a fuel injection system

Title (de)

Schaltungsanordnung für ein Kraftstoffeinspritzsystem

Title (fr)

Dispositif de commande électrique pour système d'injection de carburant

Publication

EP 2546499 A1 20130116 (EN)

Application

EP 11174004 A 20110714

Priority

EP 11174004 A 20110714

Abstract (en)

An electrical drive arrangement for at least one fuel injector (54) of a fuel injection system comprises: a buffer capacitor (60) adapted to store energy; a charging stage (64) for charging said buffer capacitor (60) to a target charge voltage (V charge); and an injector driver stage (52) operatively connected to a fuel injector (54). A voltage regulation device (62) is operatively connected between the buffer capacitor (60) and the injector driver stage (52) and configured to supply an operating voltage to the driver stage. A controller (82) is configured to determine said target charge voltage (V charge) for the buffer capacitor (60) depending on pre-set conditions, while the charging stage (64) is adapted to receive from the controller an input representative of the target charge voltage.

IPC 8 full level

F02D 41/20 (2006.01)

CPC (source: EP)

F02D 41/20 (2013.01); **F02D 2041/2003** (2013.01); **F02D 2041/2006** (2013.01)

Citation (applicant)

WO 2008152039 A1 20081218 - DELPHI TECH INC [US], et al

Citation (search report)

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- [Y] US 2005126534 A1 20050616 - KIKUTANI TAKASHI [JP]
- [Y] WO 2008152039 A1 20081218 - DELPHI TECH INC [US], et al
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CN107532535A; US10280864B2; JP2019060306A; WO2016174820A1

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)

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