

Title (en)

Method of operating a fuel injector

Title (de)

Verfahren zum Betreiben eines Kraftstoffeinspritzventils

Title (fr)

Procédé de commande d'un injecteur à carburant

Publication

**EP 1860308 A1 20071128 (EN)**

Application

**EP 06254141 A 20060808**

Priority

GB 0610233 A 20060523

Abstract (en)

A method of operating an injector drive circuit for an injector arrangement including at least one piezoelectric injector having an injector voltage, the injector drive circuit being operable to apply an activating voltage to the injector to initiate an injection event and a deactivating voltage to the injector to terminate an injection event. The method comprises i) activating injector select means to select a first injector for injection; ii) activating a first switch means to apply the activating voltage to the injector such that the injector voltage transitions from a first voltage level to a second voltage level; activating a second switch means to apply the deactivating voltage to the injector such that the injector voltage transitions from the second voltage level to the first voltage level; and, maintaining the activation state of the injector select means for a predetermined period of time after the injector transitions to the first voltage level. The invention has the advantage of reducing the voltage oscillation of the injector thus reducing noise emitted therefrom.

IPC 8 full level

**F02D 41/20** (2006.01); **H10N 30/80** (2023.01)

CPC (source: EP)

**F02D 41/2096** (2013.01); **F02D 2041/201** (2013.01); **F02D 2041/2031** (2013.01); **F02D 2041/2058** (2013.01); **F02D 2041/2082** (2013.01)

Citation (search report)

- [X] EP 1400677 A2 20040324 - DELPHI TECH INC [US]
- [X] EP 1400676 A2 20040324 - DELPHI TECH INC [US]
- [A] WO 2005028836 A1 20050331 - DELPHI TECH INC [US], et al

Cited by

FR3055991A1; CN109716300A; US11003520B2; WO2018050994A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

**EP 1860308 A1 20071128**; GB 0610233 D0 20060705

DOCDB simple family (application)

**EP 06254141 A 20060808**; GB 0610233 A 20060523