

Title (en)

CONTROL DEVICE FOR AN ULTRASONIC PIEZOELECTRIC ACTUATOR

Title (de)

STEUEREINRICHTUNG FÜR EINEN PIEZOELEKTRISCHEN ULTRASCHALL-AKTOR

Title (fr)

DISPOSITIF DE COMMANDE D'UN ACTIONNEUR PIEZO-ELECTRIQUE ULTRASONORE

Publication

**EP 2084757 A1 20090805 (FR)**

Application

**EP 07823859 A 20070926**

Priority

- FR 2007052014 W 20070926
- FR 0609043 A 20061016

Abstract (en)

[origin: WO2008047018A1] The device comprises a first stage (1) supplied by a DC voltage source (Vbat) and provided with means for forming a second DC voltage (Vint) above that (Vbat) delivered by the source, and a second stage (2) provided with means for amplifying the second voltage (Vint) and chopping the voltage obtained by the excitation of the actuator with the chopped voltage, under the control of a computer (C), the amplifying means comprising an inductor (L<SUB>p</SUB>) in electrical resonance with the piezoelectric actuator. According to the invention, the inductor (L<SUB>p</SUB>) is connected to the first stage (1) so as to constitute, during formation of the second voltage (Vint), the secondary winding of a transformer forming part of a flyback voltage converter introduced into said first stage in order to develop the second voltage (Vint). Application to the control of a fuel injector in an internal combustion engine.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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