

Title (en)

DEVICE AND METHOD FOR CONTROLLING A RESONANT ULTRASOUND PIEZOELECTRIC INJECTOR

Title (de)

VORRICHTUNG UND VERFAHREN ZUR STEUERUNG EINES PIEZOELEKTRISCHEN RESONANZ-ULTRASCHALLINJEKTORS

Title (fr)

DISPOSITIF ET PROCEDE DE COMMANDE D'UN INJECTEUR PIEZO-ELECTRIQUE ULTRASONORE RESONANT

Publication

**EP 2334922 A1 20110622 (FR)**

Application

**EP 09756011 A 20091013**

Priority

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- FR 0856939 A 20081014

Abstract (en)

[origin: WO2010043808A1] The invention relates to a device for controlling a resonant ultrasound piezoelectric stage (1), including: a first stage (2) of increasing a DC voltage (VBATT) to an intermediate DC voltage (Vinter), a second modulation stage (3), including an inductor (Lp) connected to the intermediate DC voltage and a first switching transistor (M) for selectively controlling a phase of charging the inductor and a phase of transferring the energy stored in the inductor in response to a first stream of command pulses (VI), to generate an excitation voltage (VE) of the piezoelectric stage, characterised in that the second stage includes a second switching transistor (M') connected in series between the drain of the first transistor and a terminal of the inductor, suitable for limiting the energy stored in the inductor during the charging phase in response to a second stream of command pulses (V2), so as to reduce the amplitude of the excitation voltage.

IPC 8 full level

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