

Title (en)

DEVICE AND METHOD FOR TRIGGERING A PIEZO ACTUATOR

Title (de)

VORRICHTUNG UND VERFAHREN ZUM ANSTEUERN EINES PIEZOAKTORS

Title (fr)

DISPOSITIF ET PROCEDE POUR COMMANDER UN ACTIONNEUR PIEZO-ELECTRIQUE

Publication

**EP 1794431 A1 20070613 (DE)**

Application

**EP 05761184 A 20050720**

Priority

- EP 2005053527 W 20050720
- DE 102004047961 A 20041001

Abstract (en)

[origin: WO2006037670A1] Disclosed are a device and a method for triggering a piezo actuator by means of a DC/DC converter supplying a great distribution voltage at the output end, said distribution voltage being applied to a series connection encompassing a high-side switching transistor and a low-side switching transistor. A series connection comprising a high inductance coil and the piezo actuator that is to be triggered is disposed between the junction of the two switching transistors and the reference potential. An excitation signal having a predefined pulse duty factor (effective voltage) and a predefined switching frequency is applied to the junction in order to charge or discharge the piezo actuator.

IPC 8 full level

**F02D 41/20** (2006.01); **H02M 7/5387** (2007.01); **H10N 30/80** (2023.01)

CPC (source: EP US)

**F02D 41/2096** (2013.01 - EP US); **H02N 2/067** (2013.01 - EP US); **F02D 41/221** (2013.01 - EP US); **F02D 2041/2003** (2013.01 - EP US);  
**F02D 2400/14** (2013.01 - EP US)

Citation (examination)

- US 5095256 A 19920310 - UYEYAMA SHUJIRO [JP], et al
- EP 1138903 A1 20011004 - BOSCH GMBH ROBERT [DE]
- See also references of WO 2006037670A1

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

**WO 2006037670 A1 20060413**; DE 102004047961 A1 20060518; EP 1794431 A1 20070613; US 2008088262 A1 20080417

DOCDB simple family (application)

**EP 2005053527 W 20050720**; DE 102004047961 A 20041001; EP 05761184 A 20050720; US 66449205 A 20050720