

Title (en)

METHOD AND DEVICE FOR CHARGING AND DISCHARGING A PIEZOELECTRIC ELEMENT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM LADEN UND ENTLADEN EINES PIEZOLEKTRISCHEN ELEMENTES

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT DE CHARGER ET DECHARGER UN ELEMENT PIEZOELECTRIQUE

Publication

**EP 1440483 A2 20040728 (DE)**

Application

**EP 02774368 A 20020914**

Priority

- DE 0203448 W 20020914
- DE 10152271 A 20011020

Abstract (en)

[origin: WO03038917A2] The invention relates to a method and a device for charging or discharging a piezoelectric element, whereby electric charge carriers are conveyed from a direct current voltage source to said piezoelectric element or conversely, for transmitting an elastic deflection of said piezoelectric element to an actuator, such that a regulation movement of said actuator is maintained depending on a level of a transmitted direct current voltage of the direct current voltage source of said piezoelectric element. Electric charge carriers can be transmitted and are transmitted to the piezoelectric element by means of at least one additional capacitive element depending on the state of charge of said piezoelectric element.

IPC 1-7

**H01L 41/04**

IPC 8 full level

**F02D 41/20** (2006.01); **H02N 2/06** (2006.01); **H10N 30/80** (2023.01)

CPC (source: EP)

**F02D 41/2096** (2013.01); **H02N 2/067** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03038917 A2 20030508; WO 03038917 A3 20031030;** DE 10152271 A1 20030508; EP 1440483 A2 20040728

DOCDB simple family (application)

**DE 0203448 W 20020914;** DE 10152271 A 20011020; EP 02774368 A 20020914