

Title (en)
METHOD FOR CONTROLLING A PIEZOELECTRIC ACTUATOR AND CONTROL UNIT FOR CONTROLLING A PIEZOELECTRIC ACTUATOR

Title (de)
VERFAHREN ZUM STEUERN EINES PIEZOELEKTRISCHEN AKTORS UND STEUEREINHEIT ZUM STEUERN EINES PIEZOELEKTRISCHEN AKTORS

Title (fr)
PROCEDE POUR COMMANDER UN ACTIONNEUR PIEZOELECTRIQUE, ET UNITE DE COMMANDE POUR COMMANDER UN ACTIONNEUR PIEZOELECTRIQUE

Publication
EP 1825124 A1 20070829 (DE)

Application
EP 05810154 A 20051125

Priority
• EP 2005012642 W 20051125
• DE 102004058971 A 20041208

Abstract (en)
[origin: WO2006061113A1] The invention relates to a method for controlling a piezoelectric actuator which displaces a control element of an injection valve. Said method consists of charging the actuator until a start voltage is reached. Subsequently, the actuator is discharged until a partial lifting voltage, which is maintained during a holding time, is reached. In the final step, the actuator is discharged until an off-load voltage is reached and a parameter which is dependent on the partial lifting voltage is used as a control variable. A desired value for the control variable is determined and the actuator is controlled in such a manner that the desired value of the control variable is maintained.

IPC 8 full level
F02D 41/20 (2006.01); **H10N 30/20** (2023.01); **H10N 30/80** (2023.01)

CPC (source: EP US)
F02D 41/2096 (2013.01 - EP US); **F02D 41/008** (2013.01 - EP US); **F02D 2041/2024** (2013.01 - EP US); **F02D 2041/2034** (2013.01 - EP US); **F02D 2041/2051** (2013.01 - EP US); **F02D 2041/2055** (2013.01 - EP US)

Designated contracting state (EPC)
DE FR

DOCDB simple family (publication)
DE 102004058971 A1 20060614; **DE 102004058971 B4 20061228**; DE 502005007109 D1 20090528; EP 1825124 A1 20070829; EP 1825124 B1 20090415; US 2009223490 A1 20090910; US 7617813 B2 20091117; WO 2006061113 A1 20060615

DOCDB simple family (application)
DE 102004058971 A 20041208; DE 502005007109 T 20051125; EP 05810154 A 20051125; EP 2005012642 W 20051125; US 72101305 A 20051125