

Title (en)
VALVE OPERATING MECHANISM

Title (de)
VENTILTRIEBVORRICHTUNG

Title (fr)
DISPOSITIF DE COMMANDE D'ACTIONNEMENT DE SOUPAPE

Publication
EP 2281113 A2 20110209 (DE)

Application
EP 09749520 A 20090328

Priority
• EP 2009002290 W 20090328
• DE 102008024086 A 20080517

Abstract (en)
[origin: US2011088643A1] In a valve drive train device, in particular for a valve drive of an internal combustion engine, with a switching unit comprising an actuator with a solenoid unit and with a control unit for monitoring switching operations of the switching unit provided for switching an axially displaceable cam element by means of a switch gate, the control unit for monitoring the switching unit is taking into account at least one characteristic value of a voltage integral over a voltage which is induced in a coil of the switching unit during the switching operation and is adjusting the value with respect to a characteristic limit value stored in the control unit.

IPC 8 full level
F01L 1/34 (2006.01)

CPC (source: EP US)
F01L 13/0036 (2013.01 - EP US); **F02D 41/20** (2013.01 - EP US); **F02D 41/221** (2013.01 - EP US); **H01F 7/1844** (2013.01 - EP US); **F01L 2013/0052** (2013.01 - EP US); **F01L 2013/101** (2013.01 - EP US); **F01L 2201/00** (2013.01 - EP US); **F01L 2800/11** (2013.01 - EP US); **F01L 2820/01** (2013.01 - EP US); **F02D 2041/001** (2013.01 - EP US); **F02D 2041/2051** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (search report)
See references of WO 2009141030A2

Citation (examination)
• WO 2005090766 A1 20050929 - SIEMENS AG [DE], et al
• DE 102004030779 A1 20060119 - AUDI AG [DE]
• JP 2001159505 A 20010612 - HONDA MOTOR CO LTD
• EP 1777400 A2 20070425 - SIEMENS AG [DE]
• DE 3942836 A1 19910627 - DAIMLER BENZ AG [DE]
• DE 3730523 A1 19890330 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
DE 102008024086 A1 20091119; CN 102171420 A 20110831; CN 102171420 B 20140625; EP 2281113 A2 20110209; JP 2011521138 A 20110721; JP 5444571 B2 20140319; US 2011088643 A1 20110421; US 8474421 B2 20130702; WO 2009141030 A2 20091126

DOCDB simple family (application)
DE 102008024086 A 20080517; CN 200980117956 A 20090328; EP 09749520 A 20090328; EP 2009002290 W 20090328; JP 2011508804 A 20090328; US 92712010 A 20101105