

Title (en)

SWITCHING APPARATUS, STARTING APPARATUS AND METHOD FOR AN ELECTROMAGNETIC SWITCHING APPARATUS

Title (de)

SCHALTVORRICHTUNG, STARTVORRICHTUNG UND VERFAHREN EINER ELEKTROMAGNETISCHEN SCHALTVORRICHTUNG

Title (fr)

DISPOSITIF DE COMMUTATION, DISPOSITIF DE DEMARRAGE ET PROCEDE D'UN DISPOSITIF DE COMMUTATION  
ELECTROMAGNETIQUE

Publication

**EP 2553255 A2 20130206 (DE)**

Application

**EP 11708289 A 20110316**

Priority

- DE 102010003485 A 20100330
- EP 2011053927 W 20110316

Abstract (en)

[origin: WO2011124450A2] What is described is: a switching apparatus (KH, KA, ES) with an electromagnetic switching element and a controller (4), wherein the switching element comprises two coils on a core acting on a common armature (A). In order to realize an actuation of the armature (A) in drivable fashion as quickly and simply as possible with a low energy consumption, the controller (4) is designed to have in each case one switch (S1-6) in the current path of the coil for driving each coil.

IPC 8 full level

**F02N 11/08** (2006.01); **H01H 47/08** (2006.01); **H01H 51/06** (2006.01)

CPC (source: EP US)

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**F02N 2011/0892** (2013.01 - EP US); **F02N 2200/065** (2013.01 - EP US); **H01H 47/08** (2013.01 - EP US); **H01H 51/065** (2013.01 - EP US)

Citation (search report)

See references of WO 2011124450A2

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102010003485 A1 20111006**; CN 102822501 A 20121212; CN 102822501 B 20150429; EP 2553255 A2 20130206;  
US 2013088011 A1 20130411; US 8872373 B2 20141028; WO 2011124450 A2 20111013; WO 2011124450 A3 20120705

DOCDB simple family (application)

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