

Title (en)

METHOD AND DEVICE FOR CONTROLLING A RELUCTANCE ELECTRIC MACHINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR STEUERUNG EINES ELEKTRISCHEN RELUKTANZMASCHINE

Title (fr)

PROCEDE ET DISPOSITIF DE PILOTAGE D'UNE MACHINE ELECTRIQUE A RELUCTANCE

Publication

**EP 2673875 A2 20131218 (FR)**

Application

**EP 12706645 A 20120130**

Priority

- FR 1151040 A 20110209
- FR 2012050187 W 20120130

Abstract (en)

[origin: WO2012107665A2] In a method of controlling a reluctance polyphase electric machine (36), in particular an automobile motor, the currents injected into each coil of the stator of the machine (36) are deduced by a transformation of a pair ( $I_d$ ,  $I_q$ ) of excitation currents ( $I_d$ ) and of armature current ( $I_q$ ) defined in a reference frame (d, q) rotating with the rotor of the machine, such that: - the excitation current ( $I_d$ ) is composed of a fundamental sinusoidal signal, to which are added successively other odd harmonics of increasing order when the torque setpoint of the machine increases, - the armature current ( $I_q$ ) is a signal proportional to the estimated or measured electromotive force of the machine.

IPC 8 full level

**H02P 6/08** (2006.01); **H02P 21/00** (2006.01); **H02P 25/08** (2006.01)

CPC (source: EP US)

**H02P 6/08** (2013.01 - EP); **H02P 6/10** (2013.01 - US); **H02P 21/0003** (2013.01 - US); **H02P 25/08** (2013.01 - EP US); **H02P 25/0925** (2016.02 - EP US)

Citation (search report)

See references of WO 2012107665A2

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

DOCDB simple family (publication)

**FR 2971377 A1 20120810**; **FR 2971377 B1 20130201**; CN 103354974 A 20131016; EP 2673875 A2 20131218; JP 2014505459 A 20140227; US 2014139155 A1 20140522; WO 2012107665 A2 20120816; WO 2012107665 A3 20130718

DOCDB simple family (application)

**FR 1151040 A 20110209**; CN 201280008485 A 20120130; EP 12706645 A 20120130; FR 2012050187 W 20120130; JP 2013553005 A 20120130; US 201213984677 A 20120130