

Title (en)

CONTROL OF A PERMANENT-MAGNET ELECTRIC MACHINE

Title (de)

STEUERUNG EINER ELEKTRISCHEN PERMANENTMAGNETMASCHINE

Title (fr)

COMMANDE D'UNE MACHINE ELECTRIQUE A AIMANTS PERMANENTS.

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Application

EP 13704181 A 20130121

Priority

- FR 1250888 A 20120131
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Abstract (en)

[origin: WO2013114021A1] The invention relates to a method of controlling a permanent-magnet synchronous machine (3) comprising a stator and a rotor. The method comprises a step of determining an estimated position (\$) of the rotor, a step of determining a second direct voltage setpoint ($\nu_{\text{d}\Delta 2^*}$) which is alternately equal to a first direct voltage setpoint ($\nu_{\text{d}\Delta 1^*}$) or equal to the first direct voltage setpoint ($\nu_{\text{d}\Delta 1^*}$) plus a predetermined periodic signal (G). The step of determining an estimated position (\$) of the rotor comprises a step of determining a coupling term ($\Delta t \Delta \gamma$), a step of determining a speed of rotation of the rotor (Ω_5) as a function of said coupling term ($\Delta t \Delta \gamma$), and a step of determining the estimated position (\$) of the rotor by integrating the speed of rotation of the rotor (Ω_5).

IPC 8 full level

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Citation (examination)

- JP 2009273254 A 20091119 - FUJI ELECTRIC SYSTEMS CO LTD
- US 2008197799 A1 20080821 - TOMIGASHI YOSHIO [JP]
- JP 2009273283 A 20091119 - FUJI ELECTRIC SYSTEMS CO LTD
- See also references of WO 2013114021A1

Designated contracting state (EPC)

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EP 2810367 A1 20141210; JP 2015509357 A 20150326; RU 2014135334 A 20160320; US 2014333244 A1 20141113; US 9184682 B2 20151110;
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