

Title (en)

METHOD AND DEVICE FOR EVALUATING OPERATING PARAMETERS AS WELL AS PROCESS AND SYSTEM FOR CONTROLLING A SYNCHRONOUS MACHINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR AUSWERTUNG VON BETRIEBSPARAMETERN SOWIE VERFAHREN UND SYSTEM ZUR STEUERUNG EINER SYNCHRONMASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF D'ÉVALUATION DE PARAMÈTRES DE FONCTIONNEMENT AINSI QUE PROCESSUS ET SYSTÈME DE COMMANDE D'UNE MACHINE SYNCHRONE

Publication

**EP 3235117 A1 20171025 (FR)**

Application

**EP 15832955 A 20151217**

Priority

- FR 1462831 A 20141218
- IB 2015059705 W 20151217

Abstract (en)

[origin: WO2016098032A1] Method for evaluating operating parameters of a synchronous machine (12) comprising, on the one hand, a stator, configured to generate an electromagnetic field rotating with respect to said stator, and, on the other hand, a rotor so that the rotating electromagnetic field drives the rotor round, said evaluating method comprising, for a measurement cycle N, the following steps: - reception of the value of first and second components ( $I_a$ ,  $I_p$ ) of intensity and of first and second components ( $V_a$ ,  $V_p$ ) of voltage of a current applied to said stator; - determination of the value of first and second components ( $e_a$ ,  $e_p$ ) of a back-electromotive force, associated with said rotating electromagnetic field, on the basis of said components of intensity and of voltage; - comparison of the value of the first and second components ( $e_a$ ,  $e_p$ ) of the back-electromotive force with the value of the first and second components ( $e_a$ ,  $e_p$ ) of the back-electromotive force of the measurement cycle N-1; - determination of an estimated value of the speed of the rotor( $\Omega_{est}$ ).

IPC 8 full level

**H02P 6/08** (2016.01); **H02P 21/13** (2006.01); **H02P 21/28** (2016.01)

CPC (source: EP US)

**H02P 6/08** (2013.01 - EP US); **H02P 21/13** (2013.01 - EP); **H02P 21/28** (2016.02 - EP)

Citation (search report)

See references of WO 2016098032A1

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