

Title (en)

METHOD FOR IMPROVING EFFICIENCY IN A MULTIPHASE MOTOR, AND MOTOR FOR IMPLEMENTING SUCH A METHOD

Title (de)

VERFAHREN ZUR VERBESSERUNG DES WIRKUNGSGRADES BEI EINEM MEHRPHASIGEN MOTOR, UND MOTOR ZUR DURCHFÜHRUNG EINES SOLCHEN VERFAHRENS

Title (fr)

PROCÉDÉ D'AMÉLIORATION DU RENDEMENT D'UN MOTEUR POLYPHASÉ ET MOTEUR PERMETTANT LA MISE EN OEUVRE DUDIT PROCÉDÉ

Publication

**EP 2529480 A2 20121205 (DE)**

Application

**EP 11702396 A 20110127**

Priority

- DE 102010006337 A 20100130
- EP 2011000354 W 20110127

Abstract (en)

[origin: WO2011092011A2] An electric motor has a permanent magnet rotor (46) and a device for producing a three-phase sinusoidal current (i202, i204, 1206) for supplying power to said motor (40), furthermore a microprocessor (95) for carrying out the following steps: while the motor (40) is running with a load which deviates little or not at all from a predefined value, the motor is operated first at a predefined operating voltage (U), and an amplitude of a current flowing to the motor is measured and stored (S106, S108). Subsequently, the amplitude of the voltage supplied to the motor is reduced (S110). Thereupon, an amplitude of the current flow into the motor (40) is measured again and said amplitude is compared (S116) to the amplitude previously stored. If it is established that the current flow to the motor has not decreased as a result of the reduction in the amplitude of the voltage, the motor (40) is operated at said current. If, however, it is established that the current flowing to the motor has decreased as a result of the reduction in the voltage supplied to the motor (40), the measurements and the comparison are repeated, optionally many times, in order to obtain values for an optimized efficiency.

IPC 8 full level

**H02P 23/00** (2006.01); **H02P 27/02** (2006.01); **H02P 27/04** (2006.01)

CPC (source: EP US)

**H02P 23/26** (2016.02 - EP US)

Citation (search report)

See references of WO 2011092011A2

Citation (examination)

- DE 3021540 A1 19810122 - ASEA AB
- US 6262510 B1 20010717 - LUNGU IANCU [RO]

Designated contracting state (EPC)

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DOCDB simple family (publication)

**DE 102011009563 A1 20110804**; EP 2529480 A2 20121205; US 2012293106 A1 20121122; US 8975856 B2 20150310; WO 2011092011 A2 20110804; WO 2011092011 A3 20120607

DOCDB simple family (application)

**DE 102011009563 A 20110127**; EP 11702396 A 20110127; EP 2011000354 W 20110127; US 201113576114 A 20110127