

Title (en)

METHOD, DEVICE, AND COMPUTER PROGRAM FOR DETERMINING AN OFFSET ANGLE IN AN ELECTRIC MACHINE

Title (de)

VERFAHREN, VORRICHTUNG UND COMPUTERPROGRAMM ZUM ERMITTELN EINES OFFSETWINKELS IN EINER ELEKTROMASCHINE

Title (fr)

PROCÉDÉ, DISPOSITIF ET PROGRAMME INFORMATIQUE POUR DÉTERMINER UN ANGLE DE DÉCALAGE DANS UN MOTEUR ÉLECTRIQUE

Publication

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Application

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Abstract (en)

[origin: WO2012104372A2] The invention relates to a method and device for determining or checking the plausibility of an offset angle between an assumed orientation and an actual orientation of a rotor (20) relative to a stator (10) in an electric machine (1). In the method, the electric machine is first controlled in a quasi zero-current state, in which substantially no current should flow in the windings of the electric machine. Then a voltage indicator that specifies the direction of a voltage controlled in the electric machine during the quasi zero-current state is determined and subsequently transformed into a coordinate system that is fixed with respect to the rotor. The offset angle or an angle error with respect to a previously assumed, calibrated offset angle can be determined on the basis of the transformed voltage indicator.

IPC 8 full level

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