

Title (en)  
MOTOR REGULATION FOR A SYNCHRONOUS MOTOR

Title (de)  
MOTORREGELUNG FÜR EINEN SYNCHRONMOTOR

Title (fr)  
RÉGULATION DE MOTEUR POUR MOTEUR SYNCHRONE

Publication  
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Application  
**EP 12761939 A 20120913**

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Abstract (en)  
[origin: WO2013037908A2] The invention relates to a motor regulation (8; 22) for a synchronous motor (1), which has a number of N stator coils (7) arranged offset to each other, which are arranged around a rotor (4) of the synchronous motor (1), wherein a coil voltage (US) can be inserted into the stator coils (7) by the motor regulation (8;22) and a coil current (IS) is formed which has a direct current component (ID; IDW) and a transverse current component (IQ) in a coordinate system proportional to the speed of the synchronous motor (1), wherein the transverse current component (IQ) effects a tangential force (FT) driving the rotor (4) in the direction of rotation and wherein the direct current component (ID) effects a force (FR) perpendicular to the rotor surface on the rotor (4), wherein the motor regulation (8; 22) has a direct current generator (20) for generating a direct current component (IDW), periodically alternating in the rotating coordinate system, in order to equalize oscillations of the synchronous motor (1) driven by the motor regulation (8; 22) by the force (FR) generated perpendicular to the rotor surface, wherein the direct current generator is designed to evaluate at least one angle information and one regulation transverse current.

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