

Title (en)
METHOD FOR MODULATING THE TORQUE RIPPLE AND/OR THE RADIAL FORCE OF A THREE-PHASE CURRENT-OPERATED ELECTRIC MACHINE

Title (de)
VERFAHREN ZUR MODULATION DER DREHMOMENTWELIGKEIT UND/ODER DER RADIALKRAFT EINER DREHSTROMBETRIEBENEN ELEKTRISCHEN MASCHINE

Title (fr)
PROCÉDÉ DE MODULATION DE L'ONDULATION DE COUPLE ET/OU DE LA FORCE RADIALE D'UNE MACHINE ÉLECTRIQUE À COURANT TRIPHASÉ

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Abstract (en)
[origin: WO2022048704A1] The invention relates to a method for modulating the torque ripple and/or the radial force of a three-phase current-operated electric machine (10), in particular of an electric drive machine of a motor vehicle able to be driven by an electric motor, comprising the following method steps: - selecting at least one harmonic (HM1_EM) in the torque of the electric machine (10) and/or selecting at least one harmonic (HM_X) of a load (20) coupled to the electric machine (10), wherein the at least one selected harmonic (HM1_EM, HM_X) is modulated by applying the at least one selected harmonic (HM1_EM, HM_X) to the d-current and/or q-current or to a variable correlated therewith in order to generate a setpoint variable (w) for driving the electric machine (10), wherein the phase angle of the harmonic in the d-current (Id) and/or of the harmonic in the q-current (Iq) with respect to the rotor angle is at least temporarily set to be different.

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