Title (en)
METHOD AND APPARATUS FOR TORQUE CONTROL OF A MACHINE

Title (de)
VERFAHREN UND VORRICHTUNG ZUR DREHMOMENTREGELUNG EINER MASCHINE

Title (fr)
PROCEDE ET DISPOSITIF PERMETTANT DE CORRIGER LE COUPLE D'UNE MACHINE

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Application
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Abstract (en)
[origin: WO0220332A1] An exemplary embodiment of the invention is a method for torque control of a PM synchronous machine (105). The method includes obtaining a torque command signal (Tcmd) and a machine speed (omega m) and determining an operating mode (112, 114) in response to the torque command signal (Tcmd) and the machine speed (omega). The operating mode (112, 114) includes a first operating mode (112) and a second operating mode (114). In the first operating mode (112), a stator phase voltage magnitude (V) is computed and an angle (delta DEG) between the stator phase voltage (V) and a stator phase check emf (E) is determined in response to the stator phase voltage magnitude (V). In the second operating mode (114), the stator phase voltage (V) is set to a predetermined magnitude (Vm) and the angle (delta DEG) between the stator phase voltage (V) and the stator phase back emf (E) is determined in response to the predetermined magnitude.

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