

Title (en)
SYNCHRONOUS ELECTROMECHANICAL TRANSFORMER

Title (de)
SYNCHRONER ELEKTROMECHANISCHER UMFORMER

Title (fr)
TRANSFORMATEUR ELECTROMECHANIQUE SYNCHRONE

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EP 1884013 A1 20080206 (DE)

Application
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• SI 200400151 A 20040525

Abstract (en)
[origin: WO2005117243A1] The invention relates to a synchronous electromechanical transformer that can be used as a multi-phase motor and generator, has a high specific torque, a small or negligible stop moment, a small moment irregularity, can be quietly operated, and has good heat permeability between the windings and the housing. It contains a rotor having uniformly distributed magnetic poles (4), and two stators (2) with concentrated windings (8) of at least two electrical phases. The individual stator contains the same number of similarly arranged electromagnetic poles (9) of each of at least two electrical phases arranged in related groups (7) of at least two electromagnetic poles of the same electric phase. The stator poles (9) can contain magnetically permeable polar cores and can be uniformly or non-uniformly distributed. The number of electromagnetic poles of the stator differs from that of the rotor by the product between the number of stator groups (7), the electromagnetic poles of said stator groups pertaining to the same electrical phases, and a natural number that is not a multiple of the number of electrical phases. A radial, axial and linear embodiment of the transformer is possible.

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