Title (en)

MULTI-PHASE ELECTRIC MACHINE

Title (de

MEHRPHASIGE ELEKTRISCHE MASCHINE

Title (fr)

MACHINE ELECTRIQUE MULTIPHASE

Publication

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Application

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Abstract (en)

[origin: WO0247239A1] The invention relates to a multi-phase electric machine (10) comprising a stator and a rotor. A multi-phase winding with frontend winding overhangs (25) for generating a travelling-wave or rotational field is located in slots (22) of the stator or rotor. The winding consists of coils (23) that are combined to form inductors (18), said inductors being connected to form phase conductors. The conductors (24) of the coils have a substantially rectangular cross-section in order to achieve a high slot fill factor. The ratio of the thickness of the conductors in the area of the slots to the thickness in the area of the winding overhangs that are positioned on both sides corresponds to the number of inductors that overlap in the winding overhang. The conductor cross-section is identical in the areas of the slots and the winding overhangs.

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