

Title (en)

METHOD AND DEVICE FOR DETECTING WINDING SHORT CIRCUITS AND ELECTRIC MACHINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUM DETEKTIEREN VON WINDUNGSSCHLÜSSEN SOWIE ELEKTRISCHE MASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTECTION DE COURT-CIRCUIT ENTRE SPIRES ET MACHINE ÉLECTRIQUE

Publication

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Application

EP 15714791 A 20150331

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Abstract (en)

[origin: WO2015169512A1] The invention relates to an apparatus (1) for detecting interturn faults inside a rotor winding of a rotating electrical machine (2) with a measuring device (3), wherein the measuring device (3) comprises at least two measuring coils which are oriented differently in space such that, in the case of a measuring device (3) accordingly oriented with respect to the rotor winding, a voltage can be induced inside the first measuring coil by means of a first directional component of the magnetic flux density B of the rotating electrical machine (2) and a different voltage can be induced inside the further measuring coil by means of a further directional component of this magnetic flux density B, which directional component differs from the first directional component, characterized in that the at least two measuring coils oriented differently in space are arranged together on a head part (5) of the measuring device (3), with the result that interturn faults present on the rotor winding can be detected on the basis of temporal voltage profiles of the voltages induced in the two measuring coils.

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