

Title (en)

METHOD FOR THE ELECTROMAGNETIC INSULATION OF COMPONENTS OF AN ELECTRIC MOTOR

Title (de)

VERFAHREN ZUR ELEKTROMAGNETISCHEN ISOLIERUNG VON KOMPONENTEN EINES ELEKTROMOTORS

Title (fr)

PROCÉDÉ D'ISOLATION ÉLECTROMAGNÉTIQUE DE COMPOSANTS DE MOTEUR ÉLECTRIQUE

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Application

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Abstract (en)

[origin: WO2023012662A1] The present disclosure relates to a method for the electromagnetic insulation of a first conductive element (1) and a second conductive element (2) of a stator and/or rotor of an electric motor. The method comprises the steps of: - coating the first conductive element (1) and the second conductive element (2) with at least one insulating compound (A, B) configured, during use, to insulate electromagnetically the first conductive element (1) and the second conductive element (2). The at least one insulating compound (A, B) comprises at least one preceramic polymer. - drying said first conductive element (1) and said second conductive element (2) coated with said at least one insulating compound (A, B). - coating said first conductive element (1) with a sealing compound (C) comprising a preceramic polymer and configured to favour adhesion of this second conductive element (2) to said first conductive element (1)' - assembling the first conductive element (1) and second conductive element (2) to form the stator of said electric motor; - heat treating the assembled first conductive element (1) and the said second conductive element (2). Said heat treatment comprises heating the first conductive element (1) and the second conductive element (2) up to a temperature of at least 350°C and subsequent cooling thereof. The present invention also relates to an electric motor comprising a first conductive element (1) and a second conductive element (2) electromagnetically insulated by means of the method described.

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