

Title (en)

METHOD AND DEVICE FOR CONTACTLESSLY SENSING THE TEMPERATURE OF A ROTATING PART OF AN ELECTRICAL MACHINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BERÜHRUNGSLOSEN ERFASSUNG DER TEMPERATUR VON EINEM ROTATIONSTEIL EINER ELEKTRISCHEN MASCHINE

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉTECTION SANS CONTACT DE TEMPÉRATURE D'UNE PIÈCE ROTATIVE DE MACHINE ÉLECTRIQUE

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Application

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Priority

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Abstract (en)

[origin: WO2021164930A1] The invention relates to a method for contactlessly sensing the temperature of a rotating part (10) of an electrical machine, which rotates with respect to an axis of rotation (12), by means of a fluorescent element (16) that is located on the rotating part (10) and thermally connected thereto, a light source (18) for exciting the fluorescent element (16) and at least one light sensor (20) for detecting fluorescent light that is emitted as a result of the excitation of the fluorescent element (16), wherein from this detection process, a variable correlating with a temperature-dependent decay time constant τ of the material of the fluorescent element is determined and the temperature of the rotating part (10) is determined using said variable. The invention also relates to a corresponding device (14) for contactlessly sensing the temperature of a rotating part (10) of an electrical machine.

IPC 8 full level

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