

Title (en)

METHOD FOR MEASURING THE ROTOR ANGLE-BASED EXPANSION OF A ROTATING ROTOR UNDER CENTRIFUGAL STRESS

Title (de)

VERFAHREN ZUR MESSUNG DER ROTORWINKELBEZOGENEN AUFWEITUNG EINES DREHENDEN ROTORS UNTER FLIEHKRAFTBELASTUNG

Title (fr)

PROCÉDÉ DE MESURE DE L'EXPANSION ANGULAIRE DE ROTOR D'UN ROTOR ROTATIF SOUS CONTRAINTE CENTRIFUGE

Publication

EP 4370868 A1 20240522 (DE)

Application

EP 22750991 A 20220706

Priority

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Abstract (en)

[origin: WO2023284913A1] In a method for measuring the expansion of a rotating rotor (5) on the basis of the rotor rotational speed, a first distance sensor (14) is arranged at a distance to the rotor surface, said distance sensor contactlessly detecting the distance between the rotor surface and the first distance sensor (14) in a time-based manner and generating first time-based electric distance signals. A zero mark sensor (16) scans zero marks applied onto the rotor (5) in a time-based manner. A second distance sensor (15) is arranged on a reference surface (19) which is remote from the first distance sensor (14) in the axial direction of the rotor (5) and from which the expansion and surface profile are identified. In order to eliminate disturbance variables, the signals detected by the second distance sensor can be calculated together with those of the first distance sensor.

IPC 8 full level

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