

Title (en)

DEVICE FOR THE DETECTION OF VIBRATIONS OR BENDING OF ROTOR BLADES OF A WIND POWER PLANT

Title (de)

VORRICHTUNG ZUR ERFASSUNG VON SCHWINGUNGEN ODER DURCHBIEGUNGEN VON ROTORBLÄTTERN EINER WINDKRAFTANLAGE

Title (fr)

DISPOSITIF PERMETTANT DE DÉTECTER DES OSCILLATIONS OU DES FLEXIONS DE PALES DE ROTOR D'UNE ÉOLIENNE

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Application

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Abstract (en)

[origin: WO2008095707A2] The invention relates to a device for detecting vibrations or bending of a rotor blade (1) of a wind power plant. Said device comprises a deflection mechanism (4) that is provided with a linear element (9). The linear element (9) is arranged parallel to the internal wall of the aerodynamic rotor shell (2) in the longitudinal direction (Z) of the blade and is mounted on the internal wall of the rotor shell (2) at a fastening point (16) located at a distance from the root region. At the other end, the linear element (9) is connected to a sensor unit (5) which detects the lateral deflection of the linear element (9) and emits a signal indicating excessive bending of the rotor shell (2) or evaluates further at least when the rotor shell (2) is bent beyond a predefined measure. The invention is characterized in that the linear element (9) is embodied as a linear thread (9) that is mounted between the sensor unit (5) and the fastening point (16). Furthermore, the sensor unit (5) is attached at a non-bendable reference point (17) outside the aerodynamic rotor shell (2).

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