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Title	METHOD AND DEVICE FOR PREDICTIVE MONITORING OF WIND TURBINE CONDITION AND IMPLEMENTATION OF COUNTERMEASURES
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Patent no. Description EN	Patent application nr. s 2022 0030, of 2022.05.18. The invention relates to devices for converting wind energy into electrical energy, in particular, to methods and devices for monitoring the condition of wind turbines. In the method of predictive monitoring of the state of the blades, the reception and measurement of the signal regarding the appearance of a microcrack in the composite cover of the aerodynamic blade (4) is carried out by means of at least one non-contact deformation sensor (14) installed in the area with maximum stresses of the blade. The strain sensors (14) executed in a filiform manner can be impregnated in the composite cover of the blade. In the predictive monitoring method, the reception and measurement of the signal regarding the appearance of the ice layer on the outer surface of the aerodynamic blade (4) is performed by means of at least one temperature sensor (17). The device includes the tower (1), on which the nacelle (2) is installed, the wind rotor (3) with aerodynamic blades (4) connected with the driving shaft (5) of the mechanical multiplier (6), the electric generator (7), on the end of the rotor (8) a fan wheel (9) is freely installed, which can be screwed by means of a controlled coupling (10). At the same time, near the fan wheel (9) in the nacelle housing (2), at least one hole is made, which is "closed - open" with an adjustable cover (11). At least one temperature sensor (12) is installed on the housing of the electric generator (7), and strain sensors (14) and temperature sensors (17) are installed on the aerodynamic blades (4). Inside the aerodynamic blades (4) are installed elements for destroying the ice layer (16) deposited on the blade. Monitoring and processing equipment (EMP) (28), processor (29) and control system (SC) (30) provide processing of signals received from sensors, control and development of countermeasures.