

Title (en)

STRAIN AND VIBRATION MEASURING SYSTEM FOR MONITORING ROTOR BLADES

Title (de)

DEHNUNGS- UND VIBRATIONS-MESSSYSTEM ZUR ÜBERWACHUNG VON ROTORBLÄTTERN

Title (fr)

SYSTÈME DE MESURE DE DILATATION ET DE VIBRATION DESTINÉ À LA SURVEILLANCE DE PALES DE ROTOR

Publication

EP 3652433 A1 20200520 (DE)

Application

EP 18740819 A 20180712

Priority

- DE 102017115927 A 20170714
- EP 2018069033 W 20180712

Abstract (en)

[origin: WO2019012083A1] The invention relates to an assembly for monitoring and/or controlling a wind turbine. The assembly for monitoring and/or controlling a wind turbine comprises: an arrangement of two strain sensors, in particular three strain sensors, which detects blade bending moments of a rotor blade of a wind turbine in at least two different spatial directions; a first fibre optic vibration sensor for detecting vibrations of the rotor blade in a first spatial direction; and at least one second fibre optic vibration sensor for detecting vibrations of the rotor in a second spatial direction, which differs from the first spatial direction.

IPC 8 full level

F03D 17/00 (2016.01); **F03D 80/00** (2016.01); **G01M 5/00** (2006.01)

CPC (source: EP US)

F03D 7/0296 (2013.01 - EP US); **F03D 17/00** (2016.05 - EP US); **G01B 11/16** (2013.01 - US); **G01B 11/165** (2013.01 - EP); **G01B 11/18** (2013.01 - EP); **G01H 1/04** (2013.01 - EP); **G01H 9/004** (2013.01 - EP US); **G01L 1/242** (2013.01 - US); **G01M 5/0016** (2013.01 - EP US); **G01M 5/0041** (2013.01 - EP US); **G01M 5/0066** (2013.01 - EP US); **G01M 5/0091** (2013.01 - US); **F05B 2270/334** (2013.01 - EP); **F05B 2270/808** (2013.01 - EP); **Y02E 10/72** (2013.01 - EP)

Citation (search report)

See references of WO 2019012083A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019012083 A1 20190117; CN 110869608 A 20200306; DE 102017115927 A1 20190117; EP 3652433 A1 20200520; US 2020132052 A1 20200430

DOCDB simple family (application)

EP 2018069033 W 20180712; CN 201880046244 A 20180712; DE 102017115927 A 20170714; EP 18740819 A 20180712; US 201816631139 A 20180712