Title (en)

CONTROL OF A WIND ENERGY INSTALLATION

Title (de)

STEUERUNG EINER WINDENERGIEANLAGE

Title (fr)

COMMANDE D'UNE ÉOLIENNE

Publication

EP 3870849 A1 20210901 (DE)

Application

EP 19786779 A 20191010

Priority

- DE 102018008391 A 20181025
- EP 2019077508 W 20191010

Abstract (en)

[origin: WO2020083656A1] A method according to the invention for controlling a wind energy installation, which has a rotor (10), which can be rotated about a rotor axis (R) and has at least one rotor blade (11), and a generator (20) coupled to said rotor, comprises the steps of: - capturing (S10) a value of a forefield parameter, in particular a forefield wind parameter, which is present at a first time in a first region (A) which is at a first distance (a) from the wind energy installation, in particular the rotor blade, in particular a sequence of values of the forefield parameter up to the first time, with the aid of at least one sensor (40); and - controlling (S30) the generator and/or at least one actuator (12, 32) of the wind energy installation on the basis of this captured forefield parameter value, in particular this captured forefield parameter sequence of values, and a machine-learnt assignment of a predicted near field parameter, in particular a near field wind parameter, at the wind energy installation and/or an operating parameter of the wind energy installation predicted for a subsequent, second time and/or a control variable of the actuator and/or generator to the forefield parameter or forefield parameter sequences.

IPC 8 full level

F03D 7/04 (2006.01)

CPC (source: EP US)

F03D 7/046 (2013.01 - EP US); F05B 2260/821 (2013.01 - EP US); F05B 2270/709 (2013.01 - EP US); F05B 2270/8042 (2013.01 - EP); Y02E 10/72 (2013.01 - EP)

Citation (search report)

See references of WO 2020083656A1

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 2020083656 A1 20200430; CN 112888853 A 20210601; DE 102018008391 A1 20200430; EP 3870849 A1 20210901; US 2021340957 A1 20211104

DOCDB simple family (application)

EP 2019077508 W 20191010; CN 201980070238 A 20191010; DE 102018008391 A 20181025; EP 19786779 A 20191010; US 201917288050 A 20191010