

Title (en)

METHOD AND SYSTEM FOR CONTROLLING A WIND TURBINE

Title (de)

VERFAHREN UND SYSTEM ZUM STEUERN EINER WINDENERGIEANLAGE

Title (fr)

PROCÉDÉ ET SYSTÈME SERVANT À COMMANDER UNE ÉOLIENNE

Publication

EP 3908746 A1 20211117 (DE)

Application

EP 19832965 A 20191223

Priority

- DE 102019000097 A 20190110
- EP 2019086889 W 20191223

Abstract (en)

[origin: WO2020144063A1] The invention relates to a method for controlling a wind turbine which has a rotor (130) with at least two rotor blades (30, 31), a 1P individual blade controller (210) for individually adjusting the rotor blades in cycles about the respective longitudinal axis of the rotor blades using a first rotor assembly, and a partial load range (T) and a full load range (V) which adjoin each other in a nominal operating point. The method has at least one of the following steps: - activating (S25) the 1P individual blade controller, in particular by gradually increasing the 1P individual blade controller, if the value of a first operating variable of the wind turbine exceeds a specified lower threshold which the operating variable has at a first operating point of the wind turbine, said first operating point lying in the partial load range or the full load range or being the nominal operating point; and/or - deactivating (S45) the 1P individual blade controller, in particular by gradually reducing the 1P individual blade controller, if the value of the first or a second operating variable of the wind turbine exceeds a specified upper threshold which the operating variable has below a switch-off wind speed of the wind turbine, in particular at a second wind turbine operating point which lies in the full load range.

IPC 8 full level

F03D 7/02 (2006.01)

CPC (source: EP US)

F03D 7/0224 (2013.01 - EP US); **F03D 7/024** (2013.01 - EP US); **F03D 7/04** (2013.01 - US); **F05B 2270/1095** (2013.01 - EP);
F05B 2270/32 (2013.01 - EP); **F05B 2270/3201** (2013.01 - US); **F05B 2270/327** (2013.01 - US); **F05B 2270/328** (2013.01 - EP US);
F05B 2270/335 (2013.01 - EP US); **Y02E 10/72** (2013.01 - EP)

Citation (search report)

See references of WO 2020144063A1

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 2020144063 A1 20200716; CN 113272546 A 20210817; DE 102019000097 A1 20200716; EP 3908746 A1 20211117;
US 2022112878 A1 20220414

DOCDB simple family (application)

EP 2019086889 W 20191223; CN 201980087696 A 20191223; DE 102019000097 A 20190110; EP 19832965 A 20191223;
US 201917421934 A 20191223