Title (en)

METHOD AND DEVICE FOR DETECTING ACCUMULATION OF MATERIAL ON A BLADE OF A WIND TURBINE AND FOR DETERMINING UPWIND CONDITION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERKENNUNG EINER MATERIALAKKUMULATION AUF EINER SCHAUFEL EINER WINDTURBINE UND ZUR BESTIMMUNG DES LUVZUSTANDES

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR DÉTECTER UNE ACCUMULATION DE MATÉRIAU SUR UNE PALE D'UNE TURBINE ÉOLIENNE ET POUR DÉTERMINER UNE CONDITION FACE AU VENT

Publication

EP 2764241 A2 20140813 (EN)

Application

EP 12769424 A 20121004

Priority

• SE 1150921 A 20111005
• EP 2012069640 W 20121004

Abstract (en)

[origin: WO2013050485A2] The present invention relates to a method for detecting accumulation of material (201) on a blade (108a) of a wind turbine (104), said method comprising the steps of: transmitting (S1) a light beam towards the blades (108a - 108c) of said wind turbine (104); receiving (S2) reflected light from the blades (108a - 108c) of said wind turbine(104); determining (S3) an instant width of said blade (108a) based on a detected intensity variation over time of the reflected light; and providing (S4) a signal indicating accumulation of material (201) on said blade (108a) if said determined width of the blade (108a) based on the detected intensity over time is larger than a known width of the blade (108a) without accumulation of material (201).

IPC 8 full level

F03D 11/00 (2006.01)

CPC (source: EP SE)

B64D 15/20 (2013.01 - SE); **F03D 17/00** (2016.05 - EP); **F03D 17/003** (2023.08 - SE); **F03D 17/0285** (2023.08 - SE); **F03D 80/40** (2016.05 - EP); **F03D 80/405** (2023.08 - SE); **G01B 11/046** (2013.01 - SE); F05B 2260/80 (2013.01 - SE); F05B 2260/8211 (2013.01 - EP); F05B 2270/80 (2013.01 - SE); F05B 2270/804 (2013.01 - EP); F05B 2270/8042 (2013.01 - EP); Y02E 10/70 (2013.01 - SE); Y02E 10/72 (2013.01 - EP)

Citation (search report)

See references of WO 2013050485A2

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

DOCDB simple family (publication)

WO 2013050485 A2 20130411; **WO 2013050485 A3 20130620**; EP 2764241 A2 20140813; SE 1150921 A1 20130406

DOCDB simple family (application)

EP 2012069640 W 20121004; EP 12769424 A 20121004; SE 1150921 A 20111005