

Title (en)

DEVICE FOR MONITORING MECHANICAL CONNECTION POINTS IN AN INSTALLATION

Title (de)

EINRICHTUNG ZUR ÜBERWACHUNG VON MECHANISCHEN VERBINDUNGSSTELLEN EINER ANLAGE

Title (fr)

DISPOSITIF PERMETTANT DE SURVEILLER DES POINTS DE LIAISON MÉCANIQUES D'UNE INSTALLATION

Publication

EP 3497418 A1 20190619 (DE)

Application

EP 17755092 A 20170807

Priority

- DE 102016214705 A 20160808
- EP 2017069965 W 20170807

Abstract (en)

[origin: WO2018029153A1] The invention relates to a device for monitoring mechanical connection points in an installation, in particular in a wind turbine, having: at least one optical imaging device, which is designed to digitally capture optical images of one or more connection points repeatedly, in particular regularly or continuously; and a comparison device for comparing images with reference images or for comparing parameters of the images with reference parameters and for generating an error signal relating to the connection point reproduced in an image as soon as the deviations of the image from a reference image or of a parameter from a reference parameter exceed a specified threshold during imaging. Monitoring of mechanical connection points can thus be automated and systematised, and maintenance costs can be reduced. Operation of the monitored installation is also made safer.

IPC 8 full level

G01L 5/24 (2006.01); **E02D 27/42** (2006.01); **F03D 17/00** (2016.01); **F16B 41/00** (2006.01); **G01B 11/26** (2006.01); **G06T 7/00** (2017.01)

CPC (source: EP US)

F03D 17/00 (2016.05 - EP US); **G01N 21/95** (2013.01 - EP US); **G06T 7/001** (2013.01 - EP US); **E02D 27/42** (2013.01 - EP); **F05B 2260/30** (2013.01 - EP US); **F05B 2270/331** (2013.01 - EP); **F05B 2270/8041** (2013.01 - EP); **F05D 2270/8041** (2013.01 - US); **F16B 37/14** (2013.01 - EP); **F16B 2200/95** (2023.08 - EP US); **G01L 5/24** (2013.01 - EP US); **G01N 21/9515** (2013.01 - EP US); **G06T 2207/30108** (2013.01 - EP US)

Cited by

CN112520064A

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)

DE 102016214705 A1 20180208; **DE 102016214705 B4 20220505**; EP 3497418 A1 20190619; US 11920561 B2 20240305; US 2020191122 A1 20200618; WO 2018029153 A1 20180215

DOCDB simple family (application)

DE 102016214705 A 20160808; EP 17755092 A 20170807; EP 2017069965 W 20170807; US 201716323952 A 20170807