

Title (en)

VORTEX GENERATORS FOR WIND TURBINE ROTOR BLADES HAVING NOISE-REDUCING FEATURES

Title (de)

WIRBELERZEUGER FÜR WINDTURBINENROTORSCHAUFELN MIT GERÄUSCHREDUZIERENDEN MERKMALEN

Title (fr)

GÉNÉRATEURS DE VORTEX POUR PALES DE ROTOR D'ÉOLIENNE AYANT DES CARACTÉRISTIQUES DE RÉDUCTION DE BRUIT

Publication

EP 3788255 A4 20211208 (EN)

Application

EP 18917568 A 20180430

Priority

US 2018030087 W 20180430

Abstract (en)

[origin: WO2019212456A1] The present disclosure is directed to vortex generators for wind turbine rotor blades having noise-reducing features. For example, the vortex generators are mounted within a laminar flow region on either the pressure side or the suction side of the rotor blade and have a base portion with at least one airflow modifying element extending therefrom. The base portion has a leading edge and a trailing edge extending in a first direction. Further, the base portion includes one or more edge features formed within either or both of the leading or trailing edges. Moreover, the edge features are non-parallel with respect to the first direction so as to reduce laminar boundary layer instability noise.

IPC 8 full level

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CPC (source: EP)

F03D 1/0633 (2013.01); **F05B 2240/3062** (2020.08); **Y02E 10/72** (2013.01)

Citation (search report)

- [E] EP 3514370 A1 20190724 - GEN ELECTRIC [US]
- [X] US 2016215758 A1 20160728 - CORTEN GUSTAVE PAUL [NL]
- [I] US 2017314530 A1 20171102 - HERRIG ANDREAS [DE], et al
- See also references of WO 2019212456A1

Designated contracting state (EPC)

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