Title (en)

WIND TURBINE WITH VERTICAL AXIS OF ROTATION AND DYNAMIC VANES

Title (de)

WINDTURBINE MIT VERTIKALER DREHACHSE UND DYNAMISCHEN FLÜGELN

Title (fr)

TURBINE D'EOLIENNE A AXE DE ROTATION VERTICAL ET PALES DYNAMIQUES

Publication

EP 3807526 A1 20210421 (FR)

Application

EP 19735219 A 20190612

Priority

- FR 1855233 A 20180614
- EP 2019065403 W 20190612

Abstract (en)

[origin: WO2019238785A1] The invention relates to a wind turbine (110) comprising radial dynamic vanes (4), formed by a supporting structure (40) defining an opening (41), in which a pivoting flap (42) is mounted that is coupled to a contactless magnetic activation mechanism (20, 22) in order to be moved between an active position (PA), in which it closes said opening and offers maximum wind resistance, and a passive position (PP), in which it opens said opening and offers minimal or even zero wind resistance. The activation mechanism comprises a fixed magnetic head (20) provided with a circular magnetic track (21), separated into two circular sectors with opposing magnetic polarities, and magnetic movable elements (22) with the same polarity, each coupled to a pivoting flap (42) and disposed facing the magnetic track (20) so that, during the rotation of the turbine, the magnetic attraction or repulsion generated by the opposing or identical magnetic polarities between the head and the movable elements causes the pivoting flaps to move in one direction then in the other direction for each half-revolution of the wind turbine.

IPC 8 full level

F03D 3/06 (2006.01); **F03D 7/06** (2006.01)

CPC (source: EP)

F03D 3/068 (2013.01); **F03D 7/06** (2013.01); F05B 2240/218 (2013.01); F05B 2260/302 (2013.01); F05B 2260/79 (2013.01); Y02E 10/74 (2013.01)

Citation (search report)

See references of WO 2019238785A1

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 2019238785 A1 20191219; EP 3807526 A1 20210421; FR 3082567 A1 20191220; FR 3082567 B1 20200717

DOCDB simple family (application)

EP 2019065403 W 20190612; EP 19735219 A 20190612; FR 1855233 A 20180614