



(43) International Publication Date
1 May 2014 (01.05.2014)

(10) International Publication Number
WO 2014/064626 A3

(51) International Patent Classification:
F03D 1/06 (2006.01)

(21) International Application Number:
PCT/IB2013/059584

(22) International Filing Date:
23 October 2013 (23.10.2013)

(25) Filing Language: Italian

(26) Publication Language: English

(30) Priority Data:
MI2012A001797 23 October 2012 (23.10.2012) IT

(71) Applicant: **WILIC S.AR.L.** [LU/LU]; 1, Boulevard de la Foire, L-1528 Luxembourg (LU).

(72) Inventor: **ROCHHOLZ, Hermann**; c/o WILIC S.AR.L., 1, Boulevard de la Foire, L-1528 Luxembourg (LU).

(74) Agents: **BOGGIO, Luigi** et al.; STUDIO TORTA S.p.A., Via Viotti, 9, I-10121 Torino (IT).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

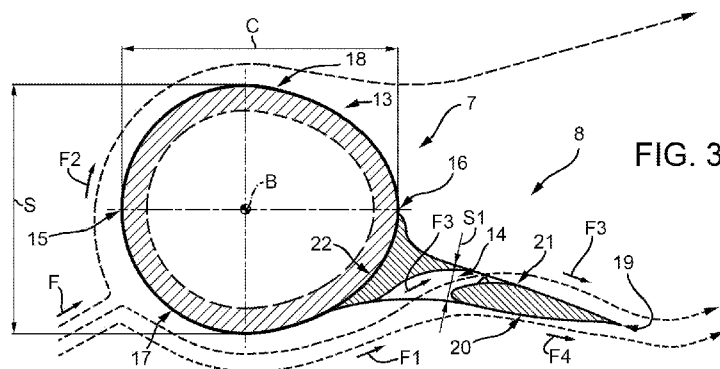
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:
26 June 2014

(54) Title: WIND TURBINE AERODYNAMIC ROTOR BLADE APPENDIX AND WIND TURBINE BLADE PROVIDED WITH SUCH AN AERODYNAMIC APPENDIX



(57) Abstract: An aerodynamic appendix (8) for a wind turbine blade (7) is designed to fit to the inner portion (12) and intermediate portion (13) of the wind turbine blade (7), and has a trailing edge (19), a pressure side (20), a suction side (21), and at least one duct (14) connecting the pressure side (20) fluidically to the suction side (21).

INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2013/059584

A. CLASSIFICATION OF SUBJECT MATTER
INV. F03D1/06
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
F03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EP0-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2010/133649 A2 (VESTAS WIND SYS AS [DK]; GODSK KRISTIAN BALSCHMIDT [DK]) 25 November 2010 (2010-11-25) figures 6a,6b,6c -----	1,18
A	US 2012/051936 A1 (EISENBERG DREW [US]) 1 March 2012 (2012-03-01) abstract; figures 4,5 -----	1-18
A	EP 2 107 235 A1 (LM GLASFIBER AS [DK]) 7 October 2009 (2009-10-07) abstract; figures 5-8 -----	1-18
A	US 2 135 887 A (RICHARD FAIREY CHARLES) 8 November 1938 (1938-11-08) figures 1-8 -----	1

☐

Further documents are listed in the continuation of Box C.

☒

See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

28 April 2014

Date of mailing of the international search report

09/05/2014

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Avramidis, Pavlos

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2013/059584

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2010133649 A2	25-11-2010	CN 102459874 A DK 2432993 T3 EP 2432993 A2 ES 2433244 T3 US 2012107117 A1 WO 2010133649 A2	16-05-2012 11-11-2013 28-03-2012 10-12-2013 03-05-2012 25-11-2010
US 2012051936 A1	01-03-2012	CN 103089536 A EP 2589797 A2 US 2012051936 A1	08-05-2013 08-05-2013 01-03-2012
EP 2107235 A1	07-10-2009	CN 102046965 A DK 2286084 T3 EP 2107235 A1 EP 2286084 A1 US 2011020128 A1 WO 2009121927 A1	04-05-2011 24-09-2012 07-10-2009 23-02-2011 27-01-2011 08-10-2009
US 2135887 A	08-11-1938	NONE	