



(51) International Patent Classification:

H02K 1/27 (2006.01) H02K 7/18 (2006.01)
H02K 5/18 (2006.01) F03D 9/00 (2006.01)

(21) International Application Number:

PCT/IB2012/051133

(22) International Filing Date:

10 March 2012 (10.03.2012)

(25) Filing Language:

Italian

(26) Publication Language:

English

(30) Priority Data:

MI2011A000374 10 March 2011 (10.03.2011) IT

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(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, 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, IS, JP, KE, KG, KM, 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, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, MD, 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, 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:

15 November 2012

(54) Title: WIND TURBINE

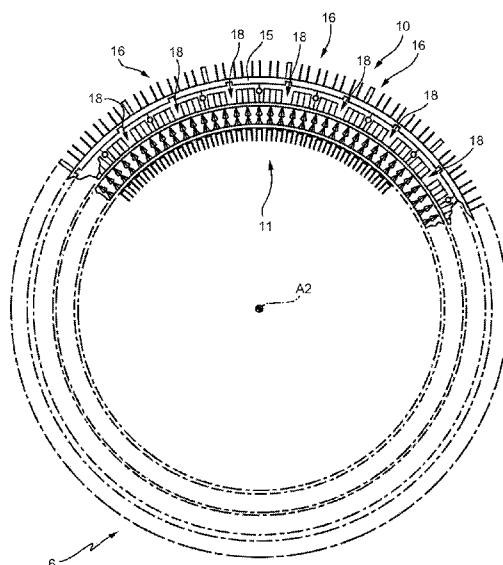


FIG. 2

(57) Abstract: A wind turbine having an electric machine (6), in turn having a stator (10), and a rotor (11) which rotates about an axis of rotation (A2) with respect to the stator (10); the rotor (11) having a plurality of magnetized modules (25), and a rotor cylinder (20; 40) which extends circumferentially, rotates about an axis of rotation (A2), and is designed to support the plurality of magnetized modules (25); and wherein the rotor cylinder (20; 40) is made of nonmagnetic material.



INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2012/051133

A. CLASSIFICATION OF SUBJECT MATTER
 INV. H02K1/27 H02K5/18
 ADD. H02K7/18 F03D9/00

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)
 H02K

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)
 EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 10 2009 025929 A1 (SPEVACEK ULRICH [DE]) 9 December 2010 (2010-12-09) paragraph [0001]; figures 3,4 paragraph [0015] paragraph [0019]	1-11
X	WO 2006/017377 A2 (NORTHERN POWER SYSTEMS INC [US]; COSTIN DANIEL [US]; JOHN VINOD [US]) 16 February 2006 (2006-02-16) paragraph [0002] paragraph [0005]	1,2,4, 10,11
X	US 2006/255679 A1 (DINE PIETER V [US] ET AL) 16 November 2006 (2006-11-16) paragraph [0032]; figures	1,2,10, 11
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Date of the actual completion of the international search 10 September 2012	Date of mailing of the international search report 27/09/2012
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INTERNATIONAL SEARCH REPORT

International application No
PCT/IB2012/051133

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 445 062 A (GLASER JERRY [US]) 24 April 1984 (1984-04-24) figures 1,2,4 -----	1,2,4,6
A	EP 2 282 397 A1 (WILIC S AR L [LU]) 9 February 2011 (2011-02-09) figures -----	1,2,4,11
A	WO 2007/063370 A1 (HIGH TECHNOLOGY INVESTMENTS B [NL]; PABST OTTO [IT]; GARDINO FRANCO [I]) 7 June 2007 (2007-06-07) figures -----	1,2,4,11
A	WO 2009/091248 A2 (LAGERWEY WIND BV [NL]; LAGERWEIJ HENDRIK LAMBERTUS; PUBANZ ANDRE HEINZ) 23 July 2009 (2009-07-23) page 5, line 34 - line 35; figure 3 -----	3,5
A	GB 2 080 707 A (PIAGGIO & C SPA) 10 February 1982 (1982-02-10) page 1, line 102 - line 107; figure 1 -----	9

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IB2012/051133

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 102009025929 A1	09-12-2010	NONE	

WO 2006017377 A2	16-02-2006	US 2006028083 A1 WO 2006017377 A2	09-02-2006 16-02-2006

US 2006255679 A1	16-11-2006	US 2006255679 A1 WO 2006124704 A1	16-11-2006 23-11-2006

US 4445062 A	24-04-1984	NONE	

EP 2282397 A1	09-02-2011	CA 2712317 A1 EP 2282397 A1 US 2011187218 A1	07-02-2011 09-02-2011 04-08-2011

WO 2007063370 A1	07-06-2007	AT 451747 T AU 2006321328 A1 CA 2631063 A1 CN 101395783 A DK 1964241 T3 EA 200801472 A1 EP 1964241 A1 ES 2339160 T3 NZ 568859 A US 2009302702 A1 WO 2007063370 A1	15-12-2009 07-06-2007 07-06-2007 25-03-2009 29-03-2010 27-02-2009 03-09-2008 17-05-2010 29-10-2010 10-12-2009 07-06-2007

WO 2009091248 A2	23-07-2009	EP 2232066 A2 NL 2001190 C1 US 2011001320 A1 WO 2009091248 A2	29-09-2010 20-07-2009 06-01-2011 23-07-2009

GB 2080707 A	10-02-1982	BE 889691 A1 DE 3126649 A1 ES 8204247 A1 FR 2487598 A1 GB 2080707 A IN 156132 A1 IT 1131966 B MX 157642 A NL 8103082 A US 4433473 A	16-11-1981 27-05-1982 16-07-1982 29-01-1982 10-02-1982 18-05-1985 25-06-1986 08-12-1988 16-02-1982 28-02-1984
