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(54) Title: WIND TURBINE OF LOW WIND SPEEDS

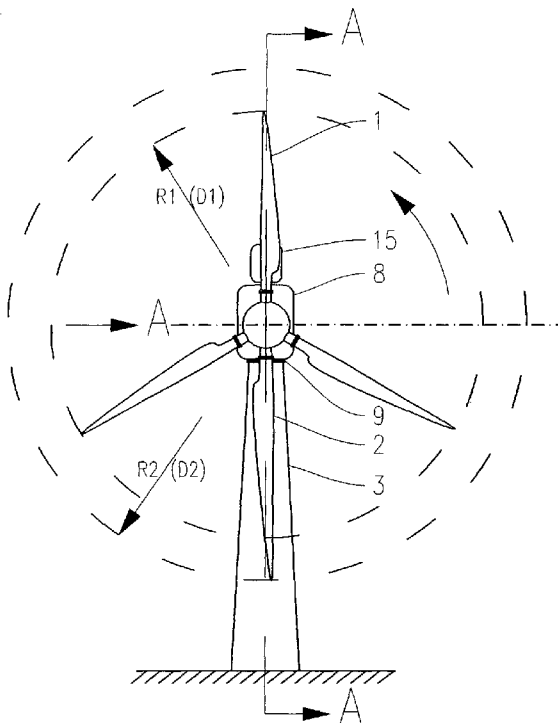


Fig. 1

(57) Abstract: Horizontal axis W/T of low wind speeds of propeller type, bearing a main rotor of three blades (1), while in the space between two successive blades (1) and diametrically opposite to the third, an additional 4th blade (2) also of propeller type but of significantly longer length, is interposed. This additional blade (2) is not permanently coupled but selectively engaged in the system of the W/T at low wind speeds, contributing to the startup and enhancing the energy production. The blade (2) bears diametrically opposite a counterweight (15) to balance the forces developed, and rotates in a plane parallel to the main rotor. The coupling of the blade (2) is preferably made at the stand-by state or at low wind speed operation of the W/T, while the uncoupling will be performed during operating state and at the rated power. The blade (2) after uncoupling, gets in vertical position and remains immobilized attached to the tower (3).



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

B. FIELDS SEARCHED
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 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)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DE 10 2006 050498 B3 (NAGEL HANS H [DE]) 31 January 2008 (2008-01-31) figures paragraphs [0010], [0011] -----	1,2,4,5, 7-12
Y	WO 2007/057021 A1 (L M GLASFIBER S A [DK]; GRABAU PETER [DK]) 24 May 2007 (2007-05-24) page 10, line 6 - line 10 -----	1,2,4,5, 7-12
A	DE 297 06 980 U1 (SCHULTE WALTER [DE]) 10 July 1997 (1997-07-10) figures 1, 2 page 5 - page 6 -----	1-12
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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 Altmann, Thomas
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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 6 856 042 B1 (KUBOTA HISAOMI [JP]) 15 February 2005 (2005-02-15) figures 8, 9, 12 column 11, line 1 - column 14, line 7 column 7, line 17 - line 19 -----	1-12

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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