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(54) Title: SHAFTLESS VERTICAL AXIS WIND TURBINE

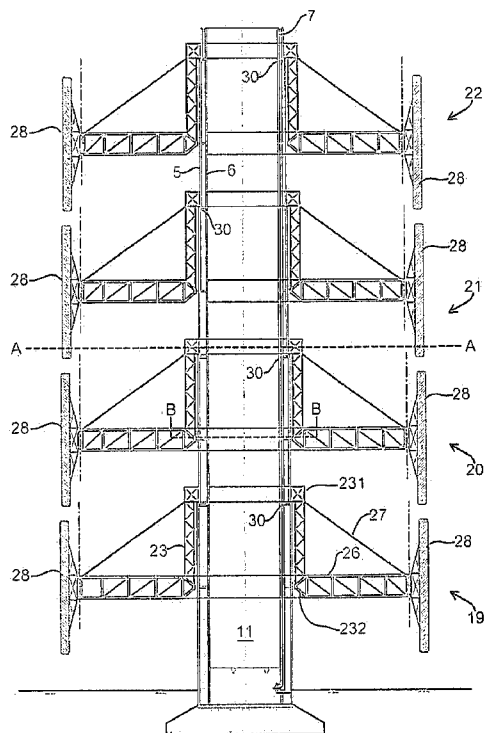


Figure 1

(57) Abstract: A shaftless vertical axis wind turbine has a stationary hollow core having inner and outer circular walls with a void between the inner and outer walls. A rotor is rotatably supported about the core and has a plurality of radially extending rotor arms each having a wind engaging rotor blade located at a distal end.



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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 practical, 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	WO 92/08893 A (PEACE STEVEN JOHN [GB]) 29 May 1992 (1992-05-29) page 7, line 23 - page 8, line 17; figures 5-7	1-19
X	DE 100 65 548 A1 (NEUHAEUSER GMBH [DE]) 4 July 2002 (2002-07-04) abstract; figures 1,2	1
X	US 4 134 708 A (BRAUSER BRADLEY O ET AL) 16 January 1979 (1979-01-16) abstract; figures 1-4	1

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☒ See patent family annex.

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9208893	A	29-05-1992	AT 127198 T	15-09-1995
			DE 69112636 D1	05-10-1995
			EP 0556253 A1	25-08-1993
			US 5419683 A	30-05-1995
DE 10065548	A1	04-07-2002	NONE	
US 4134708	A	16-01-1979	NONE	