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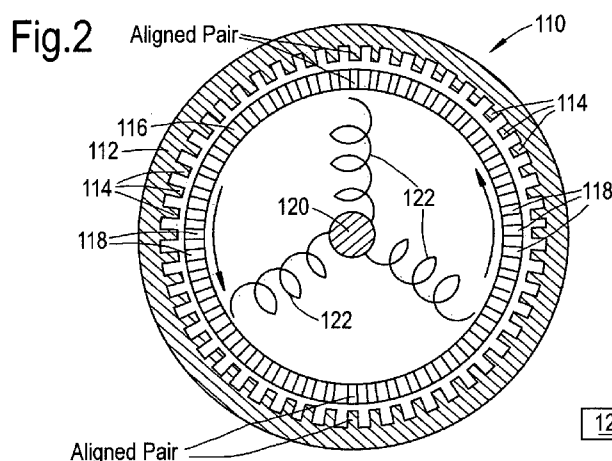
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

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 — 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))

[Continued on next page]

(54) Title: A MAGNETIC HARMONIC GEARBOX



(57) Abstract: A magnetic harmonic gearbox (110) according to the present invention comprises a first ferromagnetic member (112) and the first member (112) has a plurality of spaced teeth (114). A second member (116) is arranged within the first member (112) and the second member (116) has a plurality of spaced discrete ferromagnetic poles (118). The first and second members (112, 116) are relatively rotatable. A third member (120) is arranged within the second member (116) and the third member (120) is rotatable. The number of teeth (114) on the first member (112) is different to the number of poles (118) on the second member (116). The third member (120) comprises at least one electromagnet (122) and means (124) to modulate the current supplied to the at least one electromagnet (122) to produce a rotating magnetic field. The magnetic harmonic gearbox (110) may be operated to function as a clutch and may be used to drive an electrical generator from a wind turbine, a water turbine or a tidal turbine.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

H02K H02P

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)

EP0-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 197 849 A1 (ALSTHOM CGEE [FR]) 15 October 1986 (1986-10-15) abstract; figures page 4, line 11 - page 5, line 27 -----	1-22
A	WO 2007/107691 A1 (ROLLS ROYCE PLC [GB]; BRIGHT CHRISTOPHER GRAHAM [GB]) 27 September 2007 (2007-09-27) abstract; figures -----	1-22
A	WO 96/22630 A1 (ROBINSON ALAN KEITH [GB]) 25 July 1996 (1996-07-25) abstract; figures -----	1-22



Further documents are listed in the continuation of Box C.



See patent family annex.

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Date of the actual completion of the international search

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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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			US	2010090552 A1	15-04-2010

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