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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, 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, PA, 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.

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[Continued on next page]

(54) **Title:** BEARING POWER GENERATING CONFIGURATION

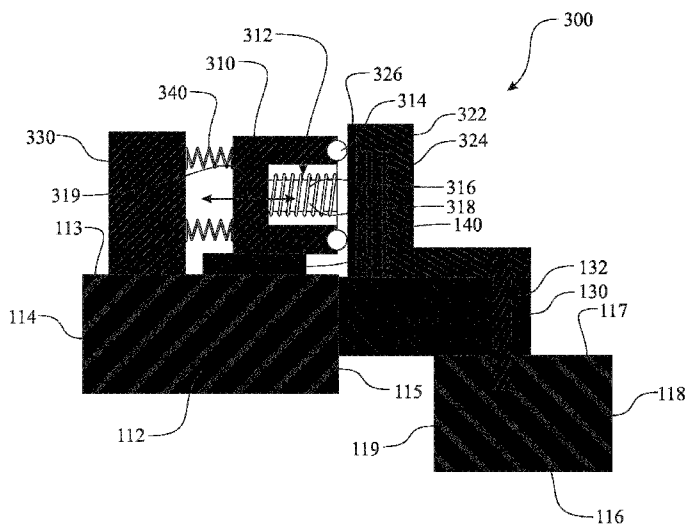


FIG. 3

(57) **Abstract:** A power generating bearing assembly (100) comprising a power generating subassembly (200, 300, 400) integrated into a bearing (110). The power generating subassembly (300, 400) utilizes the relative motion between a bearing inner ring (112) and a bearing outer ring (116) of the bearing (110) to generate electrical power. A sealing system (130) is attached to one of the bearings (112, 116). The power generating subassembly (300, 400) includes an electrical generator (310, 410) in operational engagement with a magnetically polarized material (324, 424). The electrical generator (310, 410) is attached to the non-sealing carrying bearing (112, 116). The magnetically polarized material (324, 424) can be attached directly to the sealing system (130) or carried by a magnetically polarized material mount ring (320). The relative motion between the rings (112, 116) engages the electrical generator (310, 410) and the magnetically polarized material (324, 424) causing a generator core (312, 412) of the electrical generator (310, 410) to create an electrical current.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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 F16C

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, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 2004/105602 A1 (MIZUTANI MASATOSHI [JP] ET AL) 3 June 2004 (2004-06-03) abstract figures 1, 4, 5 paragraph [0002] - paragraph [0005] claim 1	1,7,14 2-6, 8-13, 15-18
Y A	US 4 948 277 A (ALFF DENIS [US]) 14 August 1990 (1990-08-14) abstract figures 1-6 column 1, line 54 - column 2, line 20	1,7,14 2-6, 8-13, 15-18
A	JP 2003 278779 A (NTN TOYO BEARING CO LTD) 2 October 2003 (2003-10-02) abstract figures 1, 2	1-12

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 15 July 2014	Date of mailing of the international search report 22/07/2014
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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 Maas, Erik
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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