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[Continued on next page]

(54) Title: BEARING EMBEDDED POWER GENERATION CONFIGURATION

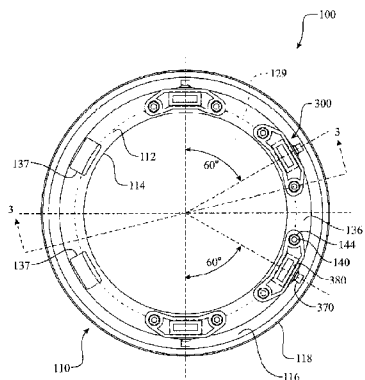


FIG. 2

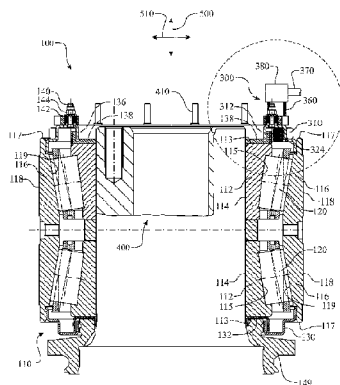


FIG. 3

(57) Abstract: A power generating bearing assembly (100) comprising a power generating subassembly (200, 300) integrated into a bearing (110). The power generating subassembly (300) 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 member (136) is attached to one of the bearings (112, 116) at one end thereof. The power generating subassembly (300) includes an electrical generator (320) assembled through an aperture (137) of the sealing member (136) within an interior section of the bearing (110) and positioned to be in operational engagement with a magnetically polarized material (324). The magnetically polarized material (324) is integrated into a magnetic ring (138), which is attached to the non-seal carrying bearing ring. The relative motion between the rings (112, 116) engages the electrical generator (310) and the magnetically polarized material (324) causing a generator core (312) of the electrical generator (320) to create an electrical current.





MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,  
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ADD.  
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B. FIELDS SEARCHED  
Minimum documentation searched (classification system followed by classification symbols)  
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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.
X	DE 10 2010 018472 A1 (SCHAEFFLER TECHNOLOGIES GMBH [DE]) 5 January 2011 (2011-01-05) abstract paragraph [0029] - paragraph [0034] paragraphs [0048], [0049], [0057] claims 1, 10-12 figures 1-3	1-19
A	DE 10 2010 021159 A1 (SCHAEFFLER TECHNOLOGIES GMBH [DE]) 24 November 2011 (2011-11-24) abstract figures 4, 5 paragraph [0002] - paragraph [0005] claim 1	1-19

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See patent family annex.

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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 2004/105602 A1 (MIZUTANI MASATOSHI [JP] ET AL) 3 June 2004 (2004-06-03) abstract figures 4, 5 paragraph [0002] - paragraph [0005] claim 1  -----	1-19

# INTERNATIONAL SEARCH REPORT

Information on patent family members

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