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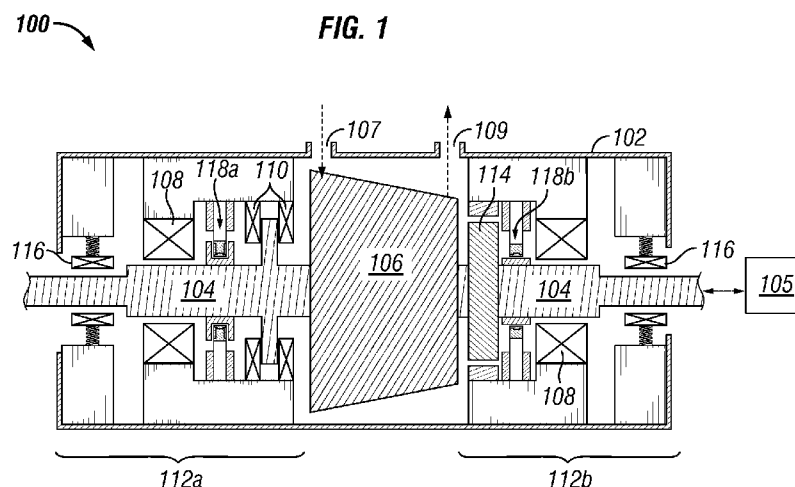
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HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
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(54) **Title:** SELF-LUBRICATING SNUBBER BEARING



(57) **Abstract:** Disclosed is a snubber bearing assembly for protecting a rotor and accompanying bearings from radial and axial rotor transient overload events. The bearing assembly includes a snubber journal mounted on the rotor and a snubber housing having a radial snubber bearing mounted on its inside surface, the radial snubber bearing being radially-offset from an outer radial surface of the snubber journal. Lubricating plugs are disposed within a plurality of holes defined in the radial snubber bearing, the lubricating plugs being configured to provide lubrication between the radial contact surface and the outer radial surface during a radial rotor transient overload event. The snubber housing can also include opposing axial snubber bearings that have lubricating plugs disposed within holes defined therein also. The opposing axial snubber bearings are configured to be axially-offset from inner axial surfaces defined by the rotor journal and provide lubrication therebetween during an axial rotor transient overload event.



INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/031237**A. CLASSIFICATION OF SUBJECT MATTER*****F16C 33/10(2006.01)i, F16C 17/10(2006.01)i, F01D 25/16(2006.01)i***

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)

F16C 33/10; F16C 33/06; F16C 33/02; F16C 33/04; F16C 3/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: snubber bearing, lubrication, rotating, plug, hole, groove, spinodal, graphite

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2005-0008271 A1 (LEE, HUEI-LONG) 13 January 2005 See abstract, paragraphs [0002],[0004],[0029]-[0031] and figures 1,2,4,5.	1-20
A	US 06095690 A (NIEGEL, FRITZ et al.) 01 August 2000 See abstract, column 5, lines 46-60, column 7, lines 1-5 and figures 1,2,8.	1-20
A	KR 10-2007-0106390 A (WIELAND-WERKE AG) 01 November 2007 See paragraphs [0021],[0022].	1-20
A	JP 2004-340248 A (DAIDO METAL CO., LTD.) 02 December 2004 See abstract, paragraphs [0016],[0044] and figure 9.	1-20

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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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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		EP 0877866 B1	20.10.1999
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