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(54) Title: AUXILIARY BEARING SYSTEM WITH PLURALITY OF INERTIA RINGS FOR MAGNETICALLY SUPPORTED ROTOR SYSTEM

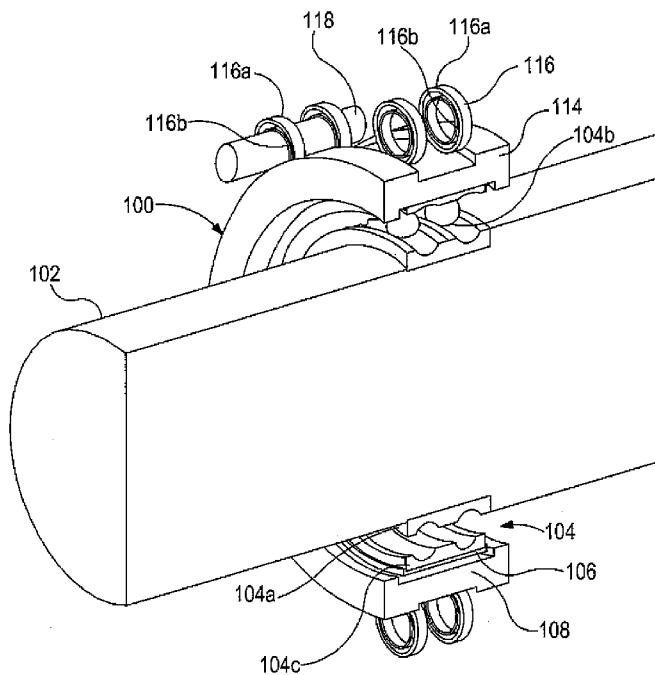


FIG. 2

(57) Abstract: An auxiliary bearing system for supporting a rotating shaft including a first auxiliary bearing coupled to the rotating shaft. A first inertia ring is coupled to and circumscribes the first auxiliary bearing. A second inertia ring circumscribes the first inertia ring. A radial clearance is defined between the first and second inertia rings when the rotating shaft is supported by a primary bearing system, and the first inertia ring engages the second inertia ring when the rotating shaft is not supported by the primary bearing system. A second auxiliary bearing is engaged with an outer surface of the second inertia ring.



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**B. FIELDS SEARCHED**

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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) &amp; Keywords: auxiliary, emergency, back-up, bearing, inertia, ring

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 05231323 A (NEW, NIGEL H.) 27 July 1993 See abstract, column 2, line 48 - column 4, line 66 and figure.	1-20
A	US 04982126 A (JOLIVET, JEAN et al.) 01 January 1991 See abstract, column 2, line 65 - column 3, line 51 and figure 1.	1-20
A	US 05083053 A (NEW, NIGEL H.) 21 January 1992 See abstract, column 3, line 39 - column 5, line 8 and figures 1,2.	1-20
A	US 05021697 A (KRALICK, JAMES H.) 04 June 1991 See column 1, line 65 - column 2, line 34 and figures 1-2A.	1-20

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

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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