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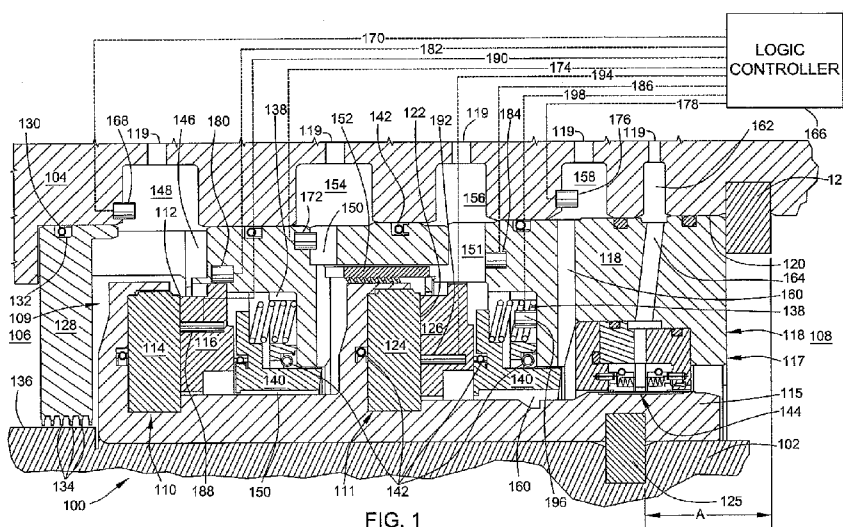
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(54) Title: SEAL MONITORING AND CONTROL SYSTEM



(57) Abstract: A seal monitoring and control system for a gas lubricated non-contacting seal includes various sensors providing signals to a programmable logic control system. The control system is disposed to determine a presence of an anomalous operating condition of the seal, for example, based on phase, relative position of rotor to stator or other signals in combination provided by the various sensors to provide an output signal, which in one embodiment performs at least one mitigating process to correct the anomalous operating condition by adjusting at least one operating parameter of the seal.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/044627

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - F16J 15/34 (2009.01)

USPC - 277/358

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)

IPC(8) - F16J 15/34 (2009.01)

USPC - 277/358

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)

MicroPatent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,715,985 B2 (DELRAHIM et al) 06 April 2004 (06.04.2004) entire document	24-30
Y		1-23, 31-37
Y	JP 5-164412 A (UMEDA et al) 29 June 1993 (29.06.1993) entire document	1-11, 14, 34, 36
Y	US 4,613,285 A (SATO et al) 23 September 1986 (23.09.1986) entire document	6-8
Y	US 4,389,849 A (GASSER et al) 28 June 1983 (28.06.1983) entire document	9, 10, 12-23, 31-37
Y	US 7,272,525 B2 (BENNETT et al) 18 September 2007 (18.09.2007) entire document	11, 23, 37
Y	US 6,981,513 B2 (KRYWITSKY) 03 January 2006 (03.01.2006) entire document	20-22

 Further documents are listed in the continuation of Box C.

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