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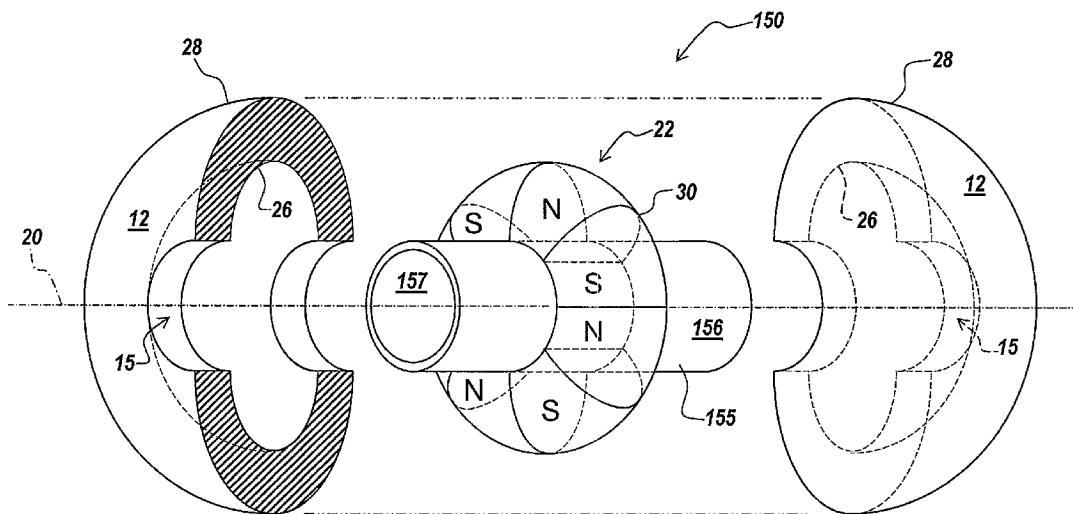
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(54) Title: ROTATIONAL APPARATUS



(57) Abstract: Disclosed herein are apparatuses having a stator and a rotor configured to provide both a magnetic drive means and a magnetic bearing means for a rotatable element. The stator and rotor are configured to operate in unison to provide a magnetic force to rotate a rotatable element associated with the rotor about an axis and to control a radial, an axial, and a tilt position of the rotatable element about the axis. The rotor and stator assemblies are configured with complementary surface shapes to produce shapeable magnetic drive forces and shapeable magnetic bearing forces to drive and control an axial, a radial, and a tilt position of an associated rotatable element.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - F04B 17/00 (2007.01)
 USPC - 310/90.5; 417/356, 420
 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)
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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)

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 6,100,618 A (SCHOEB et al) 08 August 2000 (08.08.2000) entire document	1-26
A	US 6,056,518 A (ALLEN et al) 02 May 2000 (02.05.2000) entire document	1-26
A	US 2001/0009645 A1 (NODA) 26 July 2001 (26.07.2001) entire document	1-26

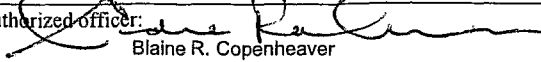
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