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- (71) Applicant (for all designated States except US): **ELECTRIC POWER RESEARCH INSTITUTE, INC.**
[US/US]; 3412 Hillview Avenue, Palo Alto, CA 94303 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **FLORA, John** [US/US]; 5108 Wedgewood Road, Lynchburg, VA 24503 (US). **ALI, Muhammad** [PK/US]; 301 Reno Drive, Lynchburg, VA 24502 (US). **POWERS, Grady** [US/US]; 115 Mullbury Place, Lynchburg, VA 24502 (US).
- (74) Agents: **CURATOLO, Joseph, G.** et al.; Curatolo Sidoti Co., LPA, 24500 Center Ridge Road, Suite 280, Cleveland, OH 44145 (US).

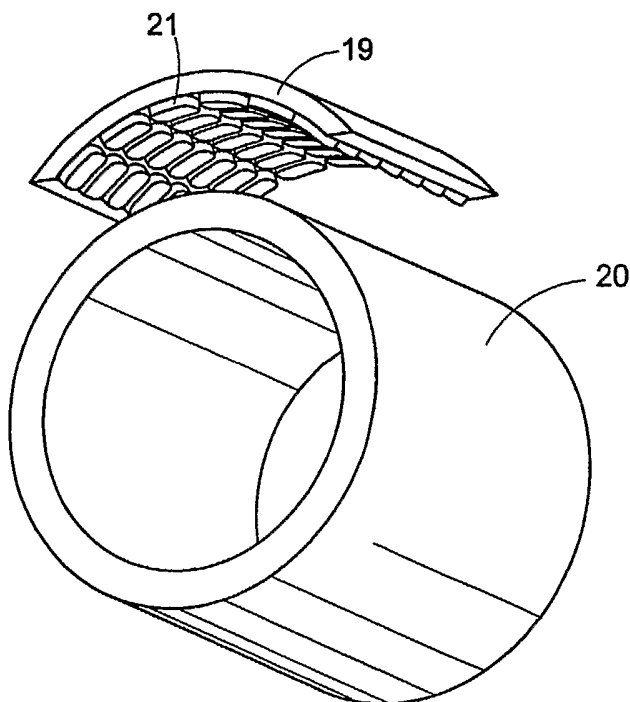
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(54) Title: FLEXIBLE ELECTROMAGNETIC ACOUSTIC TRANSDUCER SENSOR



(57) Abstract: An array of magnets (19) designed of flexible components and materials can be easily shaped to fit to the contour of various curved surfaces and structures (3). EMATs that incorporate these magnets (19), in addition to being flexible, may be smaller in volume than the conventional EMAT magnets and therefore easier to apply to complex structures where access may be restricted. Also, flexible multiple-pole magnet arrays (19) can be easily and economically fabricated in various shapes and configurations, thereby increasing versatility, utility and cost effectiveness in comparison to the rigid, conventional magnet designs.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US05/25708

A. CLASSIFICATION OF SUBJECT MATTER
 IPC: G01N 29/00(2006.01),29/04(2006.01),29/24(2006.01);H04R 15/00(2006.01)
 USPC: 73/643;367/168
 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)
 U.S. : 73/643, 644, 642, 627, 622, 635-639; 367/140, 168
 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)
 EAST Database: electroacoustic magnet transducer, EMAT, flexible, flexibility, magnet, conform, conforming

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,359,898 A (LATIMER) 01 November 1994 (01.11.1994), column 3, lines 34-63.	1
X	US 4,102,207 A (FROST et al.) 25 July 1978 (25.07.1978), column 2, lines 11-14 and column 2, line 48 to column 5, line 15.	1-8, 19-20
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Y		9-18
Y	US 6,766,694 A (HUBSCHEN) 27 July 2004 (27.07.2004), column 6, line 7 to column 8, line 44.	9-18
Y	US 3,674,946 A (WINEY) 04 July 1972 (04.07.1972), column 2, line 66 to column 6, line 5.	9-18
A	US 5,691,476 A (MADARAS) 25 November 1997 (25.11.1997), Abstract.	1
A	US 4,434,663 A (PETERSON et al.) 06 March 1984 (06.03.1984), Abstract.	4-8

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

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Hezron E. Williams Telephone No. (703) 305-4900

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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 4,296,486 A (VASILE) 20 October 1981 (20.10.1981), Abstract.	4-8
A	US 4,058,002 A (MORAN) 15 November 1977 (15.11.1977), Abstract.	3-20