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(74) Agents: **MILLER, Alan, D.** et al.; Amster Rothstein & Ebenstein LLP, 90 Park Avenue, New York, NY 10016 (US).

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(71) Applicant (for all designated States except US): **ALBERT EINSTEIN COLLEGE OF MEDICINE OF YESHIVA UNIVERSITY** [US/US]; 1300 Morris Park Avenue, Bronx, NJ 10461 (US).

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(72) Inventors; and

(75) Inventors/Applicants (for US only): **AVDIEVICH, Nikolai, I.** [US/US]; 5615 Netherland Avenue, Apt.5A, Bronx, NJ 10471 (US). **HETHERINGTON, Hoby, P.** [US/US]; 15 Walker Lane, Woodbridge, CT 06525 (US).

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(54) Title: SURFACE COIL ARRAYS FOR SIMULTANEOUS RECEPTION AND TRANSMISSION WITH A VOLUME COIL AND USES THEREOF

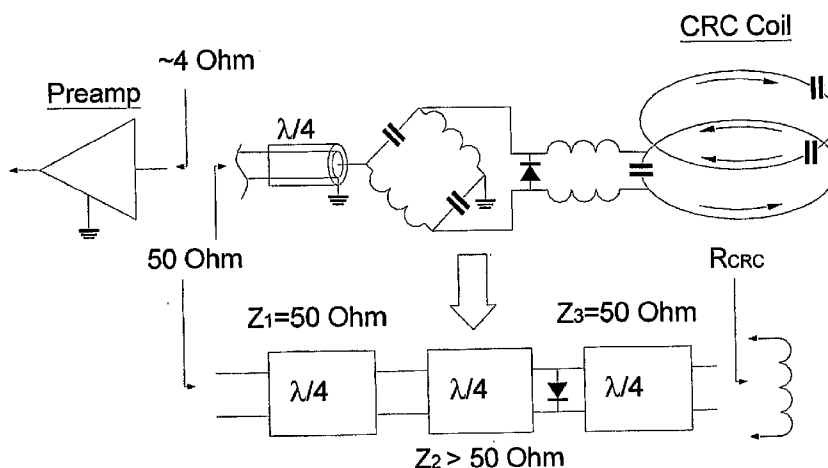


FIGURE 1

(57) Abstract: This invention provides arrays of counter rotating current surface coils for simultaneous reception and transmission with a volume coil for improved signal-to-noise ratio and radio frequency field homogeneity for in particular high-field (4-8 T) imaging of deep body regions, such as central brain structures.

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USPC - 324/318

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 6,169,401 B1 (FUJITA et al) 02 January 2001 (02.01.2001), entire document	1-2, 4-6, 9, 11, 13-15 ----
Y		3, 8, 10, 12, 16-18
Y	US 2003/0071622 A1 (REISKER et al) 17 April 2003 (17.04.2003), entire document	3, 8, 10, 12, 16-18
A	US 2005/0253581 A1 (AVDIEVICH et al) 17 November 2005 (17.11.2005), entire document	1-18

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Mail Stop PCT, Attn: ISA/US, Commissioner for Patents  
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Authorized officer:

Blaine R. Copenheaver

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