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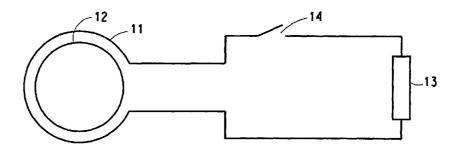
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(54) Title: FREQUENCY DETECTION SYSTEM COMPRISING CIRCUITRY FOR ADJUSTING THE RESONANCE FREQUENCY OF A HIGH TEMPERATURE SUPERCONDUCTOR SELF-RESONANT COIL



(57) **Abstract:** The use of a circuit to adjust the resonance frequency of a high temperature superconductor self-resonant transmit, receive, or transmit and receive coil results in improved performance. The circuit is useful in a frequency detection system, especially in a nuclear quadrupole resonance detection system.



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In pional Application No FUE / US2004/039438

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01R33/44 G01R33/36 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) GO1R IPC 7 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 practical, search terms used) EPO-Internal, WPI Data, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages Category ° WO 00/70356 A (INTERMAGNETICS GENERAL 1-40 X CORPORATION) 23 November 2000 (2000-11-23) the whole document US 5 999 000 A (SRINIVASAN ET AL) 1 - 40X 7 December 1999 (1999-12-07) column 2, lines 36-60, paragraph 5 - column 2, lines 43-45, paragraph 5; figures 1a,2 1-40 WO 99/45409 A (BTG INTERNATIONAL LTD; Α ROWE, MICHAEL, DAVID; SMITH, JOHN, ALEC, SYDNEY) 10 September 1999 (1999-09-10) page 23, paragraph 3 - page 23, paragraph -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "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 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or 'P' document published prior to the international filing date but later than the priority date claimed *&* document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 31/05/2005 10 May 2005 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-240, Tx. 31 651 epo nl, Dragomir, A Fax: (+31-70) 340-3016

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