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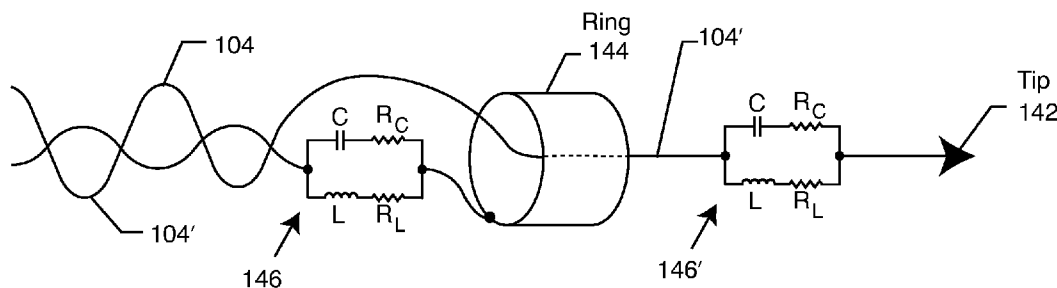
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(54) Title: BAND STOP FILTER EMPLOYING A CAPACITOR AND AN INDUCTOR TANK CIRCUIT TO ENHANCE MRI COMPATIBILITY OF ACTIVE MEDICAL DEVICES



(57) Abstract: A band stop filter is provided for a lead wire of an active medical device (AMD). The band stop filter includes a capacitor in parallel with an inductor. The parallel capacitor and inductor are placed in series with the lead wire of the AMD, wherein values of capacitance and inductance are selected such that the band stop filter is resonant at a selected frequency. The Q of the inductor may be relatively maximized and the Q of the capacitor may be relatively minimized to reduce the overall Q of the band stop filter to attenuate current flow through the lead wire along a range of selected frequencies. In a preferred form, the band stop filter is integrated into a TIP and/or RING electrode for an active implantable medical device.



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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61N 1/00 (2007.10) USPC - 607/2 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) - A61N 1/00 (2007.01) USPC - 607/2 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 - Y	US 2003/0050557 A1 (SUSIL et al) 13 March 2003 (13.03.2003) entire document	1-7, 9-11, 14-16, 18-23, 25-38, 40-47
Y	US 5,783,978 A (NOGUCHI et al) 21 July 1998 (21.07.1998) entire document	8, 12-13, 17, 24, 39, 48
Y	US 5,217,010 A (TSITLIK et al) 08 June 1993 (08.06.1993) entire document	8, 24, 39, 48
Y		12-13, 17
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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: <p align="center">Blaine R. Copenheaver</p> PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774