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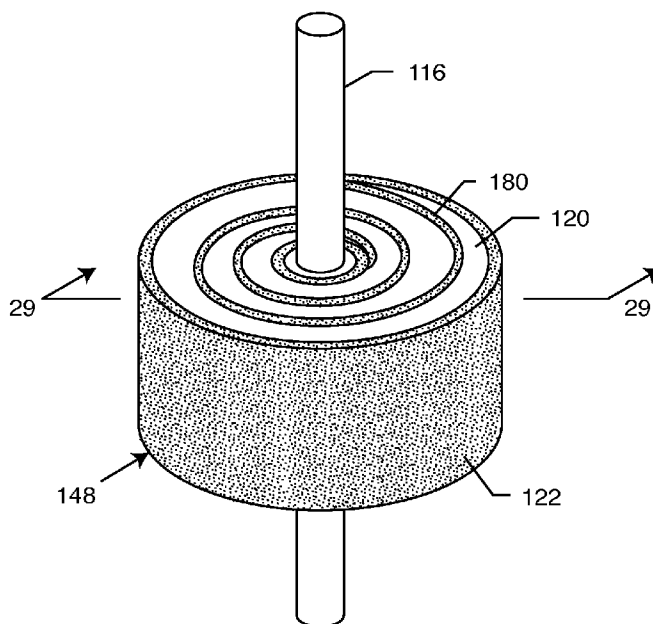
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[Continued on next page]

(54) Title: LOW LOSS BAND PASS FILTER FOR RF DISTANCE TELEMETRY PIN ANTENNAS OF ACTIVE IMPLANTABLE MEDICAL DEVICES



(57) Abstract: A hermetic terminal for an active implantable medical device (AIMD), includes an RF distance telemetry pin antenna, a capacitor conductively coupled between the antenna and a ground for the AIMD, and an inductor electrically disposed in parallel with the capacitor and conductively coupled between the antenna and a ground for the AIMD. The capacitor and the inductor form a band pass filter for attenuating electromagnetic signals through the antenna except at a selected frequency band. Values of capacitance and inductance are selected such that the band pass filter is resonant at the selected frequency band.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 06/60614

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - A61N 1/00 (2008.01)
USPC - 607/37

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 (2008.01); USPC: 607/37

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 607/37 (keyword limited -- see keywords below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (PGPB,USPT,EPAB,JPAB); GOOGLE SCHOLAR: implant, medical device, pacemaker, defibrillator, RF antenna, pin, chip, deposition, film, layer, inductor, inductance, capacitor, capacitance, filter bandpass, band pass, notch, MHz, hermetic, hermetically, electromagnetic interference, substrate, insulator, monolithic

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,539,253 B2 (THOMPSON et al.) 25 March 2003 (25.03.2003), entire document; col 6, ln 9 -18; col 6, ln 66-67; col 9, ln 33-44; Fig 1-3; col 13, ln 32-45 Fig 3-4; col 13, ln 32-52; col 9, ln 33 -44; col 15, ln col 4-61; col 16, ln 32-66; col 1, ln 25-42; col 14, ln 24-30; col 18, ln 26-36; col 17, ln 46-col 18, ln 36; col 17, ln 46-col 18, ln 36; col 7, ln 15-20.	1-87
Y	US 5,861,019 A (SUN et al.) 19 January 1999 (19.01.1999), entire document; col 7, ln 65-col 8, ln 2; col 14, ln 48-62; Fig 15.	1-87
Y	US 6,714,113 B1 (ABADEER et al.) 30 March 2004 (30.03.2004), entire document; col 4, ln 33-34; Fig 3; col 2, ln 43-52.	23, 36, 59, 85
Y	US 4,513,263 A (MINNIS) 23 April 1985 (23.04.1985), entire document; col 10, ln 46-49; col 12, ln 4-66.	2-7, 9-12, 71-74
A	US 5,836,992 A (THOMPSON et al.) 17 November 1998 (17.11.1998), entire document.	13-23, 24-25, 39-48, 61-74

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

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"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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