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(30) Priority: **20.11.2007 US 943470**

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(54) **RFID detection and identification system for implantable medical lead systems**

(57) A system for identifying active implantable medical devices (AIMD) and lead systems implanted in a patient using a radio frequency identification (RFID) tag having retrievable information relating to the AIMD, lead system and/or patient. The RFID tag may store information about the AIMD manufacturer, model number, serial number; lead wire system placement information and

manufacturer information; MRI compatibility due to the incorporation of bandstop filters; patient information, and physician and/or hospital information and other relevant information. The RFID tag may be affixed or disposed within the AIMD or lead wires of the lead system, or surgically implanted within a patient adjacent to the AIMD or lead wire system.

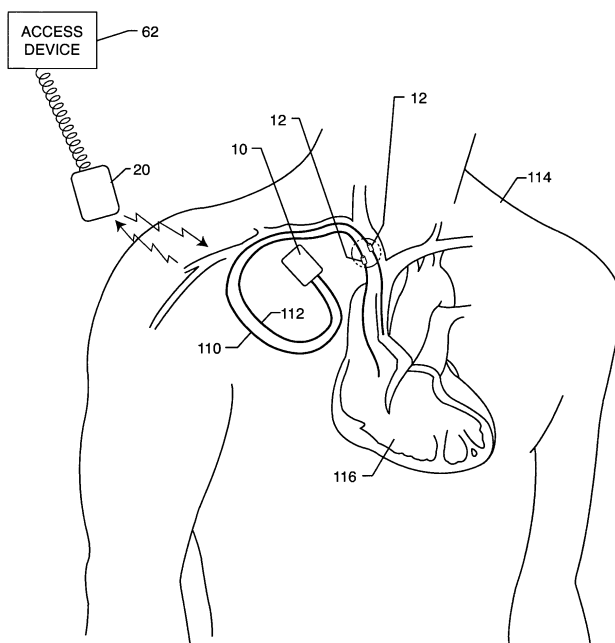


FIG. 29

**PARTIAL EUROPEAN SEARCH REPORT**

Application Number

which under Rule 63 of the European Patent Convention EP 08 02 0056 shall be considered, for the purposes of subsequent proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	EP 1 704 893 A (GREATBATCH SIERRA INC [US]) 27 September 2006 (2006-09-27) * abstract; figures 1-19 * * paragraphs [0007], [0010], [0012] * * paragraphs [0018] - [0021] * * paragraphs [0030] - [0036] * * paragraphs [0041], [0042] * * claims 15,19 * -----	8,9,11, 13-18, 23,24, 29,30	INV. A61B5/00 A61B19/00 A61N1/372 G06K19/077 A61N1/375
X	EP 0 619 101 A (BARD INC C R [US]) 12 October 1994 (1994-10-12) * abstract; figures 1-22 * * columns 6-11 * * columns 13-33 *	8,9,11, 13-15, 23,29	
X	EP 1 632 265 A (GREATBATCH SIERRA INC [US]) 8 March 2006 (2006-03-08) * abstract; figures 1-7 * * paragraphs [0016] - [0037] * * paragraphs [0178] - [0199] * ----- -/-	8,9,11, 13-15, 23,29	TECHNICAL FIELDS SEARCHED (IPC) A61B A61N G06K
INCOMPLETE SEARCH			
<p>The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for these claims.</p> <p>Claims searched completely :</p> <p>Claims searched incompletely :</p> <p>Claims not searched :</p> <p>Reason for the limitation of the search:</p> <p>see sheet C</p>			
Place of search Munich		Date of completion of the search 9 June 2009	Examiner Scheffler, Arnaud
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	



PARTIAL EUROPEAN SEARCH REPORT

Application Number
EP 08 02 0056

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	WO 2007/102893 A (GREATBATCH LTD [US]; FRYSZ CHRISTINE A [US]; STEVENSON ROBERT A [US];) 13 September 2007 (2007-09-13) * abstract; figures 1-37,118-144 * * paragraphs [0021] - [0027] * * paragraphs [0200] - [0260] * * paragraphs [0337] - [0360] * -----	10,12, 19-22, 25-28	
X	US 2007/112398 A1 (STEVENSON ROBERT A [US] ET AL) 17 May 2007 (2007-05-17) * abstract; figures 1-28,42-50 * * paragraphs [0220] - [0399] * -----	10,12, 19-22, 25-28	
			TECHNICAL FIELDS SEARCHED (IPC)



**INCOMPLETE SEARCH
SHEET C**

Application Number
EP 08 02 0056

Claim(s) not searched:
1-7

Reason for the limitation of the search (non-patentable invention(s)):

Claims 1-7 have not been searched, because they relate to non patentable subject-matter (Article 53 (c) EPC - Method for treatment of the human or animal body by surgery).



Application Number

EP 08 02 0056

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 08 02 0056

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 8,9,11,13,14,15,23,29

Radio frequency identification for retrievable information

2. claims: 16,17,18,24,30

Sealed container for implantable lead

3. claims: 10,12,19,20,21,22,25,26,27,28

Attenuation of current flow

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 08 02 0056

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

09-06-2009

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 1704893	A	27-09-2006	CA 2536477 A1	21-09-2006
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US 2007112398	A1	17-05-2007	JP 2009514617 T	09-04-2009

专利名称(译)	用于植入式医疗导线系统的RFID检测和识别系统		
公开(公告)号	EP2062525A3	公开(公告)日	2009-07-29
申请号	EP2008020056	申请日	2008-11-18
[标]申请(专利权)人(译)	格雷特巴奇有限公司		
申请(专利权)人(译)	格雷特巴奇LTD.		
当前申请(专利权)人(译)	格雷特巴奇LTD.		
[标]发明人	STEVENSON ROBERT A		
发明人	STEVENSON, ROBERT A.		
IPC分类号	A61B5/00 A61B19/00 A61N1/372 G06K19/077 A61N1/375		
CPC分类号	A61B1/00059 A61B5/0031 A61B90/90 A61B90/98 A61B2562/08 A61N1/056 A61N1/086 A61N1/37223 A61N1/37254 A61N1/3752 A61N1/3754		
优先权	11/943470 2007-11-20 US		
其他公开文献	EP2062525A2		
外部链接	Espacenet		

摘要(译)

一种用于使用具有与AIMD，引导系统和/或患者相关的可检索信息的射频识别（RFID）标签来识别植入患者体内的有源可植入医疗设备（AIMD）和引导系统的系统。RFID标签可以存储关于AIMD制造商的信息，型号，序列号；引线系统放置信息和制造商信息；由于结合了带阻滤波器，MRI兼容性；患者信息，医生和/或医院信息以及其他相关信息。RFID标签可以固定或设置在引线系统的AIMD或引线内，或者通过外科手术植入与AIMD或引线系统相邻的患者体内。

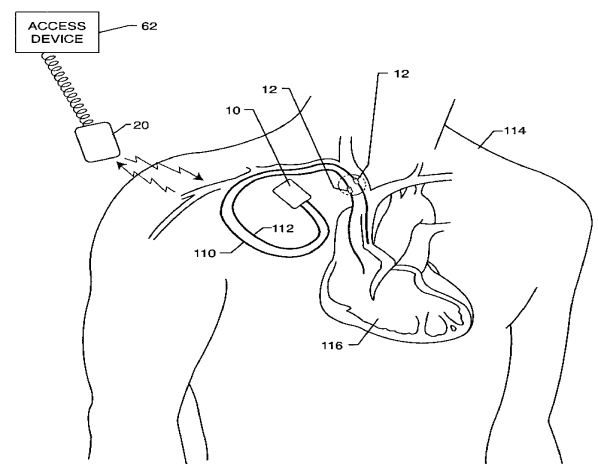


FIG. 29