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(30) Priority: **11.09.2006 US 530567**

(71) Applicant: **DePuy Products, Inc.**
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(54) **System for monitoring orthopaedic implant data**

(57) A system (10) for monitoring implant sensor data includes an orthopaedic implant (12), a patient exercise machine (14), and an antenna (24) coupled to the patient exercise machine. The orthopaedic implant includes a sensor (18) and a transmitter (20) configured to transmit implant sensor data. The antenna is selected from a

group of antennas based on the data rate and/or carrier frequency used by the transmitter. A controller (16) is coupled to the antenna and configured to display the implant data, or indicia thereof, on a display device (34) such as a computer monitor.

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EUROPEAN SEARCH REPORT

 Application Number
 EP 07 25 3590

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	US 2004/152972 A1 (HUNTER MARK [US]) 5 August 2004 (2004-08-05) * paragraphs [0134] - [0138]; figure 19 * -----	1-23	INV. A61B5/00
Y	US 4 573 475 A (DUKES JOHN N [US] ET AL) 4 March 1986 (1986-03-04) * column 1, line 7 - column 2, line 2 * -----	1-8	
Y	GB 2 272 575 A (GEC FERRANTI DEFENCE SYST [GB]; GEC MARCONI AVIONICS HOLDINGS [GB]) 18 May 1994 (1994-05-18) * page 4, lines 10-14 * -----	9-23	
A	US 2004/106967 A1 (VON ARX JEFFREY A [US] ET AL) 3 June 2004 (2004-06-03) * paragraphs [0047], [0054] * -----	1,9,17	
A	US 2005/012610 A1 (LIAO YEN-SHUO [US] ET AL) 20 January 2005 (2005-01-20) * paragraphs [0024] - [0032] * * paragraphs [0035] - [0042], [0051] * -----	1,9,17	
A	WO 2005/084544 A1 (DEPUY INT LTD [GB]; REVIE IAN [GB]; ASHBY ALAN [GB]; REZNIK DUDI [IL];) 15 September 2005 (2005-09-15) * page 16, line 1 - page 18, line 20 * * page 20, line 8 - page 25, line 23 * * page 30, lines 2-23 * * page 39, line 26 - page 40, line 9 * -----	1,9,17	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			A61B A63B A61N
Place of search		Date of completion of the search	Examiner
Berlin		18 April 2011	Trachterna, Morten
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone		T : theory or principle underlying the invention	
Y : particularly relevant if combined with another document of the same category		E : earlier patent document, but published on, or after the filing date	
A : technological background		D : document cited in the application	
O : non-written disclosure		L : document cited for other reasons	
P : intermediate document		& : member of the same patent family, corresponding document	

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 EPO FORM 1503 03.02 (P04C01)



Application Number

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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
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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: 1-8

System according to claim 1 comprising a loop antenna and operating at a data rate of less than 100kb/s

2. claims: 9-16

System according to claim 9 comprising a monopole antenna and operating at a data rate in the range of 100kb/s - 1000kb/s

3. claims: 17-23

System according to claim 17 comprising a patch antenna and operating at a data rate greater than 1000kb/s

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

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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.

18-04-2011

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		JP 2007528243 T	11-10-2007
		US 2008294258 A1	27-11-2008

专利名称(译)	用于监测整形外科植入物数据的系统		
公开(公告)号	EP1902673A3	公开(公告)日	2011-05-25
申请号	EP2007253590	申请日	2007-09-10
[标]申请(专利权)人(译)	德普伊产品公司		
申请(专利权)人(译)	DePuy公司PRODUCTS , INC.		
当前申请(专利权)人(译)	DePuy公司PRODUCTS , INC.		
[标]发明人	CAYLOR EDWARD J III		
发明人	CAYLOR, EDWARD J. III		
IPC分类号	A61B5/00		
CPC分类号	A61B5/0031 A61B5/4528 A61B5/745 A61F2002/48 A63B21/00 A63B22/00 A63B23/00 A63B2220/836 A63B2225/50 G06F19/3418 G16H20/30 G16H40/67 Y02A90/26		
优先权	11/530567 2006-09-11 US		
其他公开文献	EP1902673A2		
外部链接	Espacenet		

摘要(译)

用于监测植入物传感器数据的系统 (10) 包括整形外科植入物 (12) , 患者锻炼机器 (14) 和连接到患者锻炼机器的天线 (24) 。整形外科植入物包括传感器 (18) 和配置成传输植入物传感器数据的发射器 (20) 。基于发射机使用的数据速率和/或载波频率从一组天线中选择天线。控制器 (16) 耦合到天线并配置成在诸如计算机监视器的显示设备 (34) 上显示植入数据或其标记。

DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to class	CLASSIFICATION OF THE CITATION (IPC)
Y	US 2004/152972 A1 (HUNTER MARK [US]) 5 August 2004 (2004-08-05) * paragraphs [0134] - [0138]; figure 19 *	1-23	INV. A61B5/00
Y	US 4 573 475 A (DUKES JOHN N [US] ET AL) 4 March 1986 (1986-03-04) * column 1, line 7 - column 2, line 2 *	1-8	
Y	GB 2 272 575 A (GEC FERRANTI DEFENCE SYST [GB]; GEC MARCONI AVIONICS HOLDINGS [GB]) 28 May 1994 (1994-05-18) * page 4, lines 10-14 *	9-23	
A	US 2004/106967 A1 (VOH ASK JEFFREY A [US] ET AL) 3 June 2004 (2004-06-03) * paragraphs [0047] - [0054] *	1.9.17	
A	US 2005/032610 A1 (LIAO YEN-SHUO [US] ET AL) 20 January 2005 (2005-01-20) * paragraphs [0054] [0052] * * paragraphs [0055] - [0042], [0051] *	1.9.17	
A	WO 2005/084544 A1 (DEPUY INT LTD [GB]; BEVIE JAN [GB]; ASHBY ALAN [GB]; REZEK DUDI [IL]) 15 September 2005 (2005-09-15) * page 16, line 3 - page 19, line 20 * * page 20, line 8 - page 25, line 23 * * page 30, lines 2-23 * * page 39, line 26 - page 40, line 9 *	1.9.17	A61B A63B A61N

The present search report has been drawn up for all claims

SEARCHED	INDEXED	CLASSIFIED	EXTENDED
Berlin	18 April 2011	Trachtena, Morten	

1. INFORMATION SUBJECT

2. CATEGORIES OF CITED DOCUMENTS

3. PARTICULARLY RELEVANT CITATIONS

4. CITATIONS RELEVANT TO CLASSIFICATION

5. CITATIONS RELEVANT TO OTHER REASONS

6. CITATIONS OF THE SAME PATENT FAMILY, CORRESPONDING DOCUMENTS