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(54) **An implantable sensor and a method for calibrating the same**

(57) An implant includes a processor, RF communication circuitry, optical communication circuitry, a power source and a memory, all of which being hermetically sealed within a housing having a transparent window. Sensor readings are transmitted by RF using the RF communication circuitry to a remote reader after receiving interrogation signals from the reader. During calibration

of the sensor, corrective coefficients are calculated by comparing actual sensor pressure readings with known pressure readings. The corrective coefficients are transmitted to the memory of the control circuitry using optical communication wherein modulated light is transmitted through the transparent window of the housing to the photo-detector.

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EUROPEAN SEARCH REPORT

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EP 10 25 1324

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A	WO 2008/039543 A1 (UNIV CONNECTICUT [US]; OPTOELECTRONICS SYSTEMS CONSUL [US]; GRANTHAM G) 3 April 2008 (2008-04-03) * figure 1 * * claims * * paragraphs [0044] - [0050] * -----	1-16	
A	US 2001/039437 A1 (TAEPKE ROBERT T [US] ET AL) 8 November 2001 (2001-11-08) * figure 2 * * claims * * paragraphs [0031] - [0034] * -----	1-16	
A	US 2009/076353 A1 (CARPENTER GREG PAUL [US] ET AL) 19 March 2009 (2009-03-19) * figures * * claims * * paragraphs [0029] - [0035] * -----	1-16	TECHNICAL FIELDS SEARCHED (IPC) G01D G01L A61B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 29 June 2016	Examiner Moulara, Guilhem
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ANNEX TO THE EUROPEAN SEARCH REPORT
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

专利名称(译)	可植入传感器及其校准方法		
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申请(专利权)人(译)	科德曼NEURO科学SÀRL		
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其他公开文献	EP2280249A2 EP2280249B1		
外部链接	Espacenet		

摘要(译)

植入物包括处理器，RF通信电路，光学通信电路，电源和存储器，所有这些都密封在具有透明窗口的壳体内。在从读取器接收到询问信号之后，使用RF通信电路通过RF将传感器读数发送到远程读取器。在校准传感器期间，通过将实际传感器压力读数与已知压力读数进行比较来计算校正系数。使用光学通信将校正系数传输到控制电路的存储器，其中调制光通过壳体的透明窗口传输到光电检测器。

EUROPEAN SEARCH REPORT			Application Number EP 10 25 1324		
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The present search report has been drawn up for all claims.					
Munich		29 June 2016			
Moulaya, Guilhem					
<table border="0"> <tr> <td style="vertical-align: top;"> CATEGORY OF CITED DOCUMENTS X particularly relevant if taken into account in the examination of the application A Technological background document D non-written disclosure P intermediate document </td> <td style="vertical-align: top;"> 1 theory of principle underlying the invention B similar document, but not pertinent, or prior art D other type of document L documents cited for other reasons A: documents of the same patent family, corresponding document </td> </tr> </table>				CATEGORY OF CITED DOCUMENTS X particularly relevant if taken into account in the examination of the application A Technological background document D non-written disclosure P intermediate document	1 theory of principle underlying the invention B similar document, but not pertinent, or prior art D other type of document L documents cited for other reasons A: documents of the same patent family, corresponding document
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