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(54) Cable monitoring apparatus

(57) A cable monitoring apparatus includes a housing having an input interface adapted to electrically connect to one end of a medical cable and an output interface adapted to electrically connect to an electrical system. Signal processing circuitry is incorporated within the housing for receiving a medical signal from the medical cable via the input interface and for selectively passing the medical signal to the electrical system via the output interface when in a first mode of operation, and has application software for selectively testing functionality of the medical cable when in a second mode of operation. The medical signal may include at least one monitoring signal selected from a group consisting of fetal and maternal medical signals. Preferably, the at least one monitoring signal is generated from a medical device selected from a group consisting of at least one medical electrode, a medical electrode array, an abdominal strain gauge, a tocodynamometer, an intrauterine pressure catheter, an ultrasonic transducer, a vacuum pressure sensor, a pulse oximeter, a pH sensor, a cervical dilation sensor, a cervical effacement sensor, a cervical length sensor, a fetal station sensor, and an ultrasound transducer.

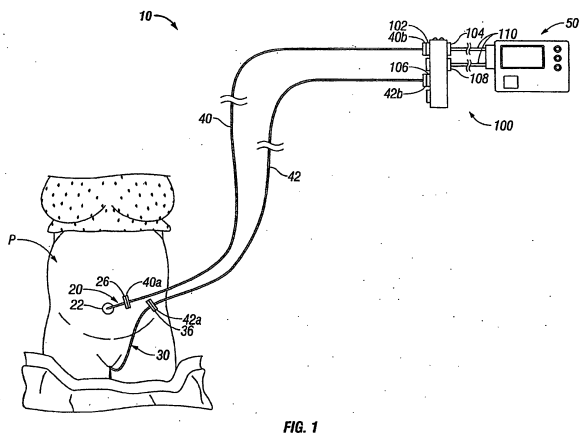

FIG. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 14 16 8857

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 0 484 107 A1 (AMERICAN HOME PROD [US]) 6 May 1992 (1992-05-06) * abstract; figures 1,3,10,12 * * column 1, lines 1-7 * * column 3, lines 45-58 * * column 5, line 4 - column 6, line 33 * * column 10, line 9 - column 11, line 32 *	1-9	INV. A61B5/00 G01R19/25 H01R13/66
X,D	US 5 566 680 A (URION KENARD E [US] ET AL) 22 October 1996 (1996-10-22) * abstract; figures 1,27,28 * * column 17, line 55 - column 18, line 57 * * column 21, lines 13-22 * * column 7, lines 61-67 *	1-9	
X	US 2005/182466 A1 (MAHAJAN ATUL [US]) 18 August 2005 (2005-08-18) * abstract; figures 1,3-7 * * paragraphs [0034], [0036] - [0040] *	1-9	

TECHNICAL FIELDS SEARCHED (IPC)

A61B
G01R
H01R

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	23 September 2014	Daniel, Christian

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
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T : theory or principle underlying the invention
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L : document cited for other reasons

& : member of the same patent family, corresponding document

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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 14 16 8857

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
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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[标]申请(专利权)人(译)	柯惠有限合伙公司		
申请(专利权)人(译)	COVIDIEN LP		
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CPC分类号	A61B5/0011 A61B5/4343 A61B5/4362 A61B2560/0276 A61B2562/222 A61B2562/227 G01R31/50 G01R31/58 H01R13/66 H01R2201/12 H01R2201/20		
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优先权	11/528914 2006-09-28 US		
其他公开文献	EP2772188A2 EP2772188B1		
外部链接	Espacenet		

摘要(译)

一种电缆监测装置，包括：壳体，具有适于电连接到医疗电缆的一端的输入接口;以及适于电连接到电气系统的输出接口。信号处理电路结合在壳体内，用于通过输入接口从医疗电缆接收医疗信号，并且当处于第一操作模式时，用于通过输出接口选择性地将医疗信号传递到电气系统，并且具有用于选择性的应用软件。在第二操作模式下测试医疗电缆的功能。医学信号可以包括从由胎儿和母体医学信号组成的组中选择的至少一个监测信号。优选地，所述至少一个监测信号由选自包括至少一个医用电极，医用电极阵列，腹部应变仪，分娩力计，子宫内压力导管，超声换能器，真空的医疗装置产生。压力传感器，脉搏血氧仪，pH传感器，宫颈扩张传感器，宫颈消失传感器，宫颈长度传感器，胎儿站传感器和超声换能器。

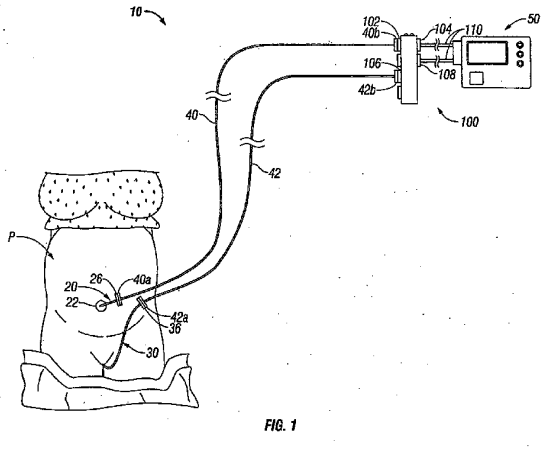

FIG. 1