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(54) A system for adjusting power employed by a medical device

(57) A system (1) for adjusting power employed by a medical device incorporating light emitting devices (12, 14) and being used for measuring patient medical parameters, includes a plurality of light emitting devices. A power unit (60) is coupled to the light emitting devices and powers the light emitting devices responsive to respective control signals which determine power to be applied to the light emitting devices. A control unit (50) provides the control signals and is coupled to the power unit. The control signals intermittently turn off at least one of the plurality of light emitting devices in a power save mode in response to a determination that a patient medical parameter value measured by the medical device, using an active light emitting device of the plurality of light emitting devices, is at a safe level.

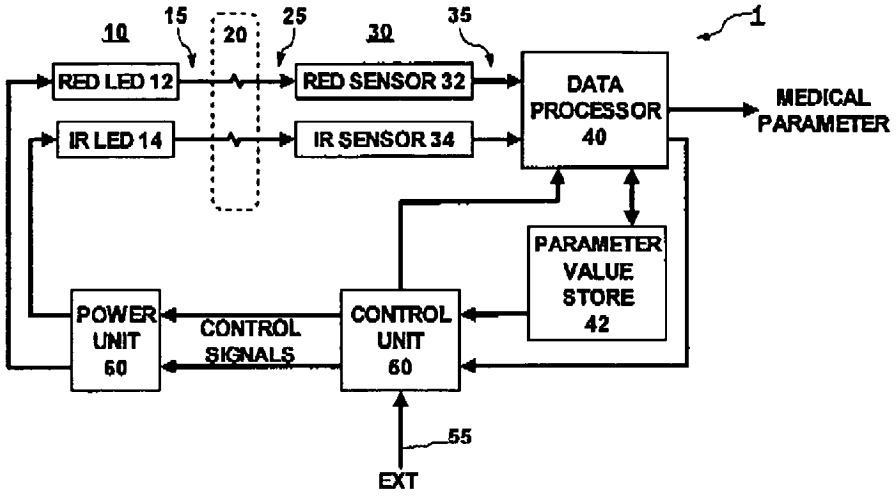

Fig. 1

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EUROPEAN SEARCH REPORT

Application Number
EP 06 25 3582

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	US 5 924 979 A (SWEDLOW DAVID B [US] ET AL) 20 July 1999 (1999-07-20)	1-6, 12-14, 16-21, 24-27	INV. A61B5/00
A	* abstract * * column 4, line 27 - column 9, line 63 * * figures 1,2 *	7-11,15, 22,23,28	

X	EP 0 872 210 A (HEWLETT PACKARD CO [US] KONINKL PHILIPS ELECTRONICS NV [NL]) 21 October 1998 (1998-10-21) * abstract *	1,2,4-6	
A	* column 1, line 1 - column 2, line 7 * * column 5, line 30 - column 9, line 52 * * figures 1-3 *	13,21,27	

A	WO 03/092490 A (SIEMENS MEDICAL SOLUTIONS [US]) 13 November 2003 (2003-11-13) * the whole document *	1-28	
	-----		TECHNICAL FIELDS SEARCHED (IPC)
A	WO 03/003914 A (MASIMO CORP [US]) 16 January 2003 (2003-01-16) * abstract * * column 5, line 10 - column 12, line 13 * * figures 3,6 *	1,13,21, 27	A61B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	20 February 2008	ARTIKIS, T

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

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims 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 the first ten claims.

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).

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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: 1-12

A system comprising a plurality of light emitting devices and a control unit for intermittently turning off one of said plurality of light emitting devices in a power save mode when a patient medical parameter value, which has been measured using one of said plurality of light emitting devices, is at a safe level.

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2. claims: 13-20,26,28

A system comprising a light emitting device and a control unit, which turns off said light emitting device in a power save mode for a predetermined time duration and turns on said light emitting device when a patient medical parameter value, which has been measured without using said light emitting device, is outside a predetermined range.

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3. claims: 21-25, 27-28

A system comprising a light emitting device and a control unit for turning off processing of data from said light emitting device.

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 06 25 3582

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.

20-02-2008

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WO 03003914 A	16-01-2003	NONE	

EPO FORM P0459

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

专利名称(译)	一种用于调节医疗设备所用功率的系统		
公开(公告)号	EP1741384A3	公开(公告)日	2008-04-02
申请号	EP2006253582	申请日	2006-07-07
[标]申请(专利权)人(译)	德雷格医疗系统股份有限公司		
申请(专利权)人(译)	德尔格医疗系统公司.		
当前申请(专利权)人(译)	德尔格医疗系统公司.		
[标]发明人	HUANG JOHNNIE		
发明人	HUANG, JOHNNIE		
IPC分类号	A61B5/00		
CPC分类号	A61B5/14551 A61B5/7257 A61B2560/0209		
优先权	60/697615 2005-07-08 US		
其他公开文献	EP1741384A2 EP1741384B1		
外部链接	Espacenet		

摘要(译)

一种用于调节由包含发光装置（12,14）并用于测量患者医疗参数的医疗装置所采用的电力的系统（1）包括多个发光装置。功率单元（60）耦合到发光器件并响应于确定要施加到发光器件的功率的相应控制信号而为发光器件供电。控制单元（50）提供控制信号并且耦合到电源单元。响应于使用多个发光的有源发光装置确定由医疗装置测量的患者医疗参数值，控制信号在省电模式下间歇地关闭多个发光装置中的至少一个发光装置。设备，处于安全水平。

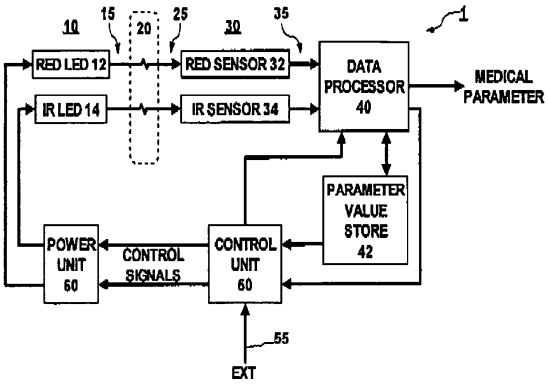

Fig. 1