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(30) Priority: **08.03.2004 US 796559**

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(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC:
05724861.9 / 1 729 631

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Remarks:

Claims filed after the date of filing of the application (Rule 68(4) EPC).

(54) **Selection of ensemble averaging weights for a pulse oximeter based on signal quality metrics**

(57) A method of ensemble averaging signals in a pulse oximeter comprises receiving first and second electromagnetic radiation signals from a blood perfused tissue portion corresponding to two different wavelengths of light, obtaining an assessment of the signal quality of

said electromagnetic signals, selecting weights for an ensemble averager using said assessment of signal quality, and ensemble averaging said electromagnetic signals using said ensemble averager.

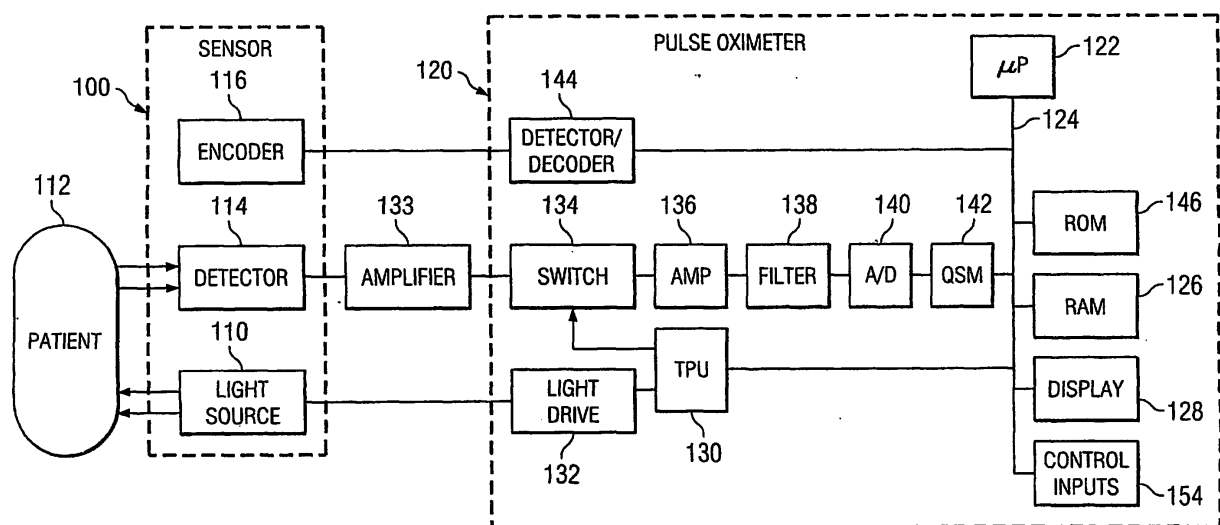


FIG. 1



PARTIAL EUROPEAN SEARCH REPORT

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of subsequent proceedings, as the European search report

EP 10 01 2712

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 2002/137994 A1 (BAKER CLARK R ET AL) 26 September 2002 (2002-09-26) * paragraphs [0014], [0035] - [0038], [0052], [0054], [0055], [0057] * * paragraphs [0064], [0072], [0073], [0079], [0081], [0084], [0085], [0156], [0178], [0179], [0195] - [0203] * * figure 1A *	1-3, 9-11,15	INV. A61B5/1455
X,D	US 4 960 126 A (CONLON ET AL) 2 October 1990 (1990-10-02) * column 3, line 32 - line 35 * * column 8, line 67 - column 9, line 2 * * column 10, line 22 * * column 10, line 58 - line 68 * * figure 4 *	1-3, 9-11,15	
A	US 2003/009091 A1 (EDGAR REUBEN W ET AL) 9 January 2003 (2003-01-09) * paragraphs [0059], [0060] *	3,11	
			TECHNICAL FIELDS SEARCHED (IPC)
			A61B

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

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EPO FORM 1503 03.02 (P04E07)

Place of search The Hague	Date of completion of the search 15 July 2014	Examiner Vanderperren, Yves
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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**INCOMPLETE SEARCH
SHEET C**

Application Number
EP 10 01 2712

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Claim(s) completely searchable:
1-3, 10, 11

Claim(s) searched incompletely:
9, 15

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Claim(s) not searched:
4-8, 12-14

Reason for the limitation of the search:

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Following the reply of the applicant dated 23.05.2014 to the invitation under Rule 62a(1) EPC, claims 1-3, claim 9 in part, claims 10 and 11, and claim 15 in part have been searched in the present application.

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

EP 10 01 2712

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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
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15-07-2014

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EPC FORM P0459

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

专利名称(译)	基于信号质量度量选择脉冲血氧计的整体平均权重		
公开(公告)号	EP2260758A3	公开(公告)日	2014-08-20
申请号	EP2010012712	申请日	2005-03-07
[标]申请(专利权)人(译)	内尔科尔普里坦贝内特公司		
申请(专利权)人(译)	NELLCOR PURITAN BENNETT INCORPORATED		
当前申请(专利权)人(译)	COVIDIEN LP		
[标]发明人	BAKER CLARK R JR		
发明人	BAKER, CLARK R. JR.		
IPC分类号	A61B5/1455 A61B5/00		
CPC分类号	A61B5/14552 A61B5/7203 A61B5/7221		
审查员(译)	VANDERPERREN , YVES		
优先权	10/796559 2004-03-08 US		
其他公开文献	EP2260758A9 EP2260758A2		
外部链接	Espacenet		

摘要(译)

在脉冲血氧计中对信号进行整体平均的方法包括从对应于两个不同波长的光的血液灌注组织部分接收第一和第二电磁辐射信号，获得对所述电磁信号的信号质量的评估，为整体平均器选择权重使用所述信号质量评估，并使用所述集合平均器对所述电磁信号进行整体平均。

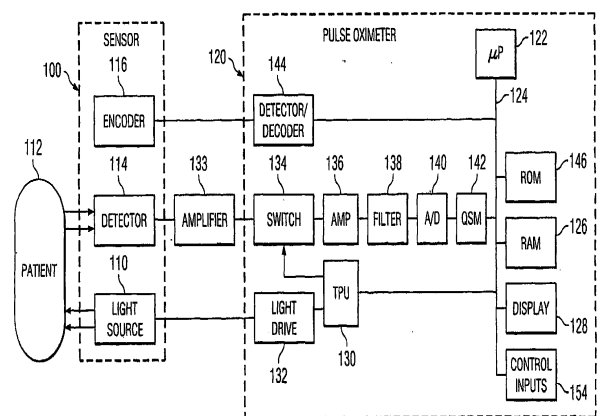


FIG. 1