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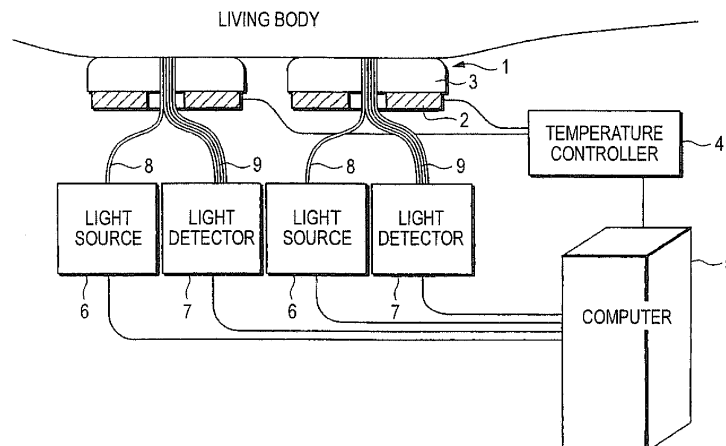
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(54) **Method for noninvasive measurement of glucose and apparatus for noninvasive measurement of glucose**

(57) A method for noninvasive measurement of glucose in a tissue of a subject, including the steps of bringing an adaptation device, which has a shape similar to a measurement probe, into contact with a skin part of a subject for stretching the skin part of the subject under a pressure that is higher than a pressure per unit area applied by the measurement probe during the non-invasive

measurement, maintaining the contact for a predetermined period of time followed by relieving the contact, bringing the measurement probe into contact with the stretched skin part of the subject for the non-invasive measurement, collecting signals emitted from the subject, and estimating a glucose concentration based on the collected signals.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
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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	WO 02/082989 A1 (ABBOTT LAB [US]) 24 October 2002 (2002-10-24) * page 6, line 24 - line 35 * * page 16, line 1 - page 18, line 10; figure 3 * * page 21, line 14 - page 22, line 14; table 3 * -----	1,2,4,6	INV. A61B5/1455 ADD. A61B5/00
A	WO 02/060320 A (ABBOTT LAB [US]) 8 August 2002 (2002-08-08) * page 9, lines 11-20 * * page 13, line 24 - page 15, line 8; figure 1 * -----	1-4,6	TECHNICAL FIELDS SEARCHED (IPC) A61B
A	WO 01/87151 A (ABBOTT LAB [US]) 22 November 2001 (2001-11-22) * page 13, line 16 - page 15, line 29 * -----	1-4,6	
A	US 6 954 661 B2 (CHO OK-KYUNG [DE] ET AL) 11 October 2005 (2005-10-11) * column 7, line 1 - line 67; figures 3,4 * -----	1-4,6	
----- The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		28 October 2010	Schindler, Martin
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			

10 EPO FORM 1503 03.82 (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:
1-4, 6
- 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
EP 10 17 0622

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: 1-4, 6

Calibration of glucose measurement after thermal stimulation

2. claims: 5, 28

Reduction of time dependency of the measurement signal

3. claims: 7, 9-26

How to apply pressure stimulation in a glucose measurement

4. claims: 8, 27

Control of the measurement probe when pressure stimulation
is used for non-invasive glucose measurement

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

EP 10 17 0622

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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28-10-2010

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专利名称(译)	用于无创测量葡萄糖的方法和用于无创测量葡萄糖的装置		
公开(公告)号	EP2243425A3	公开(公告)日	2011-03-30
申请号	EP2010170622	申请日	2006-11-30
[标]申请(专利权)人(译)	东芝医疗系统株式会社		
申请(专利权)人(译)	东芝医疗系统公司		
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代理机构(译)	KRAMER - HARSH - 施密特陈		
优先权	2006129490 2006-05-08 JP 2005347194 2005-11-30 JP		
其他公开文献	EP2243425A2 EP2243425B1		
外部链接	Espacenet		

摘要(译)

一种用于非侵入性地测量受试者组织中的葡萄糖的方法，包括使具有类似于测量探针的形状的适配装置与受试者的皮肤部分接触以拉伸受试者的皮肤部分的步骤在非侵入性测量期间，在高于测量探针施加的每单位面积压力的压力下，保持接触一段预定时间，然后缓解接触，使测量探针与拉伸的皮肤部分接触用于非侵入性测量的受试者，收集从受试者发射的信号，并基于收集的信号估计葡萄糖浓度。

