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A61B 5/026 *(2006.01)* ***A61B 5/0402*** *(2006.01)*
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04.07.2014 GB 201411983
06.07.2014 US 201414324235
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11.08.2014 US 201414457029
11.08.2014 US 201414457041
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11.08.2014 US 201414457061
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11.08.2014 US 201414457090
11.08.2014 US 201414457098
11.08.2014 US 201414457105
11.08.2014 US 201414457111
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(54) THERMOMETER HAVING A DIGITAL INFRARED SENSOR

(57) A non-touch thermometer that senses temperature from a digital infrared sensor is described. A digital signal representing a temperature without conversion from analog is transmitted from the digital infrared sensor.

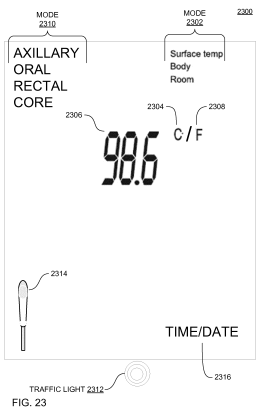

FIG. 23

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EUROPEAN SEARCH REPORT

Application Number
EP 15 17 5517

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 Y	KR 101 384 699 B1 (UNIV YONSEI WONJU INDUSTRY ACADEMIC COOPERATION FOUNDATION [KR]) 14 April 2014 (2014-04-14) * page 5, paragraph 3 - page 9, paragraph 2; figures 1-4 * -----	1-3,12, 15 4-11,13, 14	INV. G01J5/02 G01J5/00 G06T7/00 A61B5/00 G06T7/20
X	WO 2007/057522 A1 (SEMA [FR]; LAUBIE CHARLES [FR]) 24 May 2007 (2007-05-24) * page 5, line 5 - page 6, line 22; figures 1,2 * -----	1,3,12, 15	A61B5/021 A61B5/026 A61B5/0402 A61B5/08 A61B5/1455
X	"Instructions for use", , 13 January 2014 (2014-01-13), XP055233121, Retrieved from the Internet: URL:https://www.ae.daysy.me/media/filer_public/2014/02/14/2014-02-14_daysy_user_manual_en.pdf [retrieved on 2015-12-02] * page 6; figures 1,2 * -----	1-3,12, 15	A61B5/01 G01J5/08
A	DE 199 56 346 A1 (BERZ REINHOLD [DE]) 31 May 2001 (2001-05-31) * the whole document * -----	1-3,12	TECHNICAL FIELDS SEARCHED (IPC) G01J
Y	US 2009/141124 A1 (LIU QIONG [US] ET AL) 4 June 2009 (2009-06-04) * figure 1 * -----	4-11,13, 14	
A	US 2013/079649 A1 (MESTHA LALIT KESHAV [US] ET AL) 28 March 2013 (2013-03-28) * paragraphs [0052] - [0061]; figures 1-4 * -----	4-11,13, 14	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	26 February 2016	Hambach, Dirk

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

EPO FORM 1503 03.82 (P04C01)

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Application Number
EP 15 17 5517

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:

☐ 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
EP 15 17 5517

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: 1-3, 12, 15

   Separate sensor and processor boards

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2. claims: 4-11, 13, 14

   Vital sign detection with camera

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 15 17 5517

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.

26-02-2016

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		US 2009141124 A1	04-06-2009
US 2013079649 A1	28-03-2013	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)	温度计具有数字红外传感器		
公开(公告)号	EP2977732A3	公开(公告)日	2016-04-06
申请号	EP2015175517	申请日	2015-07-06
[标]申请(专利权)人(译)	ARC DEVICES NI		
申请(专利权)人(译)	ARC DEVICES（NI）有限公司		
当前申请(专利权)人(译)	ARC DEVICES（NI）有限公司		
[标]发明人	CRAWLEY MARTIN KHACHATURIAN MARK GROSS IRWIN SMITH MICHAEL G GEST STEVEN BARRETT JOHN CRONIN MICHAEL TURNBULL DEREK		
发明人	CRAWLEY, MARTIN KHACHATURIAN, MARK GROSS, IRWIN SMITH, MICHAEL G. GEST, STEVEN BARRETT, JOHN CRONIN, MICHAEL TURNBULL, DEREK		
IPC分类号	G01J5/02 G01J5/00 G06T7/00 A61B5/00 G06T7/20 A61B5/021 A61B5/026 A61B5/0402 A61B5/08 A61B5/1455 A61B5/01 G01J5/08		
CPC分类号	G06T7/0016 A61B5/0075 A61B5/0077 A61B5/01 A61B5/021 A61B5/0261 A61B5/0402 A61B5/0816 A61B5/14551 G01J5/0025 G01J5/028 G01J5/089 G01J2005/0077 G06T7/262 G06T2207/30076 G06T2207/30201		
代理机构(译)	沃勒，STEPHEN		
审查员(译)	汉巴赫，德克		
优先权	14/617926 2015-02-09 US 2014011983 2014-07-04 GB 14/457018 2014-08-11 US 14/457029 2014-08-11 US 14/457105 2014-08-11 US PCT/US2015/039165 2015-07-04 WO 14/457061 2014-08-11 US 14/457090 2014-08-11 US 14/457001 2014-08-11 US 14/457111 2014-08-11 US 14/324235 2014-07-06 US 14/457041 2014-08-11 US 14/457074 2014-08-11 US 14/457098 2014-08-11 US 14/457053 2014-08-11 US		

其他公开文献	EP2977732A2
外部链接	Espacenet

摘要(译)

描述了一种从数字红外传感器感测温度的非接触式温度计。表示没有从模拟转换的温度的数字信号从数字红外传感器发送。

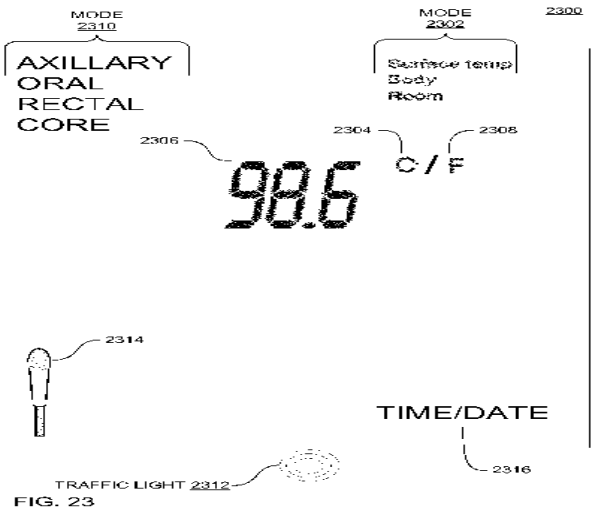

FIG. 23