



(11) **EP 3 130 281 A3**

(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
26.04.2017 Bulletin 2017/17

(43) Date of publication A2:
15.02.2017 Bulletin 2017/07

(21) Application number: **16180965.2**

(22) Date of filing: **25.07.2016**

(51) Int Cl.:
A61B 5/00 (2006.01) **A61B 5/11** (2006.01)
G06Q 30/02 (2012.01) **G06F 17/00** (2006.01)
G06F 19/00 (2011.01) **G02C 7/04** (2006.01)
A61B 5/021 (2006.01) **A61B 5/024** (2006.01)
A61B 5/01 (2006.01) **A61B 5/145** (2006.01)
A61B 5/1455 (2006.01)

(84) Designated Contracting States:
**AL AT BE BG CH CY CZ DE DK EE ES FI FR GB
GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO
PL PT RO RS SE SI SK SM TR**
Designated Extension States:
BA ME
Designated Validation States:
MA MD

(30) Priority: **24.07.2015 US 201562196513 P**
13.01.2016 US 201614994390

(71) Applicant: **Johnson & Johnson Vision Care, Inc.**
Jacksonville, FL 32256 (US)

(72) Inventors:
• **FLITSCH, Frederick A.**
New Windsor, NY 12553 (US)
• **GONZALEZ, Jorge**
Washington, DC 20001 (US)
• **PUGH, Randall B.**
Jacksonville, FL 32256 (US)

(74) Representative: **Carpmaels & Ransford LLP**
One Southampton Row
London WC1B 5HA (GB)

(54) **BIOMEDICAL DEVICES FOR BIOMETRIC BASED INFORMATION COMMUNICATION**

(57) Methods and apparatus to form a biometric based information communication system are described. In some examples, the biometric based information communication system comprises biomedical devices with sensing means, wherein the sensing means produces a biometric result. In some examples the biometric based

information communication system may comprise a user device such as a smart phone paired in communication with the biomedical device. A biometric measurement result may trigger a communication of a biometric based information communication message.

EP 3 130 281 A3



EUROPEAN SEARCH REPORT

Application Number

EP 16 18 0965

5

10

15

20

25

30

35

40

45

50

55

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 2015/065905 A1 (PUGH RANDALL BRAXTON [US]) 5 March 2015 (2015-03-05)	1-12	INV. A61B5/00
A	* paragraphs [0006] - [0007] * * paragraphs [0030], [0046] - [0050] * * paragraphs [0067] - [0074] * * paragraph [0081] *	16	A61B5/11 G06Q30/02 G06F17/00 G06F19/00 G02C7/04
X	US 2015/141772 A1 (LEBOEUF STEVEN FRANCIS [US] ET AL) 21 May 2015 (2015-05-21) * paragraphs [0002] - [0011] * * paragraphs [0077] - [0106] * * paragraphs [0124], [0140] *	1,2,5-17	ADD. A61B5/021 A61B5/024 A61B5/01 A61B5/145 A61B5/1455
X	US 2014/240124 A1 (BYCHKOV DAVID [US]) 28 August 2014 (2014-08-28)	1,2,5-12	
A	* paragraphs [0002] - [0047] *	13-17	
A	US 2014/240665 A1 (PUGH RANDALL BRAXTON [US] ET AL) 28 August 2014 (2014-08-28) * paragraphs [0006] - [0007] * * paragraphs [0007] - [0023] * * paragraph [0106] * * paragraphs [0043] - [0046] *	1-12,16	TECHNICAL FIELDS SEARCHED (IPC) A61B G06Q G06F G02C
X	US 2014/378786 A1 (HONG JUNG OOK [US] ET AL) 25 December 2014 (2014-12-25)	13-17	
A	* abstract * * paragraphs [0036] - [0044] * * paragraphs [0073] - [0084] * * paragraphs [0141] - [0155] *	1-12	
A	EP 2 732 761 A1 (HILL ROM SERVICES INC [US]) 21 May 2014 (2014-05-21) * paragraphs [0004] - [0017] * * paragraph [0028] *	1-12	
A	JP 2007 275490 A (MIWATEC KK) 25 October 2007 (2007-10-25) * abstract; figure 1 *	1-17	
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 16 March 2017	Examiner Loveniers, Kris
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)



Application Number

EP 16 18 0965

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).



LACK OF UNITY OF INVENTION
SHEET B

Application Number

EP 16 18 0965

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

Biomedical device for information communication with sensing means for sensing a user's cellular tissue layer or a fluid contacting a user's cellular tissue layer

2. claims: 13-17

Biomedical device for information communication, determining a location of the biomedical device and obtaining environmental data related to the location data

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

EP 16 18 0965

5

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.

16-03-2017

10

15

20

25

30

35

40

45

50

55

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2015065905 A1	05-03-2015	AU 2014311520 A1	10-03-2016
		CA 2922472 A1	05-03-2015
		CN 105682548 A	15-06-2016
		EP 3038524 A1	06-07-2016
		JP 2016529561 A	23-09-2016
		KR 20160048884 A	04-05-2016
		TW 201521677 A	16-06-2015
		US 2015065905 A1	05-03-2015
US 2015141772 A1	21-05-2015	WO 2015031241 A1	05-03-2015
		US 2008146892 A1	19-06-2008
		US 2011098112 A1	28-04-2011
		US 2011106627 A1	05-05-2011
		US 2012197737 A1	02-08-2012
		US 2012203081 A1	09-08-2012
		US 2012226111 A1	06-09-2012
		US 2012226112 A1	06-09-2012
US 2014240124 A1	28-08-2014	US 2014275855 A1	18-09-2014
		US 2014287833 A1	25-09-2014
		US 2014288396 A1	25-09-2014
		US 2015141772 A1	21-05-2015
		US 2016317049 A1	03-11-2016
		NONE	
US 2014240665 A1	28-08-2014	AU 2013204435 A1	11-09-2014
		BR 102014004476 A2	01-12-2015
		CA 2843125 A1	28-08-2014
		CN 104013382 A	03-09-2014
		EP 2772787 A1	03-09-2014
		HK 1201594 A1	04-09-2015
		JP 2014170208 A	18-09-2014
		KR 20140108077 A	05-09-2014
		RU 2013128239 A	27-12-2014
		SG 2013021373 A	26-09-2014
		TW 201433847 A	01-09-2014
US 2014378786 A1	25-12-2014	US 2014240665 A1	28-08-2014
		CN 104921702 A	23-09-2015
		US 2014278139 A1	18-09-2014
		US 2014303523 A1	09-10-2014
		US 2014378786 A1	25-12-2014
EP 2732761 A1	21-05-2014	US 2014378872 A1	25-12-2014
		EP 2732761 A1	21-05-2014
		US 2014139405 A1	22-05-2014

EPO FORM P0459

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

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

EP 16 18 0965

5 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.

16-03-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 2014145915 A1	29-05-2014
JP 2007275490 A	25-10-2007	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)	用于生物识别信息通信的生物医学设备		
公开(公告)号	EP3130281A3	公开(公告)日	2017-04-26
申请号	EP2016180965	申请日	2016-07-25
[标]申请(专利权)人(译)	庄臣及庄臣视力保护公司		
申请(专利权)人(译)	强生视力护理，INC.		
当前申请(专利权)人(译)	强生视力护理，INC.		
[标]发明人	FLITSCH FREDERICK A GONZALEZ JORGE PUGH RANDALL B		
发明人	FLITSCH, FREDERICK A. GONZALEZ, JORGE PUGH, RANDALL B.		
IPC分类号	A61B5/00 A61B5/11 G06Q30/02 G06F17/00 G06F19/00 G02C7/04 A61B5/021 A61B5/024 A61B5/01 A61B5/145 A61B5/1455		
CPC分类号	A61B5/0022 A61B5/04 G06F19/32 H04L67/12 H04W4/12 A61B5/14532 A61B5/14542 A61B5/14546 A61B5/68 A61B5/6801 A61B5/6846 G06Q50/22 A61B5/01 A61B5/021 A61B5/024 A61B5/1112 A61B5 /14551 A61B5/6802 A61B5/6803 A61B5/6821 A61B5/6898 A61B5/7275 A61B5/7405 A61B5/742 A61B5/7455 A61B2560/0242 G06Q30/0261 G06Q30/0267 G06Q30/0269 G16H40/67 A61B3/112 A61B3/113 A61B3/16 A61B5/0002 A61B5/1103 A61B5/486 A61B5/681 A61B5/7271 G02C7/04		
优先权	62/196513 2015-07-24 US 14/994390 2016-01-13 US		
其他公开文献	EP3130281A2		
外部链接	Espacenet		

摘要(译)

描述了形成基于生物特征的信息通信系统的方法和装置。在一些示例中，基于生物特征的信息通信系统包括具有感测装置的生物医学设备，其中感测装置产生生物特征结果。在一些示例中，基于生物特征的信息通信系统可以包括用户设备，诸如与生物医学设备通信配对的智能电话。生物测量测量结果可以触发基于生物测定的信息通信消息的通信。

European Patent Office
Office européen des brevets
Europäisches Patentamt

EUROPEAN SEARCH REPORT

Application Number
EP 16 18 0965

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICABLE IPC CLASS
X	US 2015/065905 A1 (PUGH RANDALL BRAXTON [US]) 5 March 2015 (2015-03-05) * paragraphs [0066] - [0067] * * paragraphs [0068] - [0069] * * paragraphs [0070] - [0071] *	1-12 16	INV A61B5/00 A61B5/11 G06F17/00 G06F19/00 G02C7/04
X	US 2015/141772 A1 (LEBOEUF STEVEN FRANCIS [US] ET AL) 21 May 2015 (2015-05-21) * paragraphs [0062] - [0063] * * paragraphs [0077] - [0106] * * paragraphs [0124] - [0140] *	1, 2, 5-17 13-17	ADD A61B5/021 A61B5/024 A61B5/01 A61B5/145 A61B5/1455
X	US 2014/240124 A1 (BYCHKOV DAVID [US]) 28 August 2014 (2014-08-28) * paragraphs [0062] - [0064] *	1, 2, 5-12 13-17	A61B G06F G02C
A	US 2014/240665 A1 (PUGH RANDALL BRAXTON [US] ET AL) 28 August 2014 (2014-08-28) * paragraphs [0066] - [0067] * * paragraphs [0068] - [0069] * * paragraphs [0070] - [0071] *	1-12, 16	TECHNICAL FIELDS SEARCHED
X	US 2014/378786 A1 (HONG JUNG DOOK [US] ET AL) 25 December 2014 (2014-12-25) * abstract * * paragraphs [0036] - [0044] * * paragraphs [0073] - [0084] * * paragraphs [0141] - [0155] *	13-17 1-12	A61B G06F G02C
A	EP 2 732 761 A1 (HILL ROM SERVICES INC [US]) 21 May 2014 (2014-05-21) * paragraphs [0064] - [0067] * * paragraph [0068] *	1-12	
A	JP 2007 275499 A (MIWATEC KK) 25 October 2007 (2007-10-25) * abstract; figure 1 *	1-17	
The present search report has been drawn up for all claims			

Date of search

Date of receipt of the search

Examiner

THE HAGUE

16 March 2017

Loveniers, Kris

CATEGORY OF CITED DOCUMENTS

A: particularly relevant if taken alone
X: particularly relevant if combined with another document of the same category
Y: non-relevant background
Z: non-relevant disclosure
P: non-relevant 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
A: member of the same patent family, corresponding document

COPIES OF THIS REPORT