

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2018/093168

A. CLASSIFICATION OF SUBJECT MATTER

A61B 5/02(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNPAT, EPODOC, WPI, CNKI, GOOGLE: 心脏, 测量, 参数, 振动, 传感器, 二尖瓣, 关闭, 特征点, 加速度, 光纤, 标定, heart, measure, parameter, vibrate, sensor, mitral, valve, closure, characteristic, point, acceleration, fiber, calibrate

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CN 101951831 A (HEART FORCE MEDICAL INC.) 19 January 2011 (2011-01-19) description, paragraphs [0036]-[0051] and [0064]-[0120], and figures 2 and 10-17	1-26
Y	CN 105491942 A (KONINKLIJKE PHILIPS N.V.) 13 April 2016 (2016-04-13) description, paragraphs [0041]-[0055], and figures 1 and 2	1-26
A	CN 108057176 A (SHENZHEN DARMA INC.) 22 May 2018 (2018-05-22) entire document	1-26
A	CN 105326477 A (FUDAN UNIVERSITY) 17 February 2016 (2016-02-17) entire document	1-26
A	US 2017119255 A1 (THE REGENTS OF THE UNIVERSITY OF CALIFORNIA) 04 May 2017 (2017-05-04) entire document	1-26

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance

“E” earlier application or patent but published on or after the international filing date

“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

“O” document referring to an oral disclosure, use, exhibition or other means

“P” document published prior to the international filing date but later than the priority date claimed

“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

“&” document member of the same patent family

Date of the actual completion of the international search

05 March 2019

Date of mailing of the international search report

27 March 2019

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/CN2018/093168

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
CN	101951831	A	19 January 2011	WO	2009073987	A1	18 June 2009
				WO	2009073986	A1	18 June 2009
				WO	2009073982	A1	18 June 2009
				CA	2709172	A1	11 June 2009
				EP	2231000	A1	29 September 2010
				BR	PI0819384	A2	05 May 2015
				US	2011263994	A1	27 October 2011
				RU	2010128724	A	20 January 2012
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				JP	2016528981	A	23 September 2016
				MX	2016001594	A	05 May 2016
				EP	3030145	A1	15 June 2016
				BR	112016002488	A2	01 August 2017
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				WO	2015018675	A1	12 February 2015
CN	108057176	A	22 May 2018	None			
CN	105326477	A	17 February 2016	None			
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				KR	20170007286	A	18 January 2017
				EP	3142546	A1	22 March 2017
				WO	2015175904	A1	19 November 2015
				AU	2015259002	A1	10 November 2016
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