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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: SYSTEMS AND METHODS FOR MONITORING THE CIRCULATORY SYSTEM

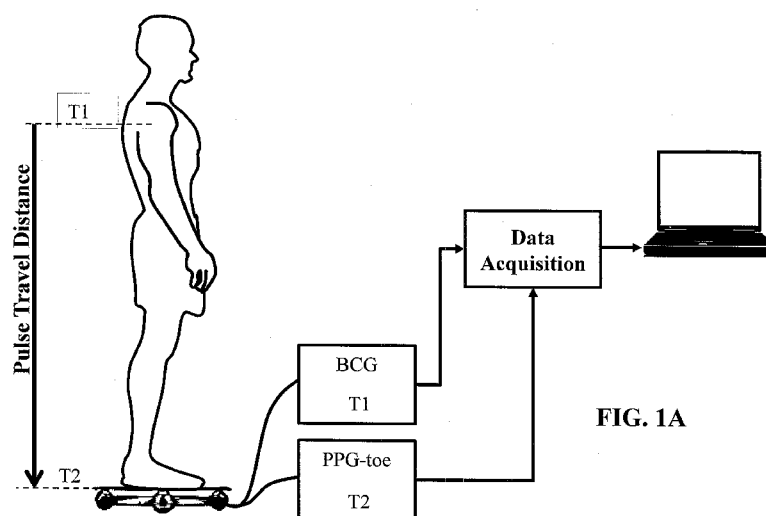


FIG. 1A

(57) Abstract: In accordance with embodiments of the present disclosure, a ballistocardiogram (BCG) sensor is used to detect heart and vascular characteristics of a user, and provide a BCG output indicative of the detected cardiovascular characteristics. The BCG output can be used for various purposes, such as detecting arterial aging. Secondary sensors can be used in conjunction with the BCG and can be used to determine the central arterial blood pressure, when used in conjunction with a peripheral blood pressure measurement.

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A. CLASSIFICATION OF SUBJECT MATTER*A61B 5/02(2006.01)i, A61B 5/0402(2006.01)i, A61B 5/053(2006.01)i, A61B 5/1455(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 5/02; A61B 5/04; A61B 5/0205; A61B 5/00

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: impedance cardiogram, electrocardiogram, plethysmography, pulse wave velocity

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002-0188205 A1 (ALEXANDER K. MILLS) 12 December 2002	1
Y	See abstract, paragraphs [0104]-[0106], claims 1,3, and figures 9,18.	3-5,8,10,12-13 ,15-16,20,24
A		2,6,9,11,14,17-19 ,21-23,25
Y	US 2010-0094147 A1 (INAN OMER T. et al.) 15 April 2010	3-5,8,10,12-13 ,15-16,20,24
	See abstract, paragraphs [0042]-[0072], claim 1, and figures 1A-1B	
A	US 2008-0194975 A1 (MACQUARRIE DAVID et al.) 14 August 2008	1-25
	See abstract, paragraphs [0037],[0057], and figure 5.	
A	US 2006-0111641 A1 (LOREN A. MANERA et al.) 25 May 2006	1-25
	See abstract, paragraphs [0020]-[0021],[0029]-[0033], claim 1, and figures 1,5	



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"&" document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/022664

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