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(54) Title: PHYSIOLOGICAL STRAIN SENSOR

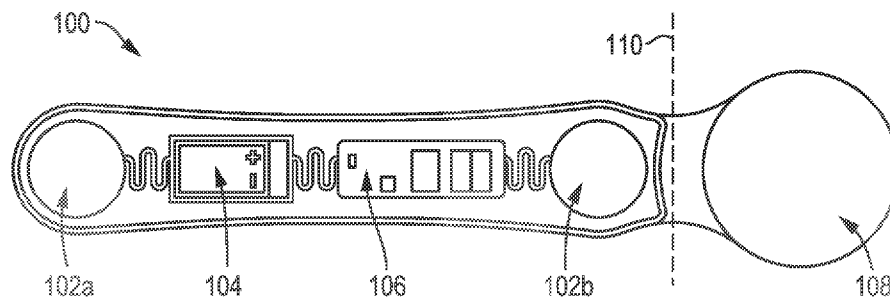


FIG. 1

(57) Abstract: Wearable sensor apparatus and methods. The wearable sensor apparatus includes a body temperature sensor to be placed in the xiphoid process of a user; a heart rate sensor to be placed in any curvilinear surface of the upper trunk of the chest; a microcontroller unit (MCU) contained within the wearable sensor apparatus and in operable connectivity with the at least one sensor device and configured to receive the gathered data and process it onboard the wearable sensor; and a communication module in operable connectivity with the MCU and configured to wirelessly transmit at least some of the gathered data to an external receiver.



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A. CLASSIFICATION OF SUBJECT MATTER

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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)

See Search History document

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

See Search History document

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

See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2015/0087921 A1 (BARDY DIAGNOSTICS INC.) 26 March 2015 (26.03.2015) entire document	1-3, 5, 7, 8, 10, 21 --- 14, 15, 18
X --- Y	US 2019/0231199 A1 (MASIMO CORPORATION) 01 August 2019 (01.08.2019) entire document	1, 4, 6-8, 13, 16 --- 9, 11, 12, 14, 15, 17-20
Y	US 2017/0127944 A1 (NANO AND ADVANCED MATERIALS INSTITUTE LIMITED) 11 May 2017 (11.05.2017) entire document	9, 17
Y	US 2015/0118957 A1 (LITE-ON IT CORPORATION) 30 April 2015 (30.04.2015) entire document	11, 19
Y	US 2021/0000344 A1 (BARDY DIAGNOSTICS INC.) 07 January 2021 (07.01.2021) entire document	12, 19, 20
A	US 2014/0288390 A1 (FITBIT INC.) 25 September 2014 (25.09.2014) entire document	1-21
A	JP 2007296266 A (PHYSIO TRACE KK) 15 November 2007 (15.11.2007) see machine translation	1-21

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

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