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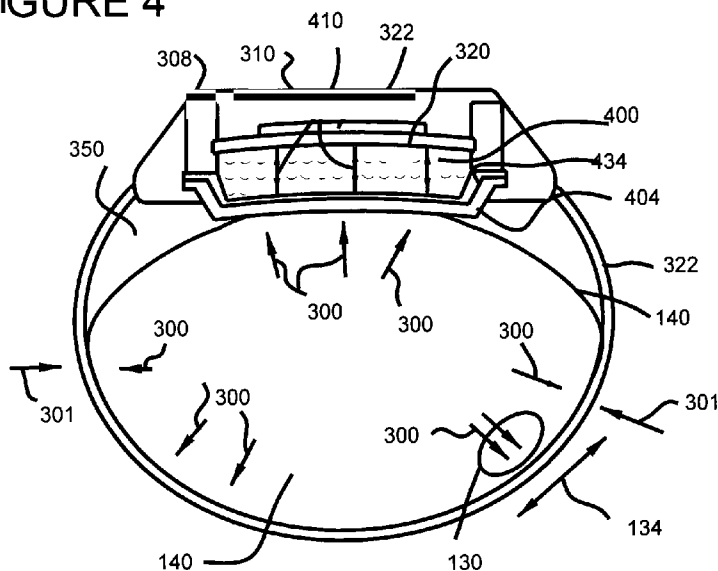
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(54) **Title:** WRIST PLETHYSMOGRAPH

FIGURE 4



(57) **Abstract:** A pulse monitoring plethysmograph system for establishing a history of the pulses of the user over an extended period of time, comprises a housing, a piezoelectric sensing element mounted within said housing, and fixed to the housing, a force transmitting member positioned to cause said piezoelectric sensing element to flex in response to an external force and to generate a current, and a transimpedance amplifier. The transimpedance amplifier converts the current generated by the flexing of the piezoelectric element into a voltage signal and an analog to digital converter converts the voltage signal into digital data. A digital memory storing member is provided for storing the digital data and establishing a history of data over an extended period of time.

WO 2008/073140 A3

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
 IPC: **A61B 5/02**(2006.01)

USPC: 600/485

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)
 U.S. : 600/485,490-492,500,502-504

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)

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 5,406,952 A (Barnes et al) 18 April 1995 (18.04. 1995), column 2, lines 23-34 and lines 63-68; column 3, lines 33-40 and lines 59-62.	1-2, 4-9 and 20 ----- 3, 10-19 and 21
Y	US 5,810,736 A (Pail) 22 September 1998 (22.09. 1998), column 2, lines 31-41.	3
Y	US 2003/0069508 A1 (Kawaguchi et al) 10 April 2003 (10.04.2003), paragraphs 4 and 24-25.	21
Y	US 2004/0044288 A1 (Gorenberg et al) 04 March 2004 (04.03.2004), paragraphs 132, 152 and 218-219.	10-16 and 19
Y	US 26,126,595 (Amano et al), 03 October 2000 (03.10.2000), column 2, lines 65-68, column 6, lines 45-50 and column 40, lines 45-60.	17 and 18

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

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Name and mailing address of the ISA/US Mail Stop PCT, Attn ISA/US Commissioner for Patents P O Box 1450 Alexandria, Virginia 223 13-1450 Facsimile No. (57 1) 273-3201	Authorized officer Charles Marmor, II <i>Charles Marmor</i> Telephone No. 571-272-3700 <i>Jan</i>