Title: DETECTION OF OXIMETRY SENSOR SITES BASED ON WAVEFORM CHARACTERISTICS

Abstract: In accordance with an embodiment of the present technique, there is provided methods and systems for detecting the location of a sensor and determining calibration algorithms and/or coefficients for calculation of physiological parameters based on the detected location. An exemplary embodiment includes receiving a signal corresponding to absorption of at least one wavelength of light by a patient's tissue, generating a plethysmographic waveform from the signal, determining an identifying characteristic of the plethysmographic waveform, and determining a location of the sensor based on a comparison of the identifying characteristic with at least one defined criterion.
Published:

- of inventorship (Rule 4.17(iv))
- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:

6 November 2008
A. **CLASSIFICATION OF SUBJECT MATTER**

**IPC(8)** - A61 B 5/00 (2008.04)

**USPC** - 600/310; 600/323

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)

**IPC(8)** - A61B 5/00 (2008.04)

**USPC** - 600/310; 600/323

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

**USPC** - 600/310; 600/322; 600/323

(Text Search)

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

PubWEST (PGPB, USPT, USOC, EPAB, JPAB); DialogPRO (Engineering) and Google Scholar.

Search Terms: oximeter, oximetry, waveform, pulse, pulsation, venous, shape, elastic, plethysmographic, calibration, algorithm, coefficient, high frequency, harmonic, respiratory

### C DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
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<tbody>
<tr>
<td>Y</td>
<td>US 2005/0197579 A1 (BAKER) 08 September 2005 (08.09.2005) para [0002], [0003], [0006], [0009], [0017], [0019], [0021], [0029], [0037], [0042], [0043], [0045].</td>
<td>1-31</td>
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Date of the actual completion of the international search

26 August 2008 (26.08.2008)

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