

EXHIBIT B



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Fonseca et al.

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(54) **ACTIGRAPHY METHODS AND APPARATUSES**

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CPC **A61B 5/7278** (2013.01); **A61B 5/0245** (2013.01); **A61B 5/0402** (2013.01);
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(58) **Field of Classification Search**
None
See application file for complete search history.

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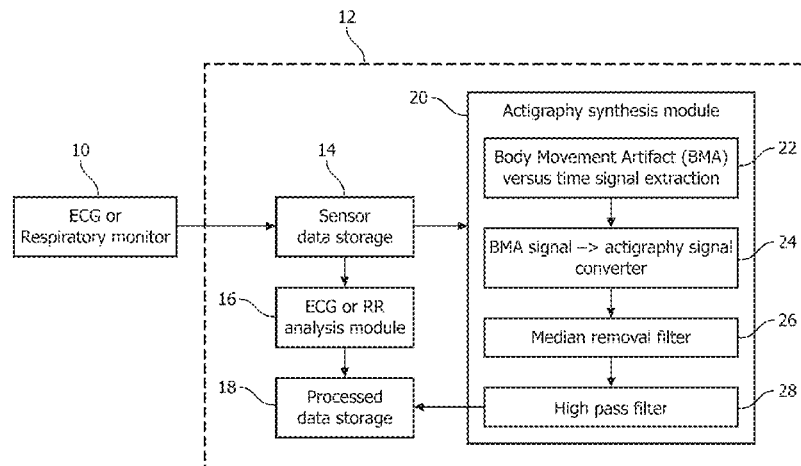
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Primary Examiner — Ankit D Tejani

(57) **ABSTRACT**

An actigraphy method includes receiving a physiological parameter signal as a function of time for a physiological parameter other than body motion (such as electrocardiography or a respiration monitor), computing a body motion artifact (BMA) signal as a function of time from the physiological parameter signal (for example, using a local signal power signal, a local variance signal, a short-time Fourier transform, or a wavelet transform over epochs of duration on order a few minutes or less), and computing an actigraphy signal as a function of time from the BMA signal, for example by applying a linear transform to the BMA signal and optionally applying filtering such as median removal and/or high-pass filtering.

20 Claims, 16 Drawing Sheets



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A61B 5/11 (2006.01)
A61B 5/113 (2006.01)
A61B 5/08 (2006.01)
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A61B 5/7242 (2013.01)

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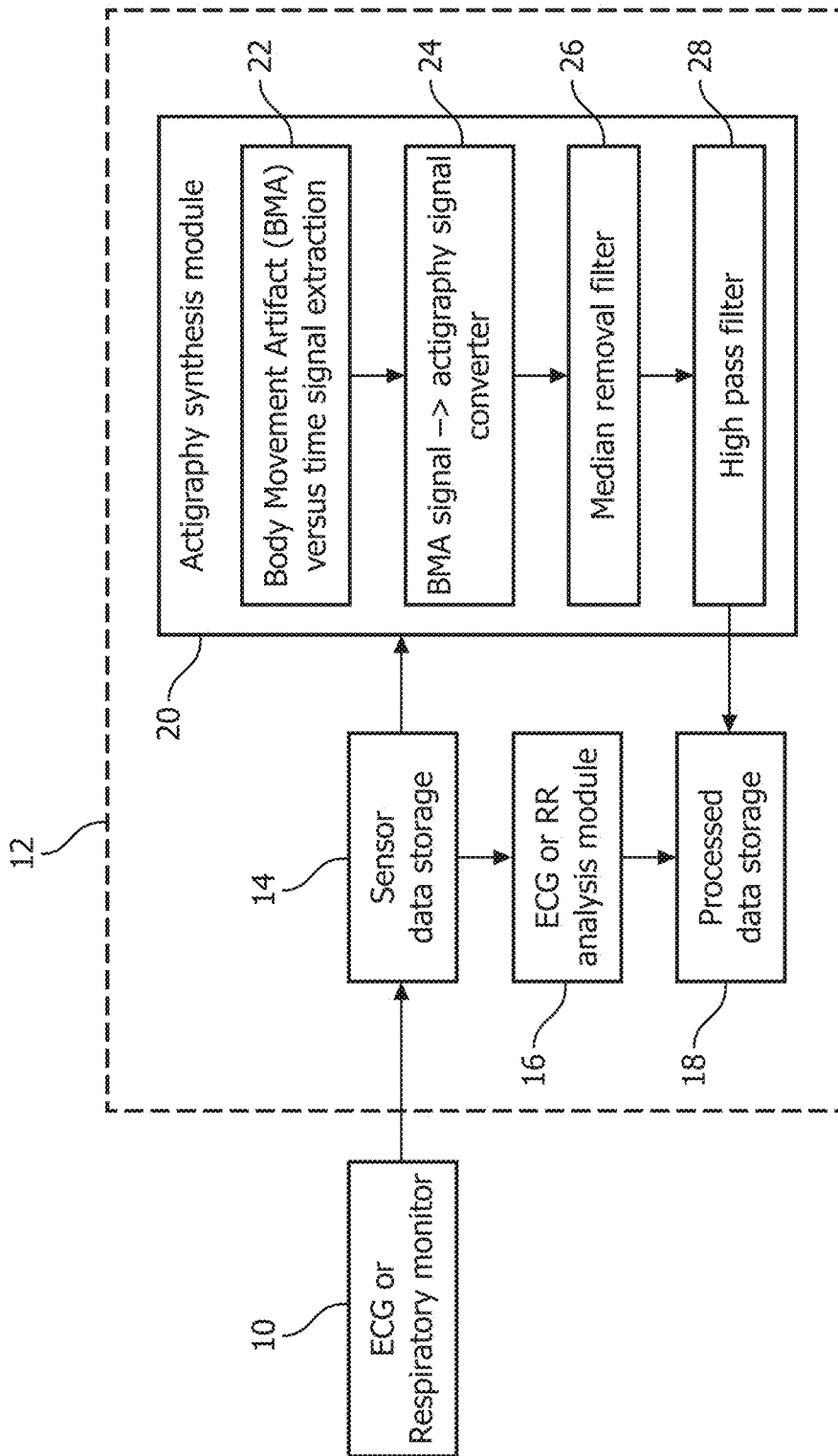


FIG. 1

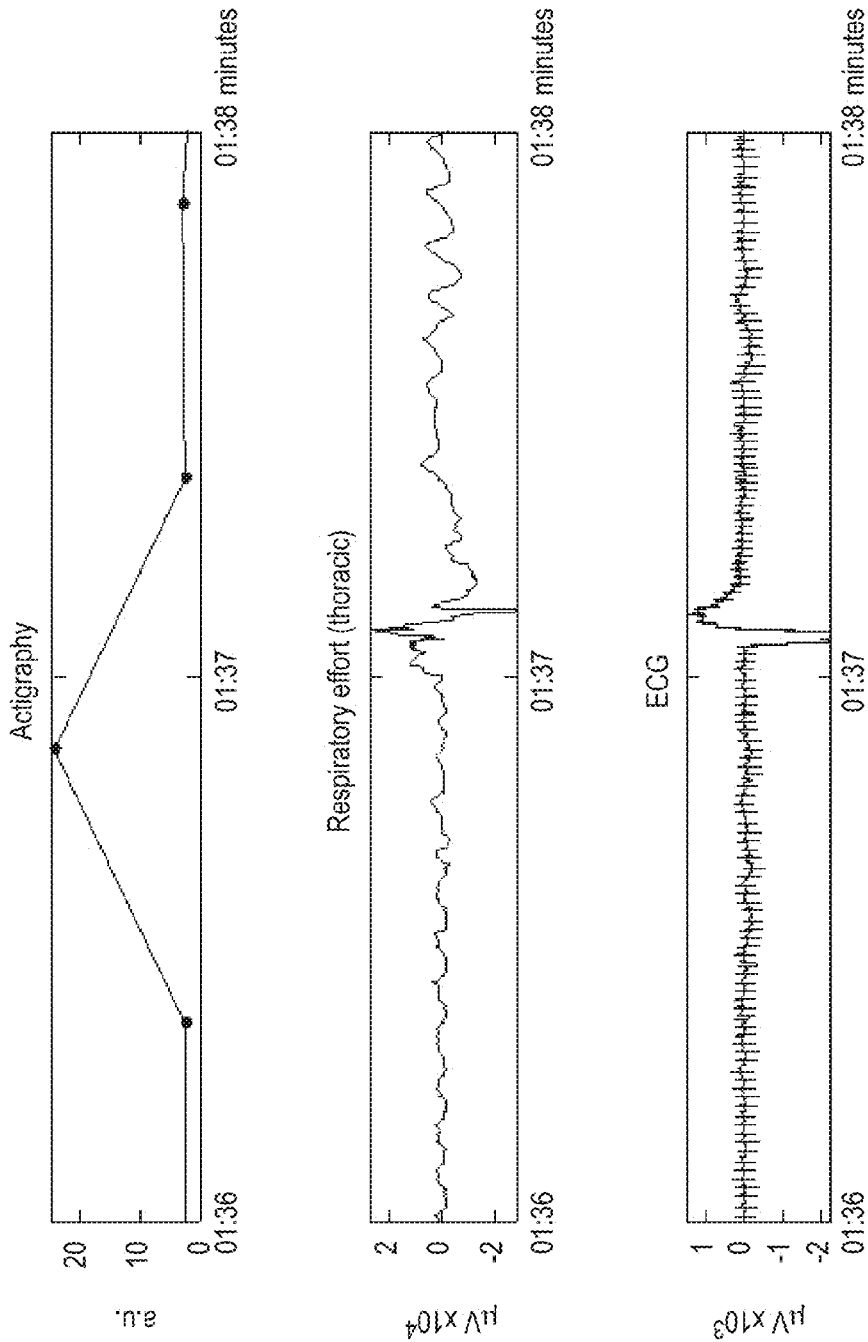


FIG. 2

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