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Bardy et al.

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(54) **SYSTEM AND METHOD FOR FACILITATING DIAGNOSIS OF CARDIAC RHYTHM DISORDERS WITH THE AID OF A DIGITAL COMPUTER**

(58) **Field of Classification Search**
CPC combination set(s) only.
See application file for complete search history.

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Related U.S. Application Data

(63) Continuation-in-part of application No. 14/997,416, filed on Jan. 15, 2016, now Pat. No. 9,345,414, which is a continuation-in-part of application No. 14/614,265, filed on Feb. 4, 2015, which is a
(Continued)

(57) **ABSTRACT**
R-R interval data is presented in a format that includes relevant near field and far field ECG data. The near field view provides a “pinpoint” classical view at classical recording speed. The far field view that provides an “intermediate” lower resolution, pre- and post-event view. Both ECG data views are temporally keyed to the extended duration R-R interval data that is scaled non-linearly to maximize the visual differentiation for frequently-occurring heart rate ranges. All three views are presented simultaneously. The durations of the pinpoint view, the intermediate view, and the R-R interval plot are flexible and adjustable. Diagnostically relevant cardiac events can be identified and located to allow pre- and post-event heart rhythm data. The pinpoint “snapshot” and intermediate views of ECG data with the extended term R-R interval data comparatively depicts heart rate context and patterns of behavior prior to and after a clinically meaningful arrhythmia or patient concern.

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CPC **A61B 5/0456** (2013.01); **A61B 5/044** (2013.01); **A61B 5/04017** (2013.01); **A61B 5/0432** (2013.01); **A61B 5/04085** (2013.01); **A61B 5/6823** (2013.01)

21 Claims, 9 Drawing Sheets

