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**Grover et al.**

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(54) **SYSTEM AND METHOD FOR  
HIERARCHICAL REFERENCING FOR  
BIOPOTENTIAL MEASUREMENTS**

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(58) **Field of Classification Search**  
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See application file for complete search history.

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(\*) Notice: Subject to any disclaimer, the term of this  
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(57) **ABSTRACT**

The present invention relates to a method of taking biopotential measurements, with the ability to perform in high-density sensing applications. The invention is a hierarchical referencing method for the electrodes in the biopotential measurement system that is able to recover potential at each location with respect to a global reference with smaller requirements on ADC resolution, and thus with lower power and area requirements as compared to current systems.

**Related U.S. Application Data**

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**11 Claims, 5 Drawing Sheets**

