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(54) **PULSE OXIMETRY DATA CONFIDENCE INDICATOR**

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(58) **Field of Classification Search** 600/309-310, 600/322-324, 330, 331, 336

See application file for complete search history.

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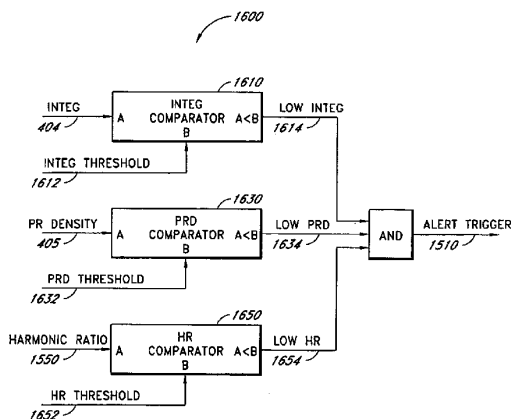
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(57) **ABSTRACT**

A data confidence indicator includes a plurality of physiological data and a plurality of signal quality measures derived from a physiological sensor output, and a plurality of comparator outputs each responsive to one of the measures and a corresponding one of a plurality of thresholds. An alert trigger output combines the comparator outputs. A low signal quality warning is generated in response to the alert trigger output, wherein the thresholds are set so that the warning occurs during a time period when there is low confidence in the data. The alert may be in the form of a message generated on the pulse oximeter display to warn that the accuracy of saturation and pulse rate measurements may be compromised. A confidence-based alarm utilizes signal quality measures to reduce the probability of false alarms when data confidence is low and to reduce the probability of missed events when data confidence is high.

24 Claims, 24 Drawing Sheets



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Page 2

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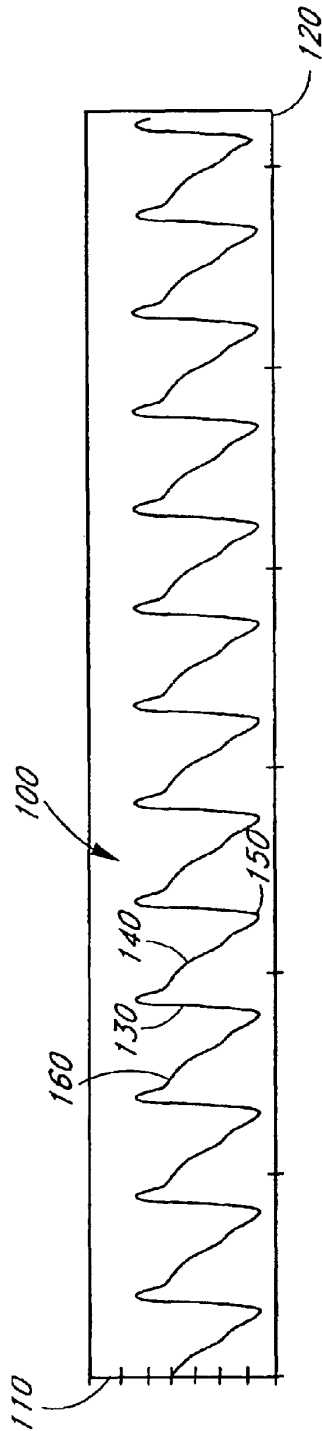


Fig. 1

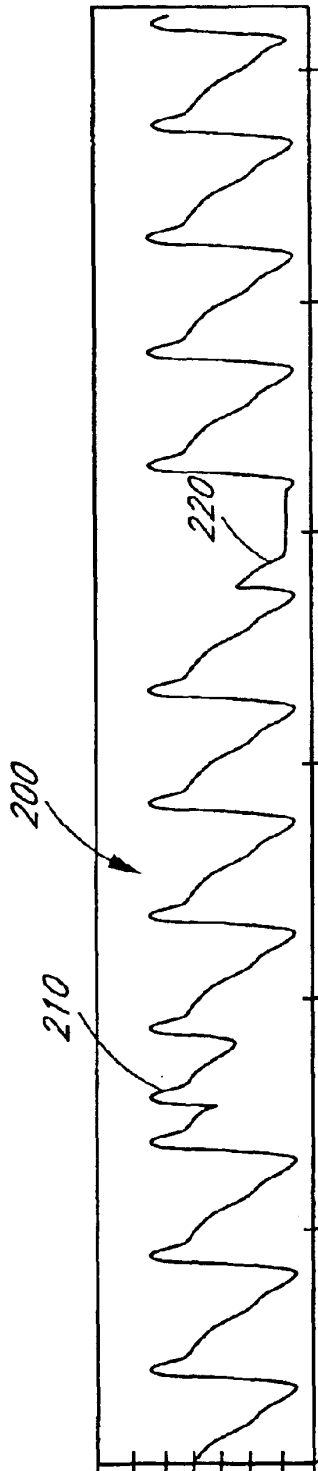


Fig. 2

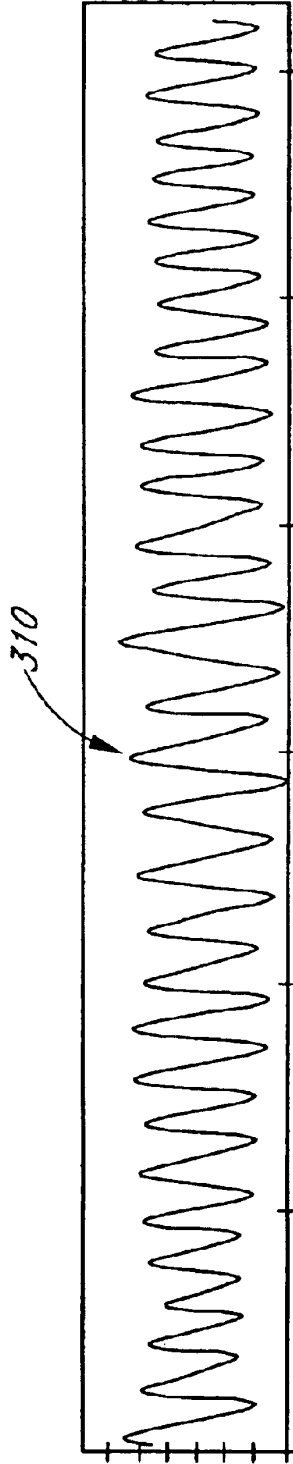


Fig. 3A

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