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(54) **METHOD FOR ESTIMATING CENTRAL AORTIC PULSE PRESSURE BY CUFF PRESSURE PULSE WAVE OSCILLATION SIGNALS AND DEVICE THEREOF**

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(58) **Field of Classification Search**

CPC A61B 5/022; A61B 5/021; A61B 5/0225

See application file for complete search history.

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(57)

ABSTRACT

A method and device for estimating central aortic pulse pressure by cuff pressure pulse wave oscillation signals. The method comprises (I) providing an equation for estimating central aortic pulse pressure; (II) measuring pressure pulse wave oscillation signals in a cuff, which comprise a brachial systolic blood pressure, a diastolic blood pressure and a waveform of the pressure pulse wave oscillation signals in the cuff; (III) averaging the waveform of the pressure pulse wave oscillation signals and calibrating the averaged waveform; (IV) analyzing the calibrated pressure pulse wave oscillation signal waveform to obtain a plurality of predicting variables; and (V) obtaining an estimate of the central aortic pulse pressure by values of predicting variables in step (IV) and the equation in step (I).

6 Claims, 7 Drawing Sheets

