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#### (54) DIAGNOSTIC METHOD AND APPARATUS USING LIGHT

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### ABSTRACT

A diagnosis method and apparatus for measuring blood hemoglobin concentration, oxygen saturation, pulse rate, respiration rate, or degree of aging of blood vessels using light includes an input/output unit for receiving a command for measurement from a user and for providing information on the result of a measurement to the user; a control unit for receiving the command for measurement from the input/ output unit and for generating a control signal; a light generating unit for generating at least two light beams for measurement according to the control signal; a light receiving unit for receiving the light beams transmitted through an object that is subject to measurement and for converting the received light beams into electrical signals; and a data processing unit for processing the electrical signals received from the light receiving unit and for outputting information on the result of a predetermined measurement.

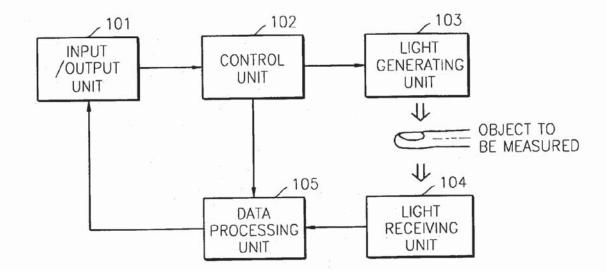


FIG. 1

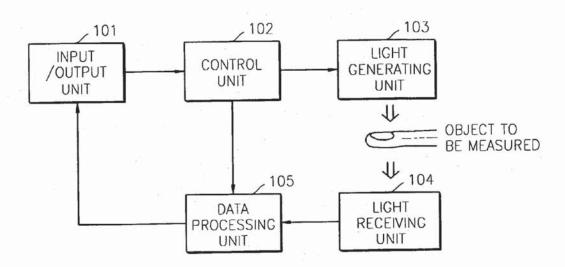


FIG. 2

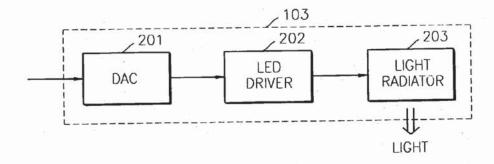


FIG. 3

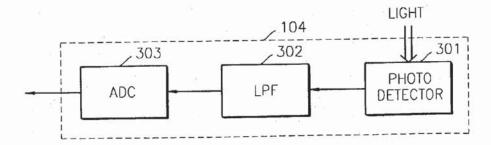


FIG. 4

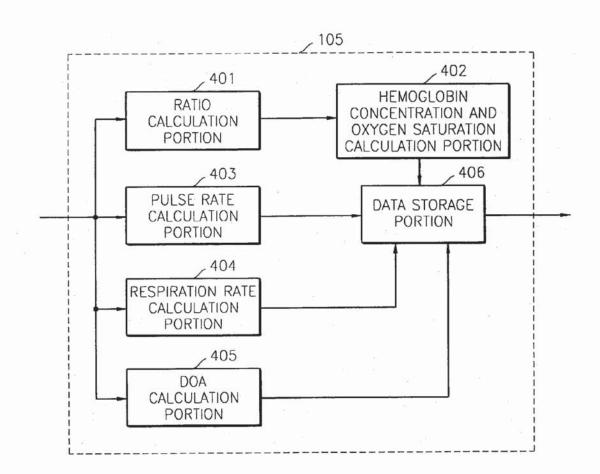
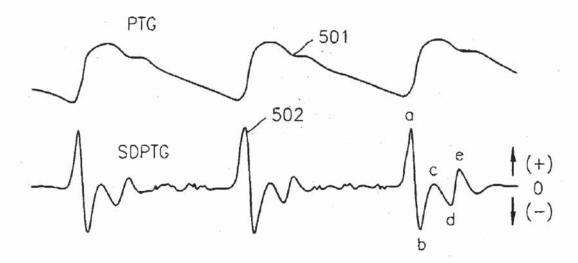
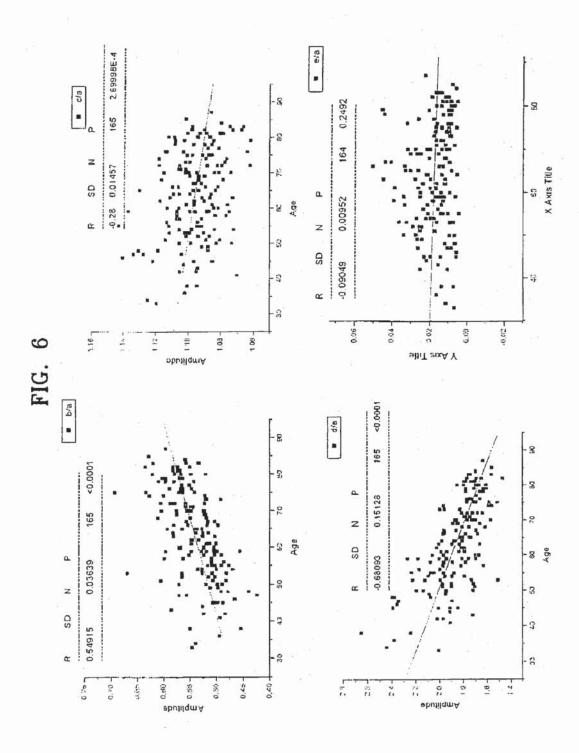


FIG. 5





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