



US 20040059236A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2004/0059236 A1**

Margulies et al.

(43) **Pub. Date: Mar. 25, 2004**

(54) **METHOD AND APPARATUS FOR MONITORING THE AUTONOMIC NERVOUS SYSTEM**

Publication Classification

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(51) **Int. Cl.⁷ A61B 5/02**

(52) **U.S. Cl. 600/500**

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(57) **ABSTRACT**

An apparatus and method for detection and monitoring of autonomic nervous system (ANS) activity in humans, primarily in the field of sleep research. The present invention discloses a portable, simple, and cost-effective electronic device containing hardware and software that permits real-time monitoring of a pulsatile blood volume waveform obtained through use of a photoplethysmographic (optical volume detecting) probe, thereby allowing signal conditioning, waveform slope analysis, display, recording, and output of pulse transitional slope data representative of activity in the ANS.

(21) **Appl. No.: 10/666,121**

(22) **Filed: Sep. 19, 2003**

Related U.S. Application Data

(60) **Provisional application No. 60/412,310, filed on Sep. 20, 2002.**

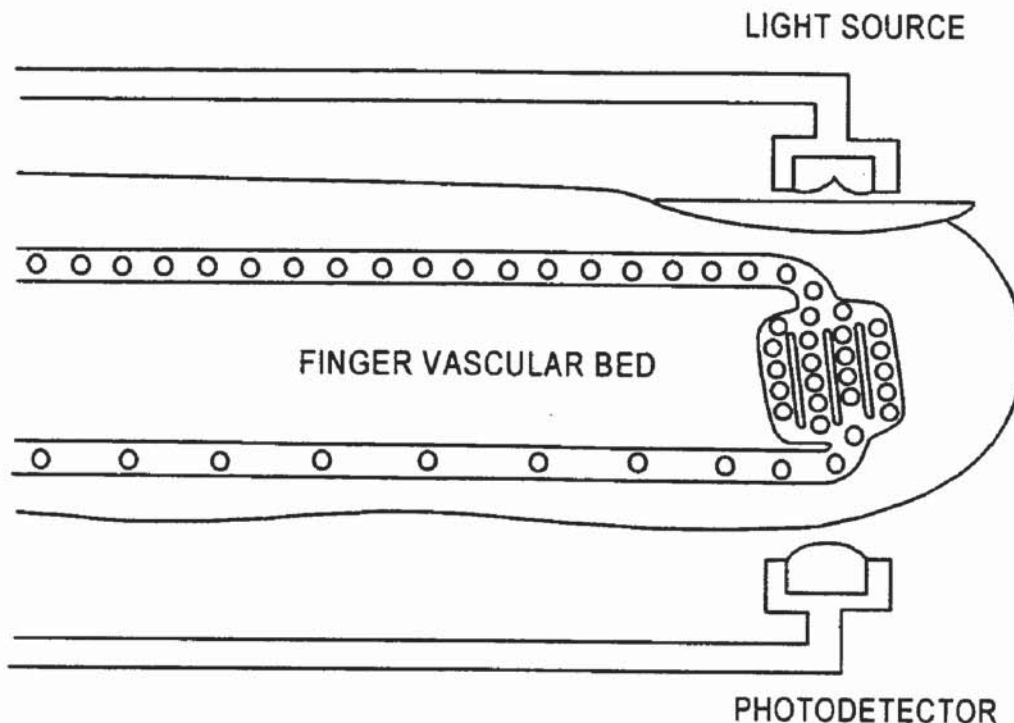


FIG. 1

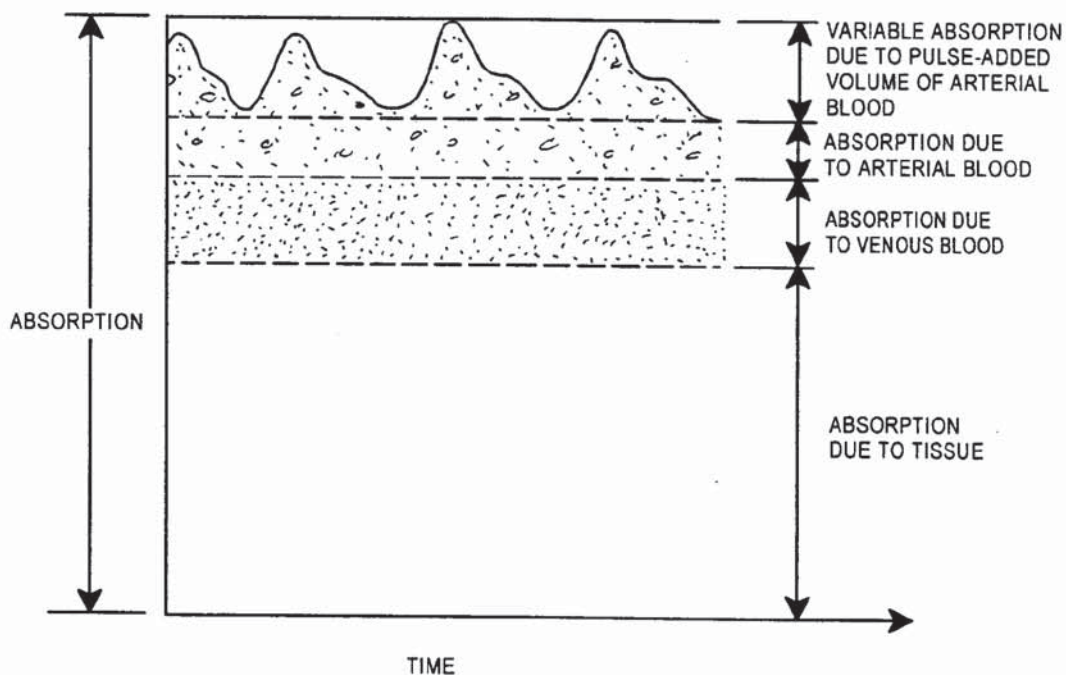
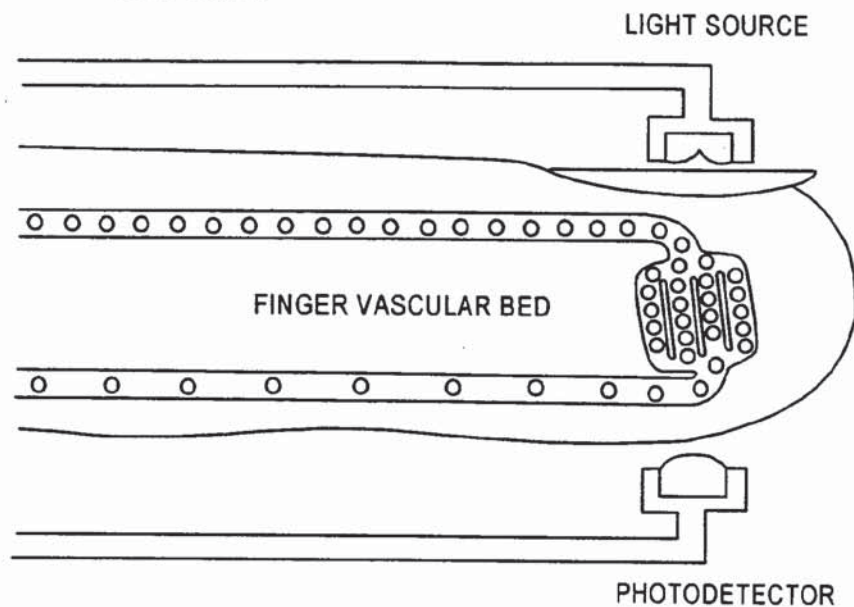
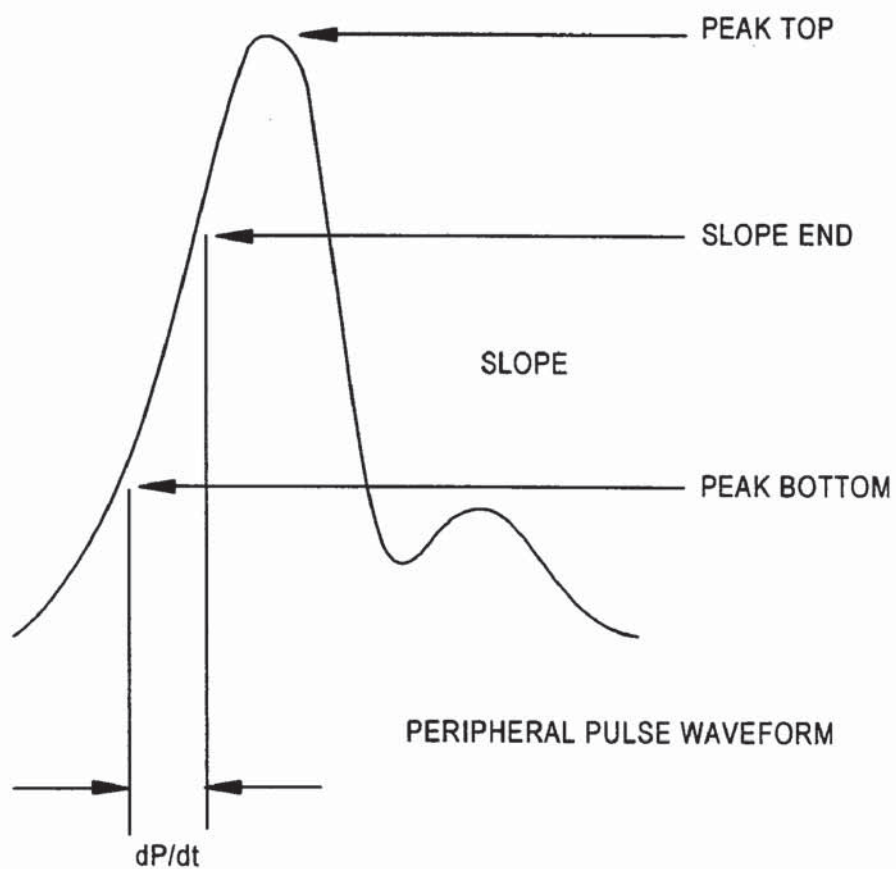
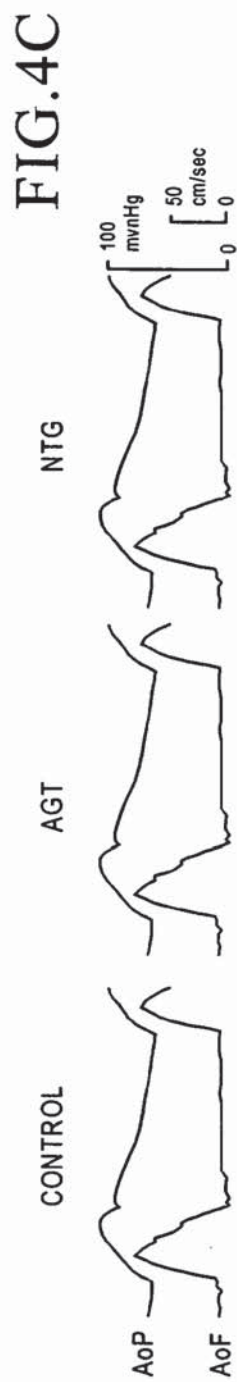
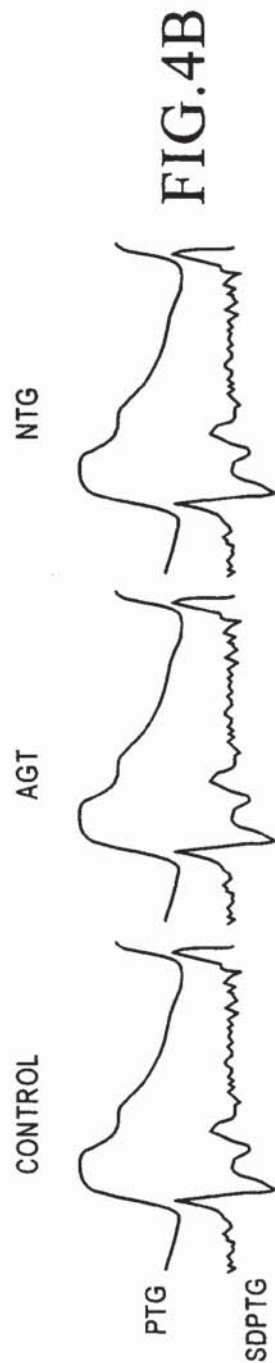


FIG. 2

FIG.3





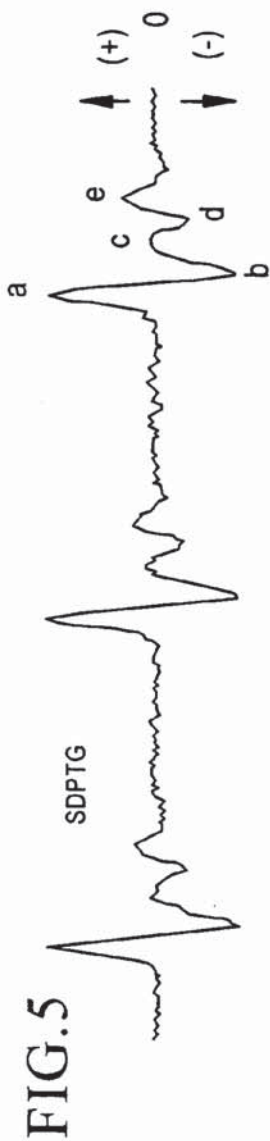
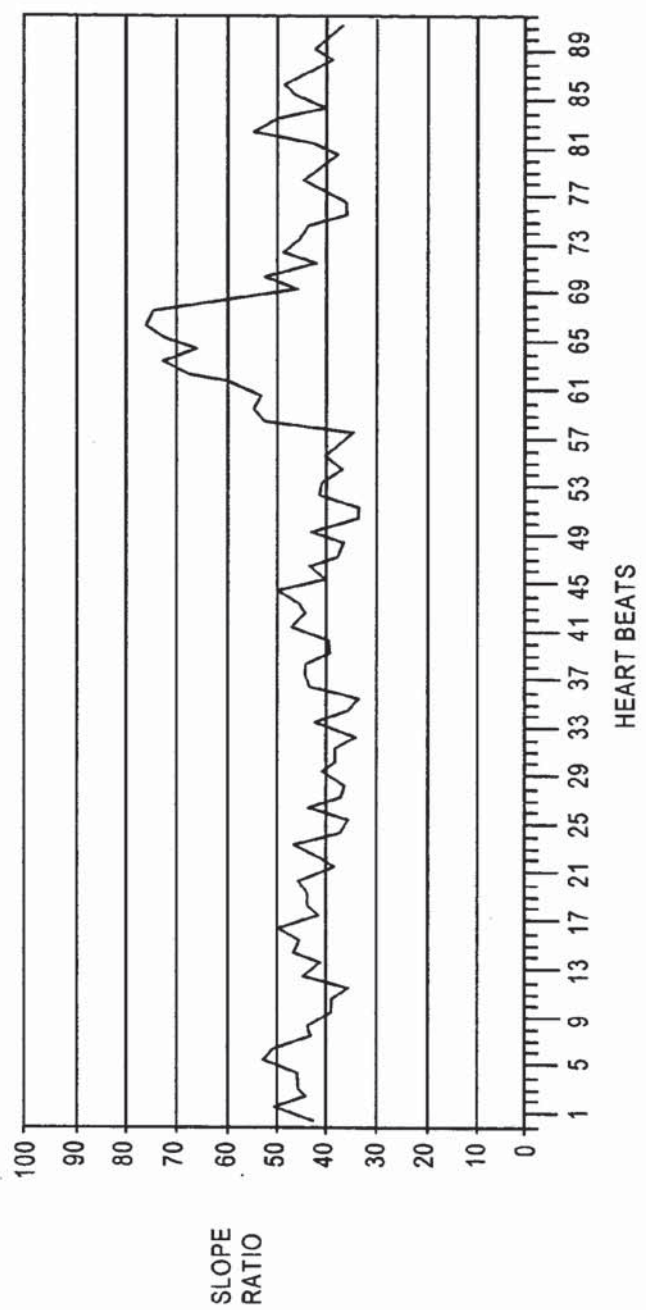


FIG. 6



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