

**United States Patent** [19]  
**Hall**

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[54] **MOTION ARTEFACT REJECTION SYSTEM FOR PULSE OXIMETERS**

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[73] **Assignee:** National Research Development Corporation, London, England

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[30] **Foreign Application Priority Data**  
 Aug. 14, 1987 [GB] United Kingdom ..... 8719333

[51] **Int. Cl.<sup>5</sup>** ..... A61B 5/00

[52] **U.S. Cl.** ..... 128/633; 128/664; 128/666; 128/687

[58] **Field of Search** ..... 128/633, 634, 664, 665, 128/666, 687; 356/39, 41

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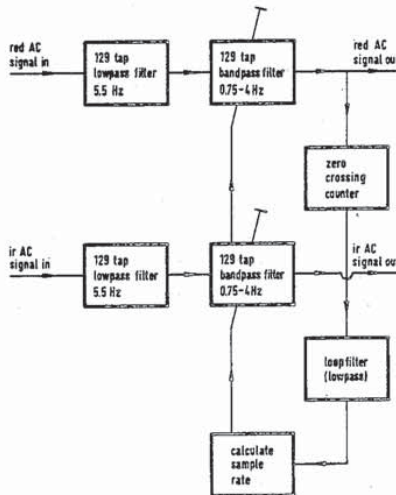
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[57] **ABSTRACT**

A pulse oximeter apparatus characterized in that it comprises a bandpass filter adapted selectively to exclude motion artefact from wanted signal is disclosed.

Also disclosed is the use of such an apparatus for the determination of pulse rate and/or arterial blood oxygen saturation.

**6 Claims, 4 Drawing Sheets**



Apple Inc.  
 APL1048

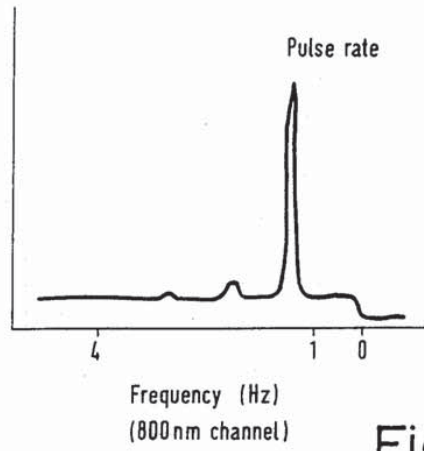


Fig.1

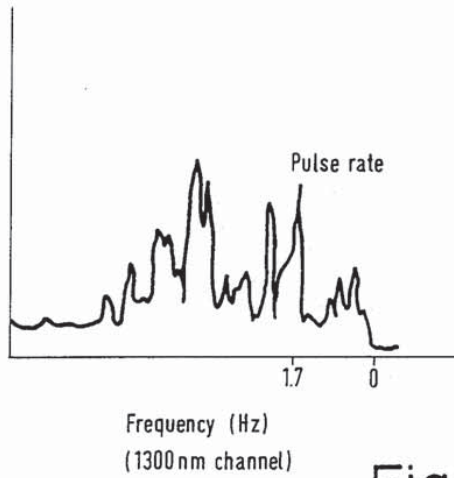


Fig.2

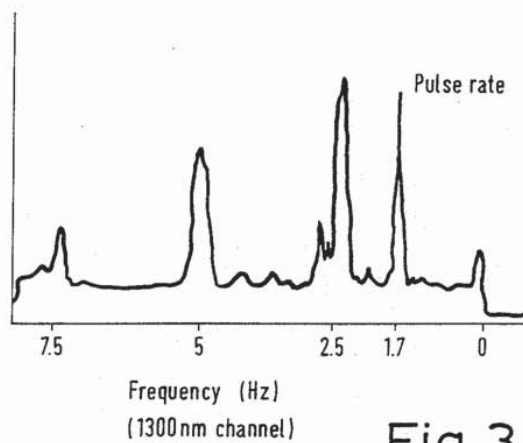


Fig. 3

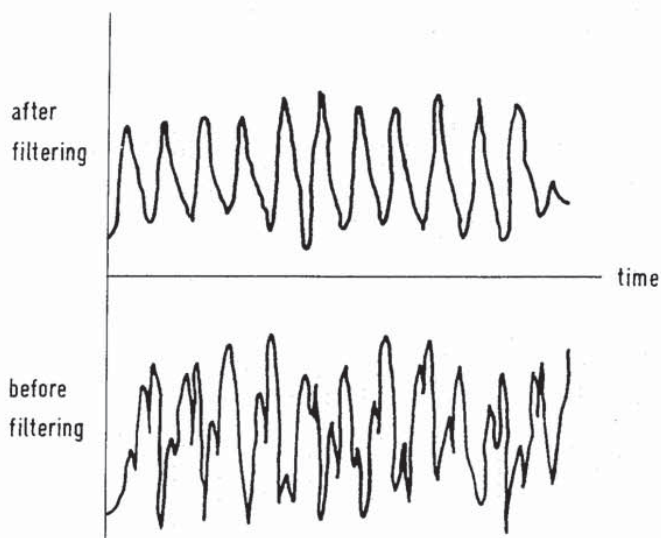


Fig. 4

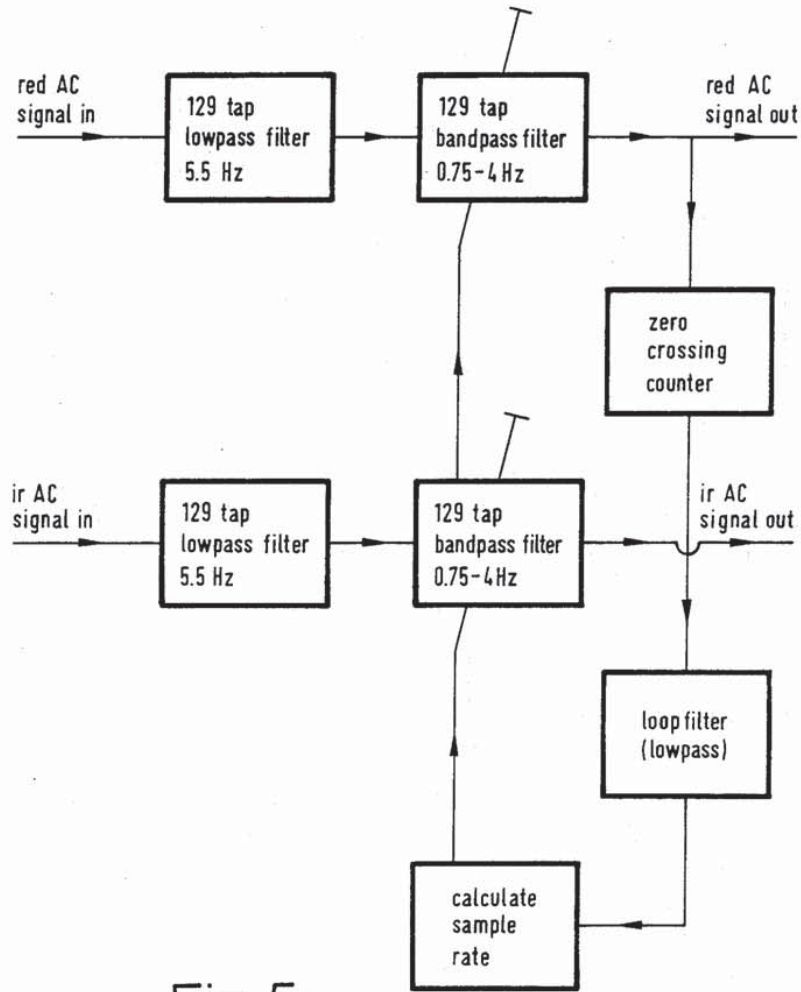


Fig. 5

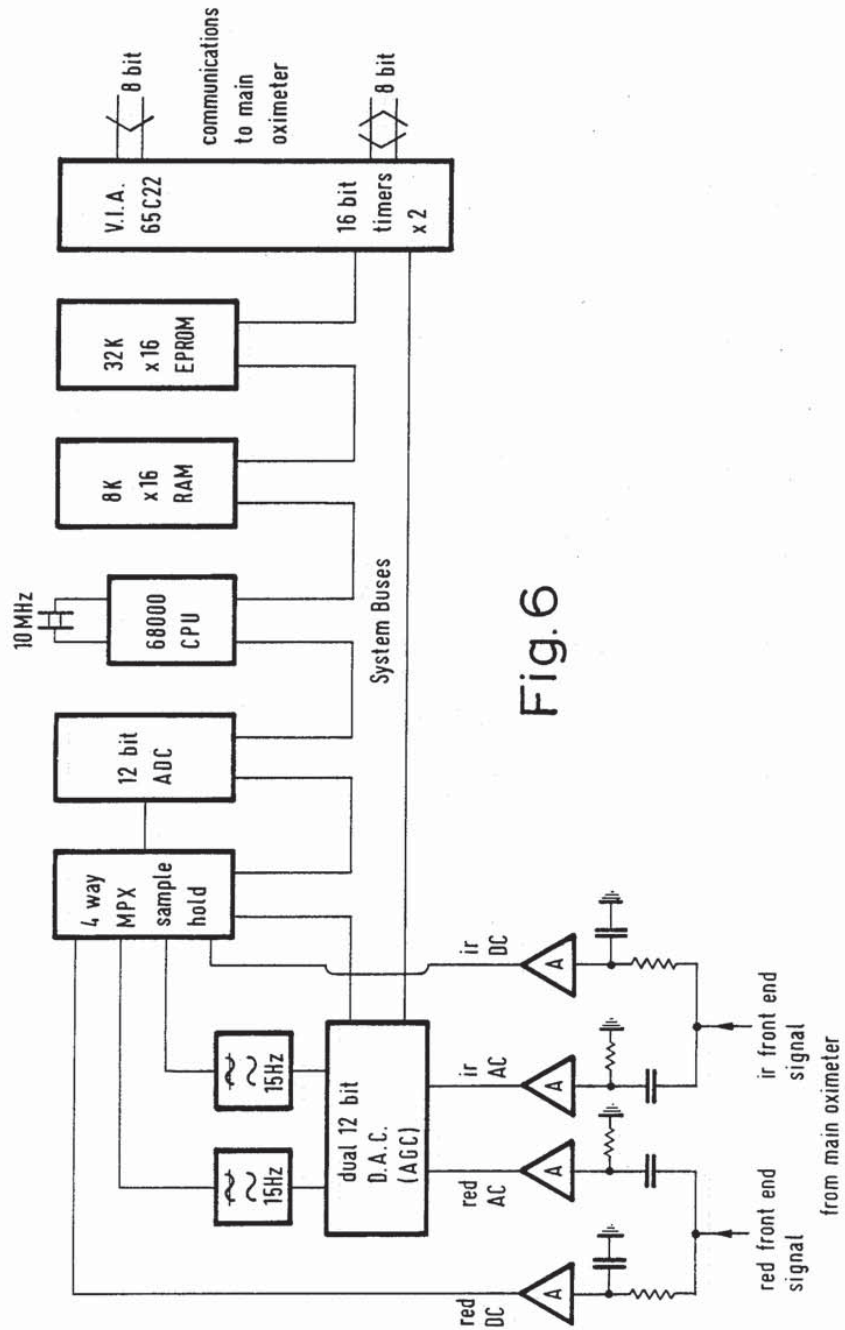


Fig. 6

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