

# United States Patent [19]

Shimizu et al.

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[54] PULSE DETECTION APPARATUS

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Japan

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[30] Foreign Application Priority Data

Aug. 31, 1985 [JP] Japan ..... 60-192632  
Aug. 31, 1985 [JP] Japan ..... 60-192633

[51] Int. Cl.<sup>4</sup> ..... A61B 5/02

[52] U.S. Cl. .... 128/690; 128/706

[58] Field of Search ..... 128/690, 707, 706

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Woodward

[57] ABSTRACT

A pulse detection apparatus includes a memory for storing the normal pulse count of a user. After taking some exercise such as jogging, the percentage of the pulse count, detected by a pulse sensor, with respect to the normal pulse count, is calculated, and the results are displayed, to allow the user to determine the recovery rate of his physical strength.

21 Claims, 19 Drawing Sheets

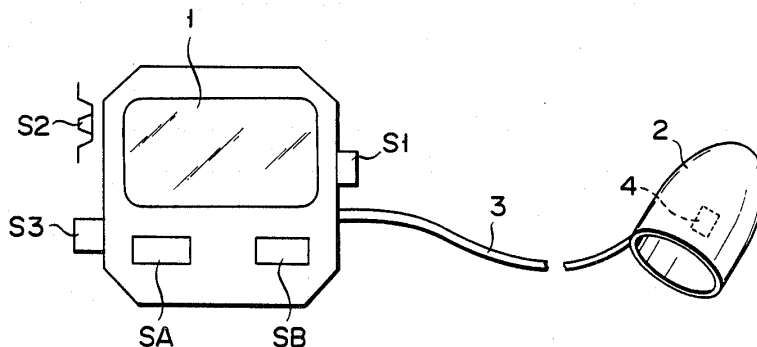


FIG. 1

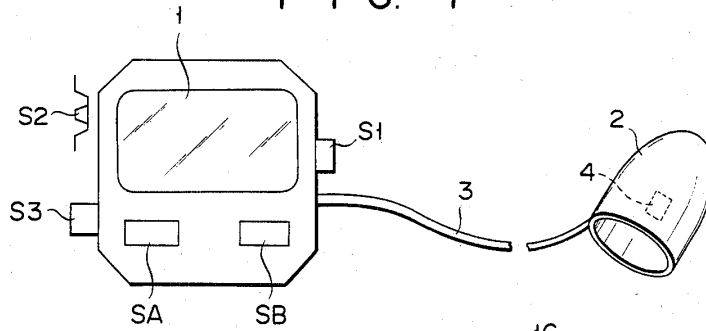


FIG. 2

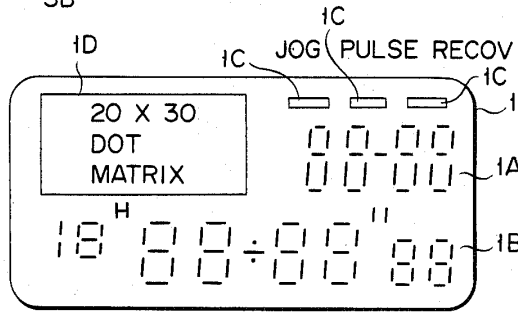


FIG. 9A

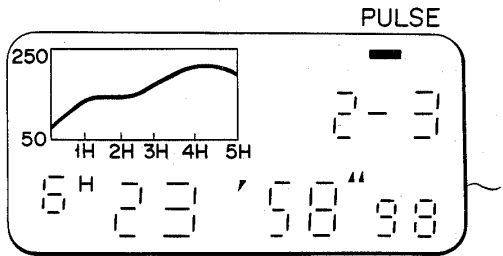
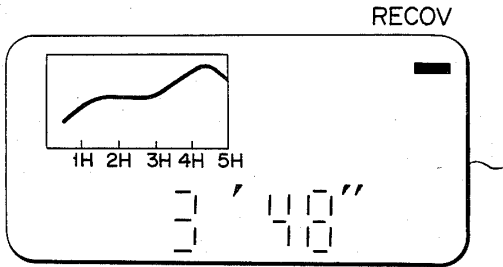
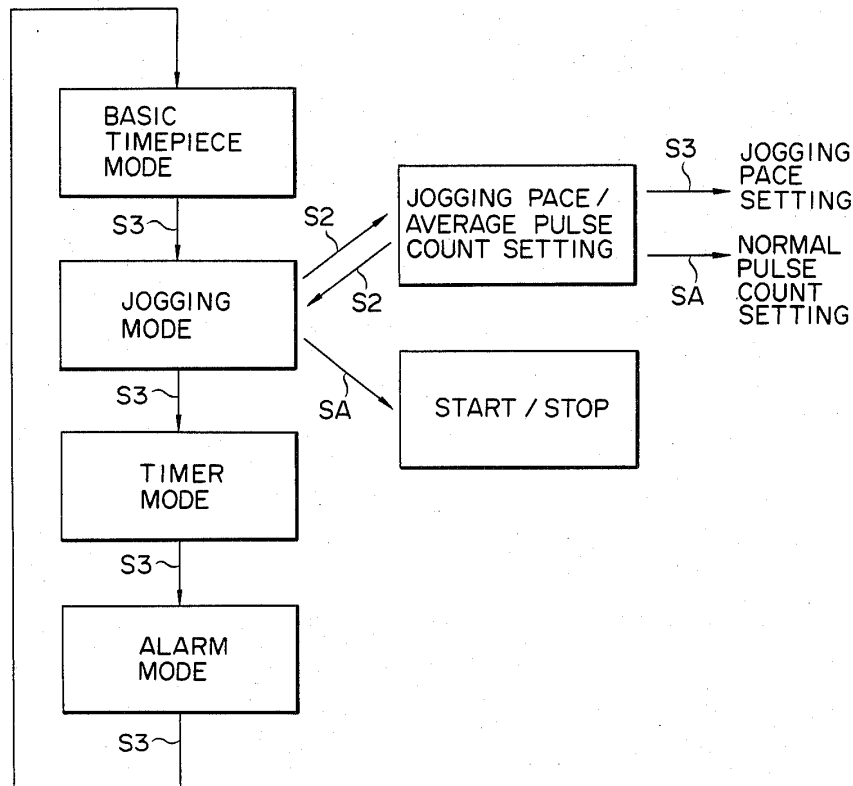


FIG. 9B



F I G. 3



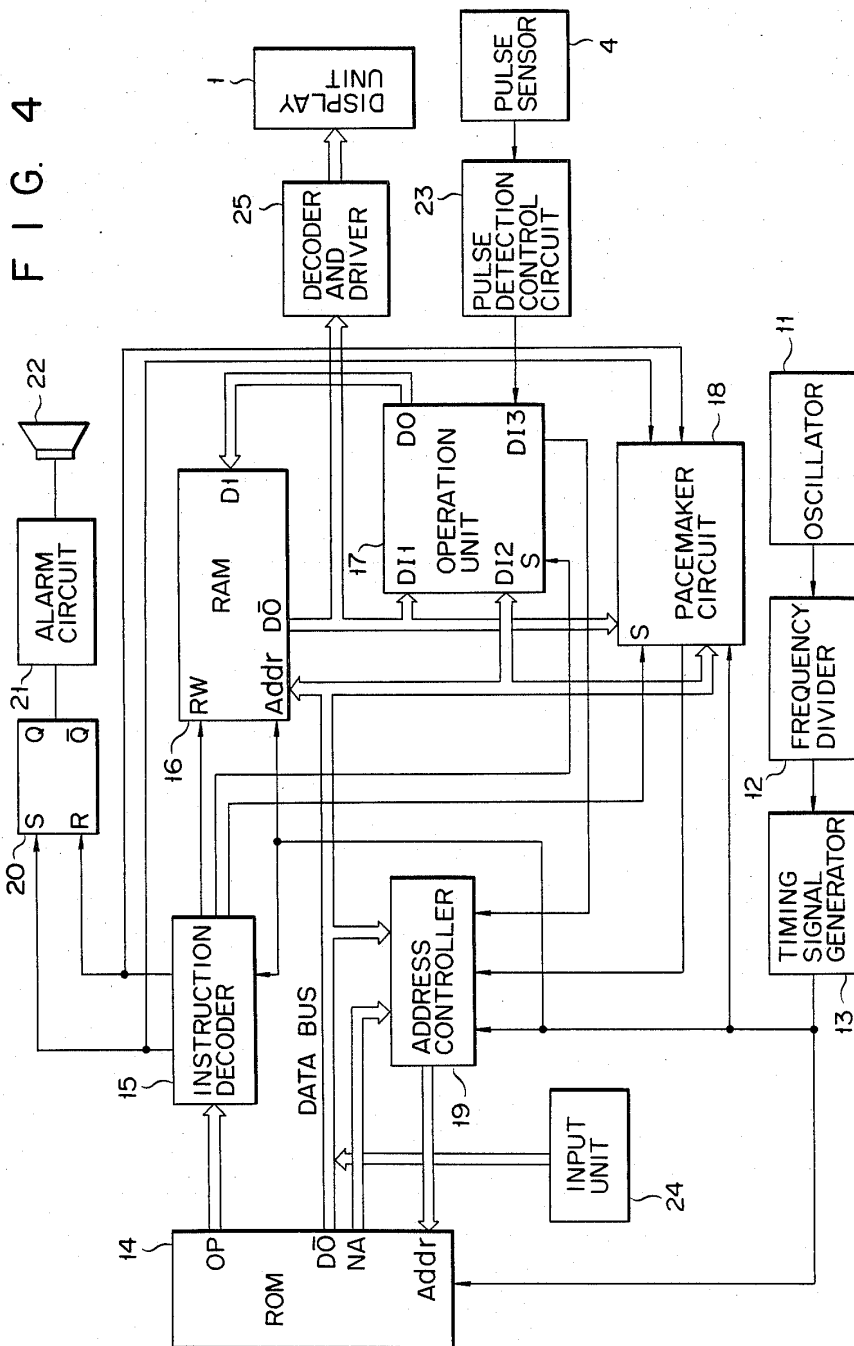
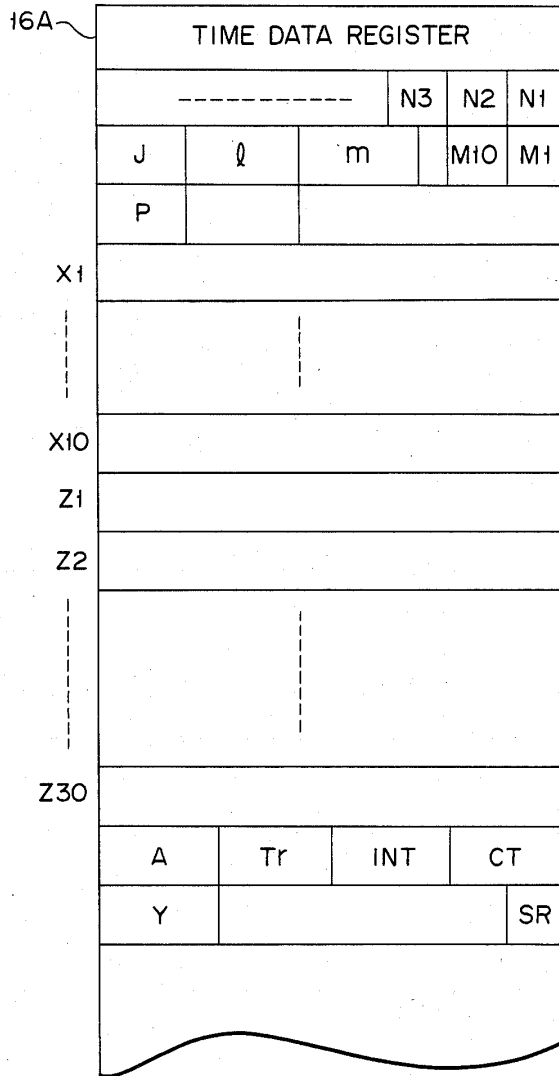


FIG. 5



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