

United States Patent [19]

Shimizu et al.

[11] Patent Number: 4,807,639

[45] Date of Patent: Feb. 28, 1989

[54] PULSE DETECTION APPARATUS

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Japan

[21] Appl. No.: 901,783

[22] Filed: Aug. 28, 1986

[30] Foreign Application Priority Data

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

[51] Int. Cl.⁴ A61B 5/02

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

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

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Assistant Examiner—George Manuel

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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

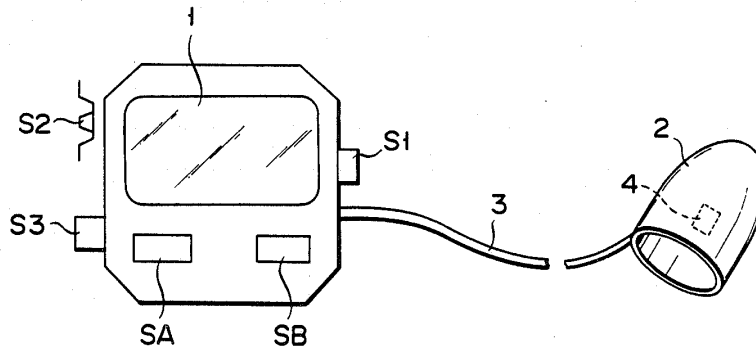


FIG. 1

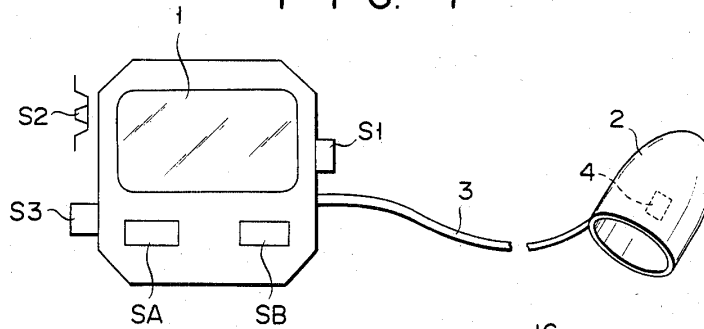


FIG. 2

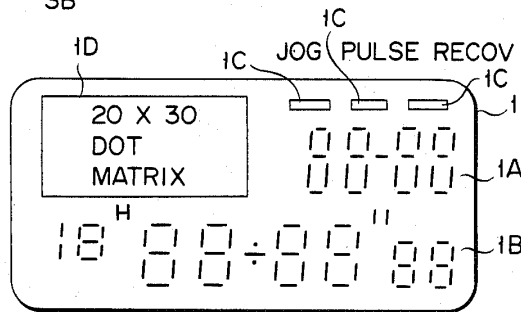


FIG. 9A

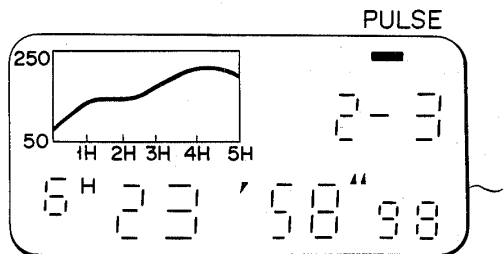
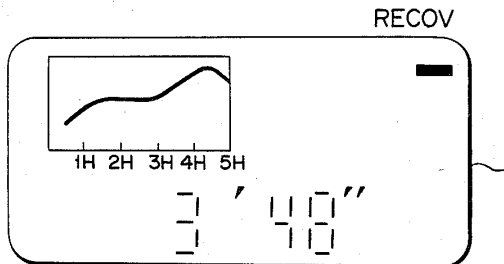
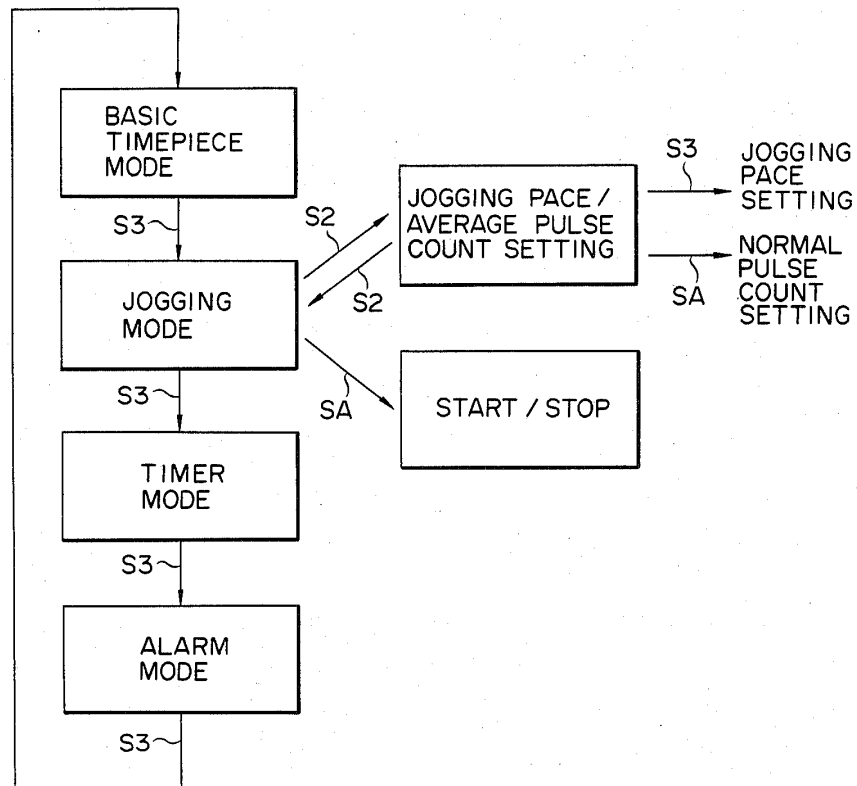


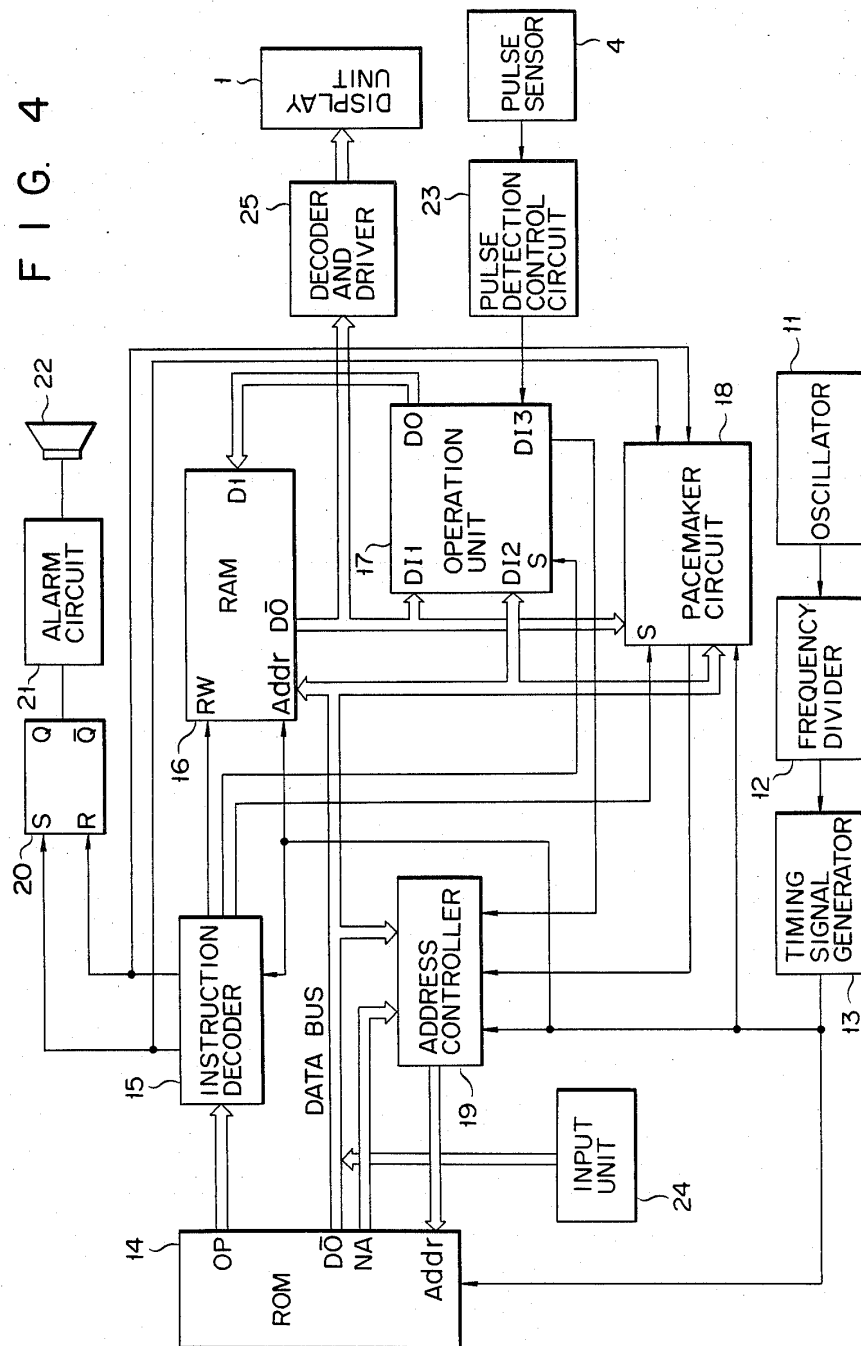
FIG. 9B



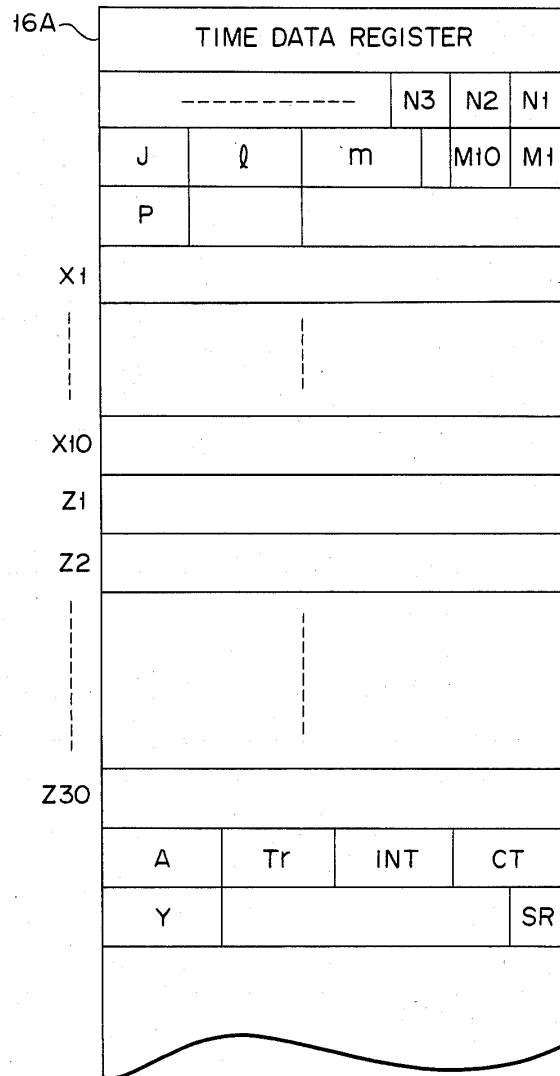
F I G. 3



4
F I G.



F I G. 5



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