



United States Patent [19]

Aoshima et al.

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[45] **Date of Patent:** **Aug. 8, 2000**

[54] **PULSE COUNTER AND PULSE DISPLAY METHOD**

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[73] Assignees: **Seiko Epson Corporation,** Tokyo;
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[21] Appl. No.: **09/180,727**

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[51] **Int. Cl.⁷** **A61B 5/02**

[52] **U.S. Cl.** **600/500; 600/502**

[58] **Field of Search** **600/500, 502,**
600/503, 501, 481

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Attorney, Agent, or Firm—Mark P. Watson

[57] ABSTRACT

A pulse counter is provided in which the value displayed for the detected value is highly reliable. An SN condition detecting means detects the SN condition of a pulse wave signal (step S201). The SN condition detecting means then determines whether or not the detected SN condition is good based on a specific threshold value (step S202). When a determination is made that the SN condition is good, a display control signal to display the pulse rate on a display means is output to a display method switching means (step S203). Conversely, when a determination is made in step S202 that the SN condition is not good, the pulse rate is not displayed on the display means, but rather a display control signal indicating that no information at all be displayed is output to the display method switching means (step S204).

16 Claims, 10 Drawing Sheets

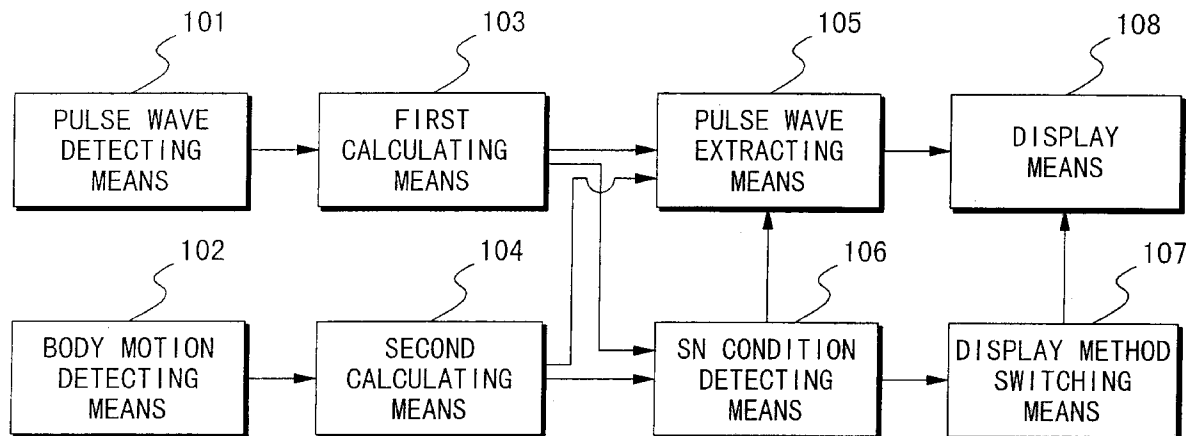


FIG. 1

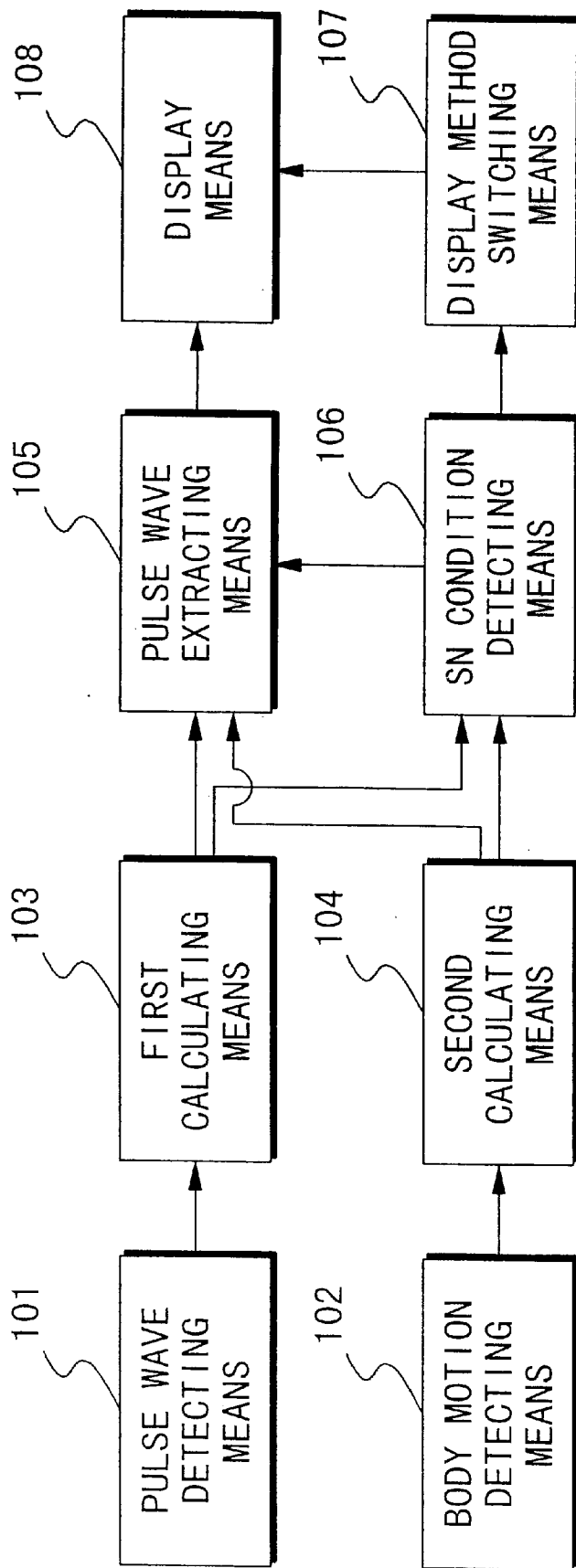


FIG. 2

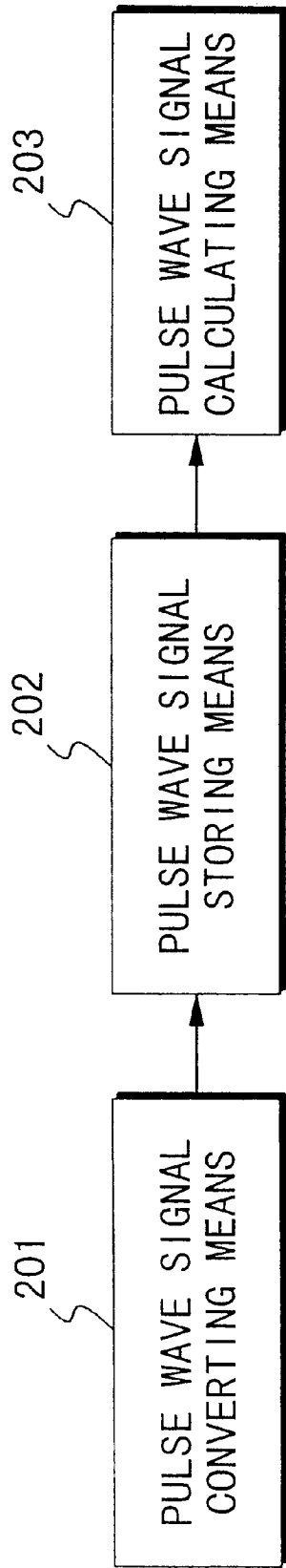


FIG. 3

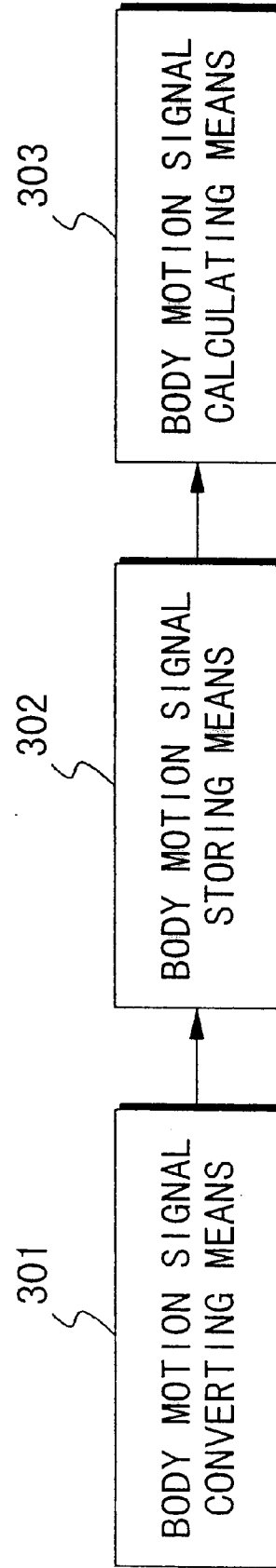


FIG. 4

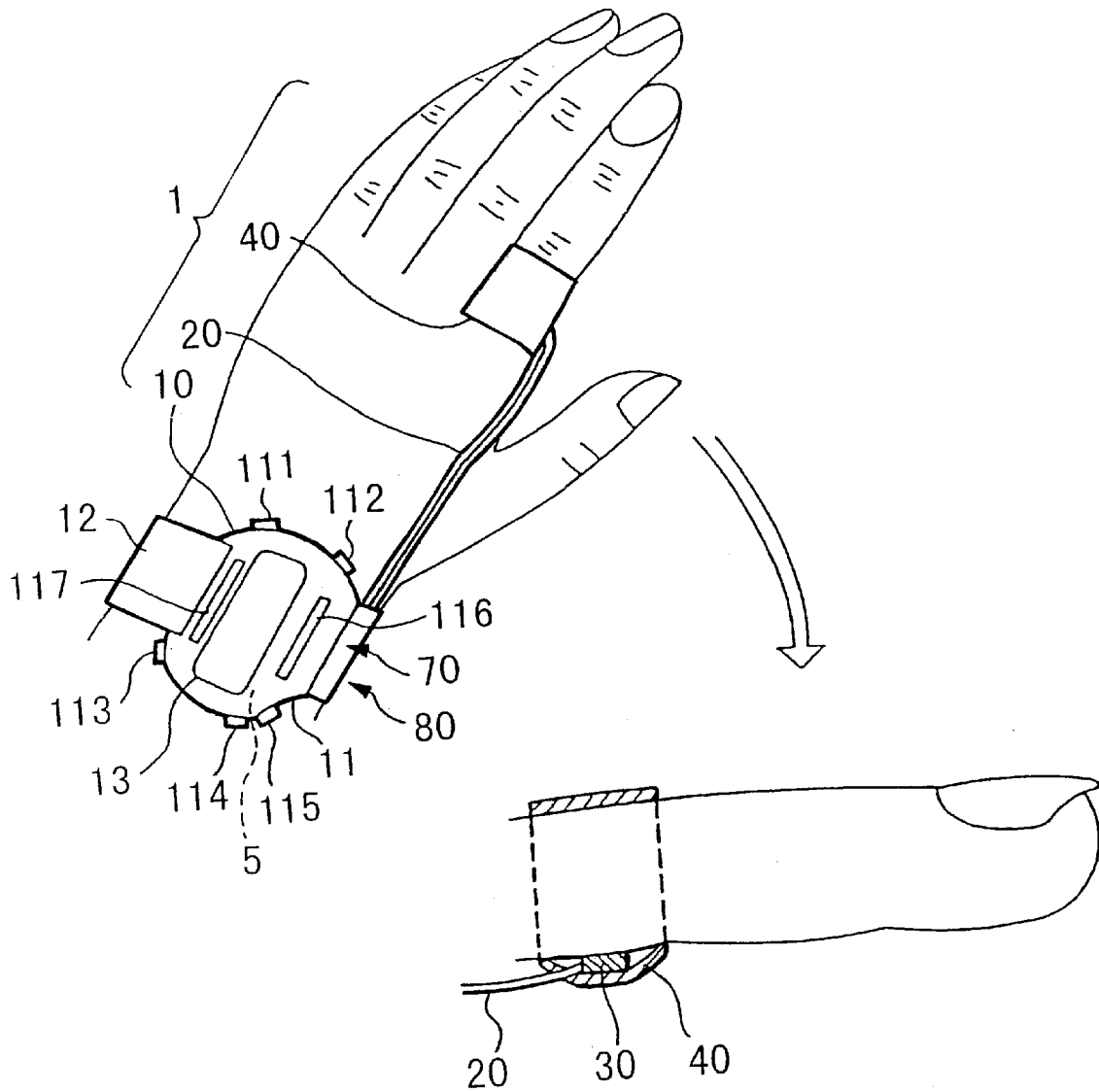


FIG. 5

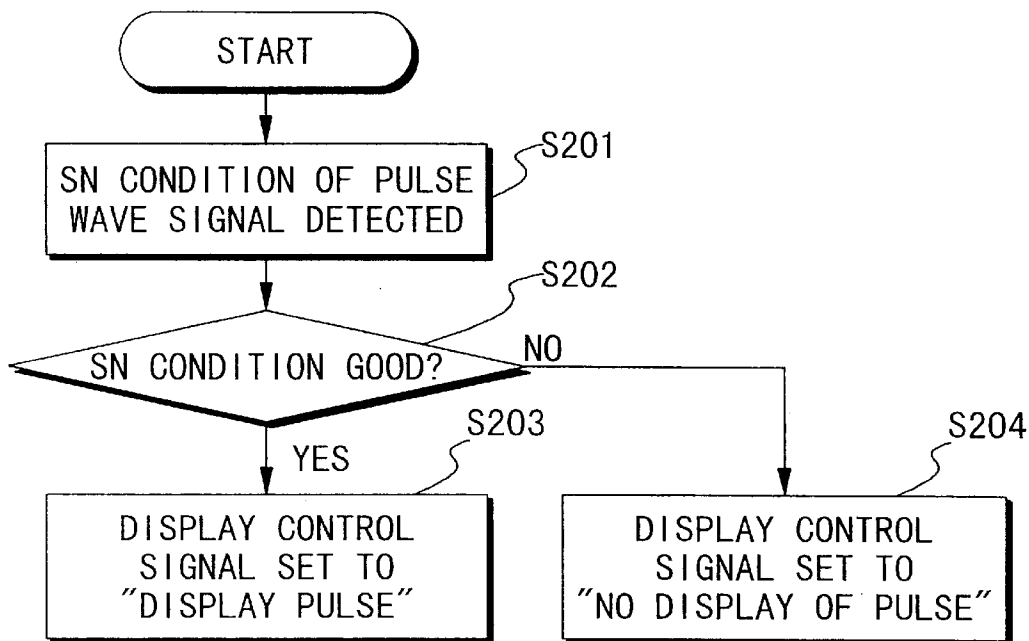
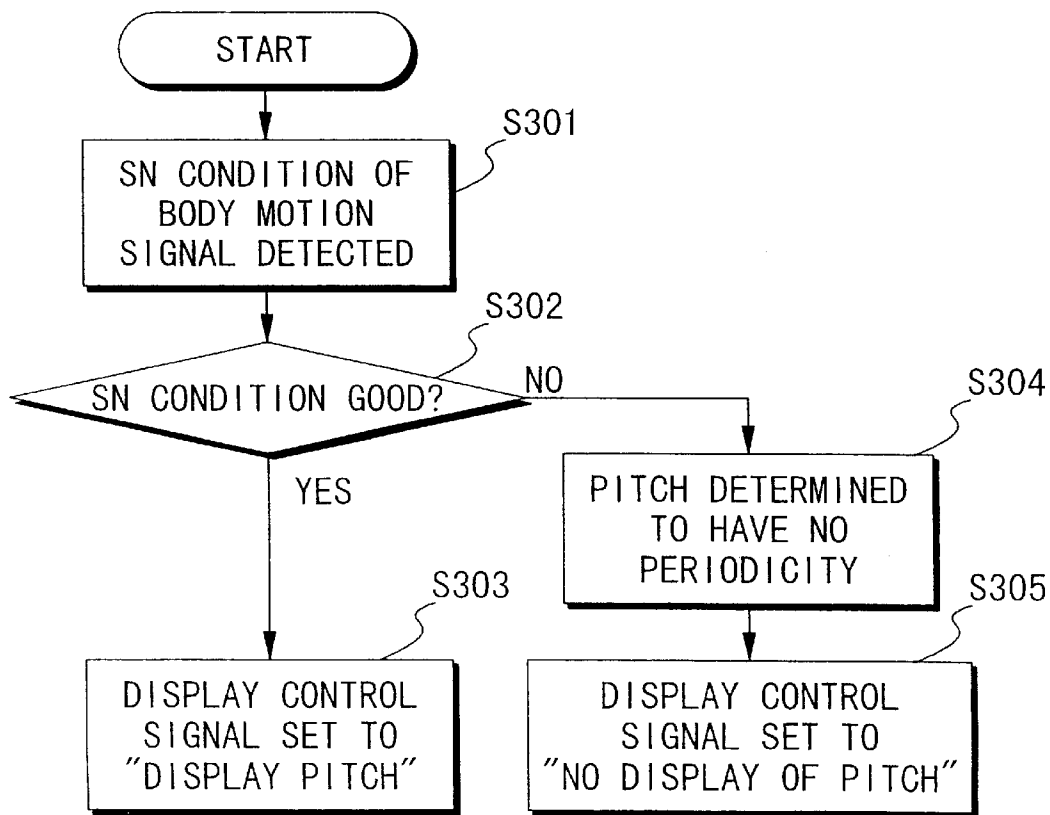


FIG. 6



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