

[54] PERSONAL MONITOR AND PROCESS FOR HEAT AND WORK STRESS

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[21] Appl. No.: 338,374

[22] Filed: Apr. 13, 1989

Related U.S. Application Data

[63] Continuation of Ser. No. 55,654, May 29, 1987, abandoned.

[51] Int. Cl.⁴ A61B 5/02

[52] U.S. Cl. 128/670; 128/706; 128/736

[58] Field of Search 128/670-671, 128/687-690, 736, 696, 706-708

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[57] ABSTRACT

A personal monitor (10, 100, 200) for work and heat stress has a heart beat sensor (12) producing output electrical signals indicating a user's heart beats. A memory (127) stores heart beat information corresponding to the heart beat signals produced over predetermined time intervals. A microprocess (126) is connected to receive the heart beat information from the memory (127). The microprocessor (126) analyzes the heart beat information incrementally over the predetermined time intervals under program control to obtain a physiological demand during the predetermined time intervals and compares the obtained physiological demand against a stored physiological demand limit. Light emitting diodes (208) and a sound producing diaphragm (186) provide indications to the user when the stored physiological demand limit has been exceeded. The microprocessor (126) controls operation of the LEDs (208) and the diaphragm (186).

19 Claims, 12 Drawing Sheets

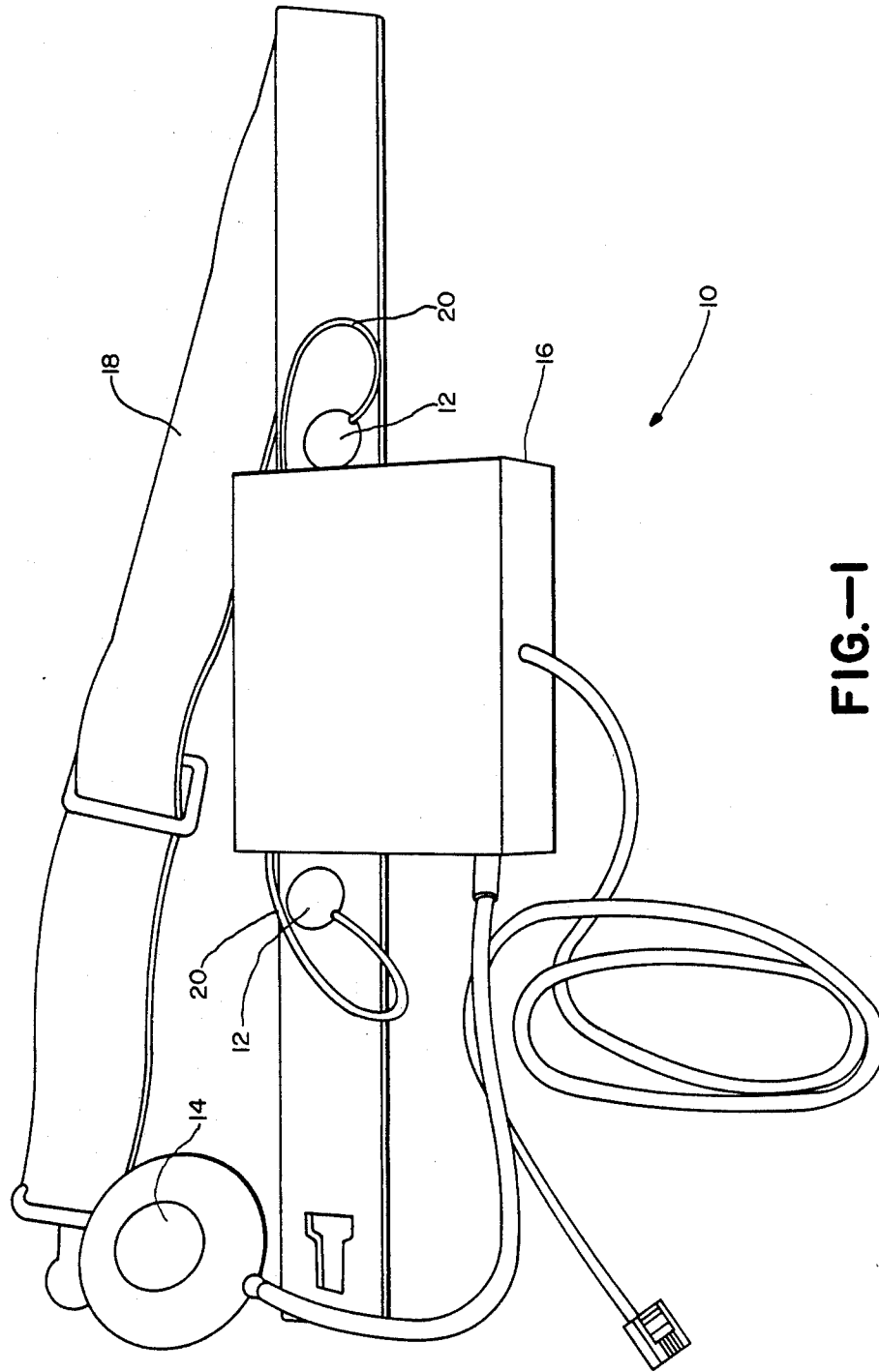


FIG. 1

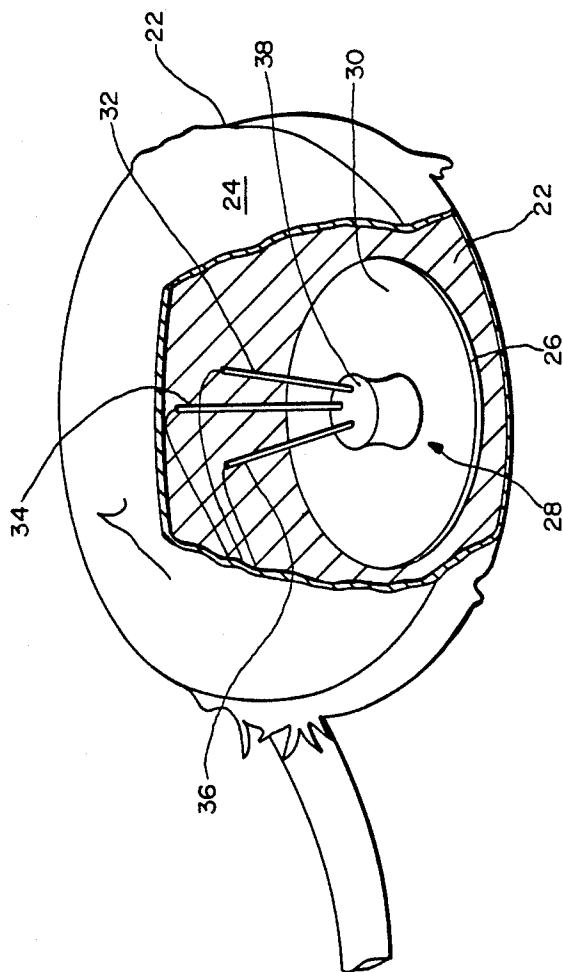


FIG.-2

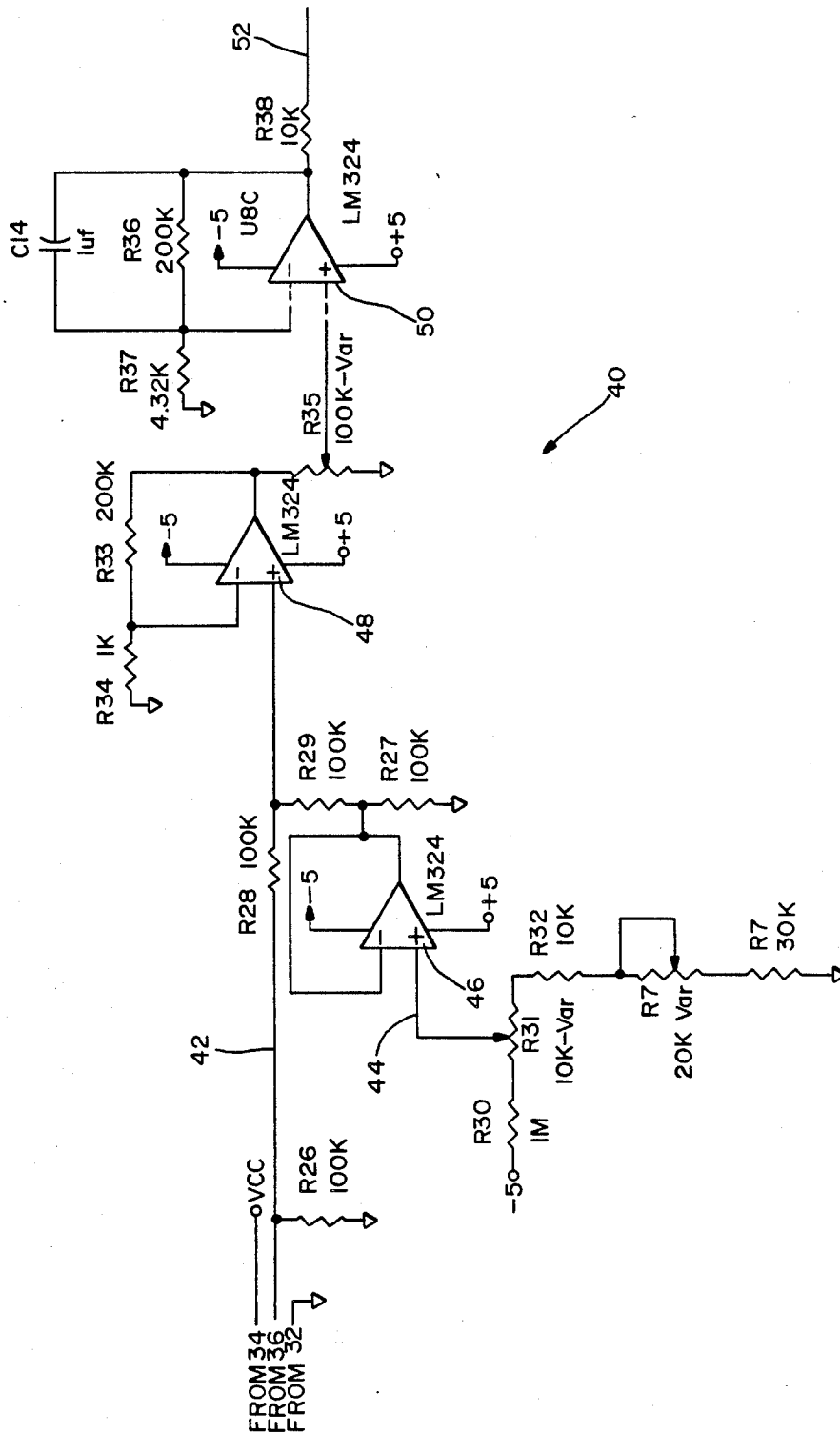


FIG.-3

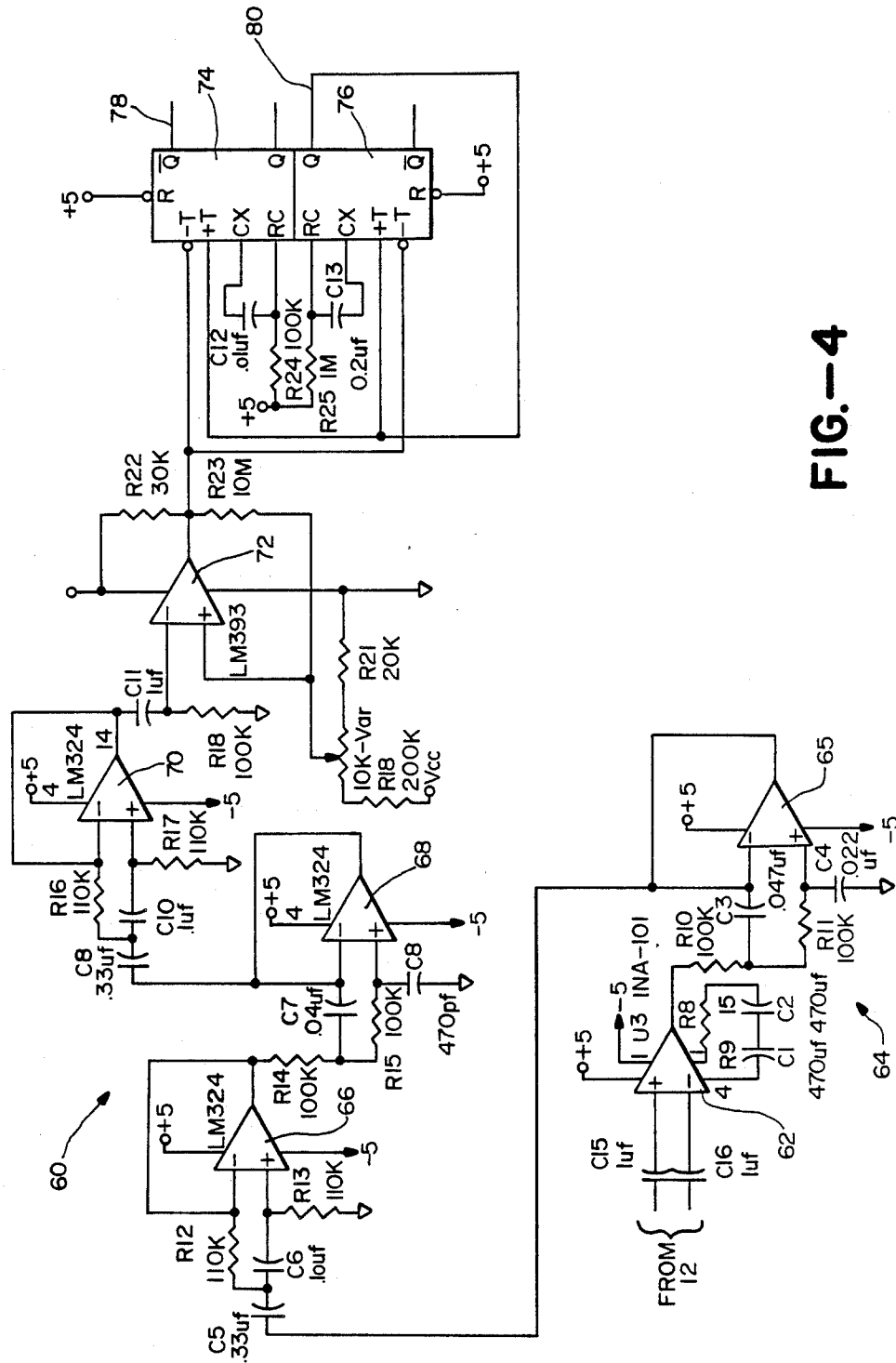


FIG. 4

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