

ABSTRACT

AN ELECTRODE MULTIPLEXING PHYSIOLOGICAL PARAMETER MONITORING RING

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The present invention discloses an electrode multiplexing physiological parameter monitoring ring, including a built-in power supply, a microprocessor module, an electrocardiogram monitoring analog front end, a skin conductance monitoring module, a first electrode, and a second electrode. The microprocessor module is connected to the electrocardiogram monitoring analog front end and the skin conductance monitoring module. The first electrode and the second electrode are connected to the electrocardiogram monitoring analog front end, and the electrocardiogram monitoring analog front end processes electrocardiogram signals collected by the first electrode and the second electrode. The first electrode and the second electrode are further connected to the skin conductance monitoring module, and the skin conductance monitoring module processes skin impedance signals collected by the first electrode and the second electrode. A coupling manner in which the first electrode and the second electrode are coupled to the electrocardiogram monitoring analog front end is direct current coupling or alternating current coupling, and is opposite to a coupling manner in which the first electrode and the second electrode are coupled to the skin conductance monitoring module. In the present invention, electrocardiogram monitoring, heart rate monitoring, and skin conductance monitoring are implemented through only two electrodes, so that the number of electrodes is reduced, and system design is simplified.

25 (FIG. 1)

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