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(54) AC-COUPLED ELECTROCARDIOGRAM SIGNAL ACQUISITION SYSTEM WITH ENHANCED COMMON MODE REJECTION

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(57)ABSTRACT

An ECG signal acquisition system includes a first amplifier which has a non-inverting input adapted to be coupled to a first differential input, an inverting input adapted to be coupled to a second differential input, and an output. The system includes first and second biasing resistors coupled between the non-inverting and inverting inputs of the first amplifier. The system includes an average estimation circuit which has a first input coupled to the non-inverting input of the first amplifier and a second input coupled to the inverting input of the first amplifier. The system includes a driver amplifier which has an inverting input coupled to the output of the average estimation circuit, a non-inverting input coupled to receive a reference common-mode voltage, and an output. The system includes a low-pass filter coupled between the output of the driver amplifier and the biasing resistors.

