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(54) **AD CONVERTER WITH SELF-CALIBRATION FUNCTION**

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(57) **ABSTRACT**

An AD converter with self-calibration function that does not require an instrument for calibration, and includes: a reference voltage unit that generates a reference voltage; a summation and conversion unit that has two or more unit voltages serving as units of amount of change in a summed voltage, and during conversion, sums up any one unit voltage of the two or more unit voltages until the summed voltage exceeds the reference voltage, with an input voltage being an initial value of the summed voltage; and a control unit including a calibration control section that calibrates the two or more unit voltages and an offset voltage of a comparator at a time of calibration, and a conversion control section that determines a polarity of the offset voltage of the comparator and thereafter converts the input voltage to a digital value during conversion.