

## LOW VOLTAGE PRECISION CURRENT SWITCH

## Abstract of the Disclosure

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A current switch circuit for operating with low supply voltages while not compromising dynamic range has been provided. The current switch circuit includes a differential pair of transistors having first (12) and second (20) transistors. The base of the first transistor is coupled to a bias voltage ( $V_B$ ) while its collector is coupled to an output (14) of the current switch circuit. The collector of the second transistor is coupled to a first supply voltage terminal while the base of the second transistor is coupled to a variable bias circuit (22) for alternately swinging the voltage applied to the base of the second transistor above or below the bias voltage applied to the base of the first transistor. When the voltage applied to the base of the second transistor is greater than the bias voltage applied to the base of the first transistor, a predetermined current is sunk from the output of the current switch. Otherwise, substantially zero current flows at the output of the current switch.

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FIG. 1 accompanies this abstract.