



(54) **SWITCHED-CAPACITOR VOLTAGE CONVERTER**

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(57) **ABSTRACT**
A switched-capacitor voltage converter includes a loop regulator module, a clamp transistor, and a clamp circuit. The loop regulator module is configured to monitor electrical parameters of an input terminal and an output terminal, and output a voltage to a gate of the clamp transistor based on electrical parameters to stabilize a voltage of an output terminal of the switched-capacitor voltage converter at a target value. The clamp circuit is connected between the two terminals of the clamp transistor, such that the voltage difference between the drain and the source of the clamp transistor is less than the withstand voltage of the clamp transistor.

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