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(54) **POWER SWITCH REVERSE CURRENT PROTECTION SYSTEMS**

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## ABSTRACT

One example described herein includes a power switch control system. The system includes a first monitoring terminal coupled to a first terminal of a power transistor and a second monitoring terminal coupled to a second terminal of the power transistor. The power transistor and the power switch control system can form an ideal diode between the first monitoring terminal arranged as an anode and the second monitoring terminal arranged as a cathode. The system further includes a reverse current controller coupled to the first monitoring terminal and the second monitoring terminal and is configured to control activation of the power transistor to conduct a reverse current from the second monitoring terminal to the first monitoring terminal in response to a reverse voltage arranged as a cathode voltage at the second monitoring terminal being greater than an anode voltage at the first monitoring terminal.

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