



## Current Source Inverter With Bidirectional Switches Background

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### The Invention

A switching circuit includes a diode, a semiconductor switch, and a first bidirectional switch. The semiconductor switch is configured to conduct a first current from a second terminal to a third terminal of the semiconductor switch when a first on-state signal is sent to a first terminal of the semiconductor switch. An anode of the diode is connected to the second terminal of the semiconductor switch, and a cathode of the diode is connected to the third terminal of the semiconductor switch. The first bidirectional switch includes a first terminal, a second terminal connected to the anode of the diode, and a third terminal and is configured to conduct a second current from the second terminal to the third terminal or from the third terminal to the second terminal when a second on-state signal is sent to the first terminal of the first bidirectional switch.

### Additional Information

#### For More Information About the Inventors

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#### Tech Fields

- [Engineering : Electric machines](#)
- [Engineering : Power electronics & control systems](#)

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