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(54) **POWER CONVERTER WITH REDUCED POWER CONSUMPTION AND METHOD OF OPERATING THE SAME**

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ABSTRACT

A power converter with reduced power consumption receives an input voltage and provides an output voltage to supply power to a load. The power converter includes a power factor correction circuit, a driver circuit, and a controller. The power factor correction circuit includes at least one inductor and an output capacitor. When the controller determines that an effective value of an input current is correspondingly lower than a current lower limit, a specific time period starts based on the output voltage reaching a voltage lower limit, and the specific time period ends based on the output voltage reaching a voltage upper limit. In the specific time period, the controller enables the driver circuit based on the input current being correspondingly greater than a predetermined threshold so as to continuously transfer the energy stored in the at least one inductor to the output capacitor.

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