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(54) LOAD CONTROL DEVICE FOR A LIGHT-EMITTING DIODE LIGHT SOURCE

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(57)ABSTRACT

A load control device for controlling the intensity of a lighting load, such as a light-emitting diode (LED) light source, may include a power converter circuit operable to receive a rectified AC voltage and to generate a DC bus voltage, a load regulation circuit operable to receive the bus voltage and to control the magnitude of a load current conducted through the lighting load, and a control circuit operatively coupled to the load regulation circuit for pulse width modulating or pulse frequency modulating the load current to control the intensity of the lighting load to a target intensity. The control circuit may control the intensity of the lighting load by pulse width modulating the load current when the target intensity is above a predetermined threshold and control the intensity of the lighting load by pulse frequency modulating the load current when the target intensity is below the predetermined threshold.

