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(54) **SYSTEMS AND METHODS FOR PROVIDING POWER SUPPLY TO CURRENT CONTROLLERS ASSOCIATED WITH LED LIGHTING**

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ABSTRACT

System and method for controlling one or more light emitting diodes. For example, the system includes: a power supply controller configured to receive a cathode voltage from a cathode of a diode, the diode including an anode configured to receive a rectified voltage generated by a rectifying bridge, the power supply controller being further configured to generate a first signal based at least in part on the cathode voltage; and a driver configured to receive the first signal and generate a second signal based at least in part on the first signal, the driver being further configured to output the second signal to a gate terminal of a transistor, the transistor including a source terminal coupled to the driver and a first resistor, the transistor further including a drain terminal coupled to the one or more light emitting diodes and an output capacitor connected to the cathode of the diode.

