



US 20220377859A1

(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0377859 A1**  
(43) **Pub. Date:** **Nov. 24, 2022**(54) **LIGHT-EMITTING DIODE LIGHTING  
DEVICE WHICH IMPROVES LINE  
REGULATION****Publication Classification**(51) **Int. Cl.**  
**H05B 45/345** (2006.01)  
**H05B 45/37** (2006.01)  
(52) **U.S. Cl.**  
CPC ..... **H05B 45/345** (2020.01); **H05B 45/37**  
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May 21, 2021 (CN) ..... 202110559731.X

(57) **ABSTRACT**

An LED lighting device includes a luminescent device driven by a rectified AC voltage, a current regulating circuit, and a duty cycle detecting circuit. The current regulating circuit is configured to provide a regulating current so that the current flowing through the luminescent device does not exceed the regulating current. The current detecting circuit is configured to monitor the value of the regulating current, and the duty cycle detecting circuit is configured to monitor the duty cycle of the regulating current. The present invention can improve the overall line regulation of the LED lighting device when the rectified AC voltage somehow fluctuates between its upper bound and lower bound.

