



US 20230232516A1

(19) **United States**(12) **Patent Application Publication**
CHUNG et al.(10) **Pub. No.: US 2023/0232516 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **LED ILLUMINATION DEVICE FOR
RAPIDLY RELEASING RESIDUAL
CAPACITANCE**(52) **U.S. Cl.**CPC *H05B 45/3725* (2020.01); *H05B 45/40*
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ABSTRACT(72) Inventors: **CHIA-TIN CHUNG**, MIAOLI
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An LED illumination device for rapidly releasing residual capacitance, which includes a bridge rectifier chip, a current-limiting chip, a light-emitting group, a resistor group and a capacitor. The light-emitting group includes a plurality of first and second LED chips. The resistor group includes a plurality of first and second resistor chips. The first working voltage of the first LED chip is different from the second working voltage of the second LED chip. The first resistance value of the first resistor chip is different from the second resistance value of the second resistor chip. Each first LED chip corresponds to one of the first resistor chips, and each second LED chip corresponds to one of the second resistor chips. When the power supply is turned off, the residual capacitance remaining in the capacitor can be released by cooperation of the first resistor chips and the second resistor chips.

(21) Appl. No.: **17/702,805**(22) Filed: **Mar. 24, 2022**(30) **Foreign Application Priority Data**

Jan. 18, 2022 (TW) 111200624

Publication Classification(51) **Int. Cl.***H05B 45/3725* (2006.01)*H05B 45/40* (2006.01)D