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Has received an application for a patent for a new and useful invention. The title and description of the invention are enclosed. The requirements of law have been complied with, and it has been determined that a patent on the invention shall be granted under the law.

Therefore, this

United States Patent

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Michelle K. Lee

Director of the United States Patent and Trademark Office



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(12) **United States Patent**
Chung et al.

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(54) **ILLUMINATING APPARATUS CAPABLE OF DETECTING POWER SUPPLY AND METHOD USING THE SAME**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 320 days.

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USPC 315/291, 307-326, 276-279, 185 S,
315/224, 225, 247, 200 R
See application file for complete search history.

(56) **References Cited**

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(57) **ABSTRACT**

An illuminating apparatus is disclosed. The illuminating apparatus includes a detecting unit, an illuminating unit, and a control unit. The illuminating unit includes multiple illuminating sets and a switching unit for adjusting a connection relationship among the illuminating sets. The detecting unit is for detecting an inputted power supply received by the illuminating unit while the control unit is coupled to the detecting unit and the switching unit. The control unit based on a detected inputted power supply controls the switching unit according to a predetermined setting parameter, so as to ensure a conducting voltage of the illuminating unit to vary according to a variation in the inputted power supply.

12 Claims, 6 Drawing Sheets

