

Title (en)
Lighting apparatus

Title (de)
Beleuchtungsanordnung

Title (fr)
Appareil d'éclairage

Publication
EP 1881743 A2 20080123 (EN)

Application
EP 07013491 A 20070710

Priority
JP 2006189881 A 20060710

Abstract (en)
A lighting apparatus is provided, which has a not lowered light output and a long life even service time is prolonged. The lighting apparatus includes a light source having a phosphor and a resin including the phosphor, and having a characteristic that as a provided electric power is increased, a decreased rate of a lumen maintenance factor is increased, and an electric-to-optical conversion efficiency is reduced; a radiation element, directly or indirectly disposed on the light source; a power source, capable of changing the electric power supplied to the light source; and a controller, reducing the electric power provided to the light source at an initial period, and making the provided electric power increase as a function of time.

IPC 8 full level
H05B 44/00 (2022.01); **H05B 37/03** (2006.01)

CPC (source: EP US)
H05B 45/18 (2020.01 - EP US); **H05B 45/375** (2020.01 - EP US); **H05B 45/40** (2020.01 - EP US); **H05B 47/20** (2020.01 - EP US)

Citation (examination)
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• DE 19540326 A1 19970430 - BOSCH GMBH ROBERT [DE]
• US 2005184681 A1 20050825 - GORDIN MYRON K [US], et al
• SHUN-LIEN CHUANG ET AL: "Kinetic Model for Degradation of Light-Emitting Diodes", IEEE JOURNAL OF QUANTUM ELECTRONICS, IEEE SERVICE CENTER, PISCATAWAY, NJ, USA, vol. 33, no. 6, 1 June 1997 (1997-06-01), XP011051647, ISSN: 0018-9197

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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK RS

DOCDB simple family (publication)
EP 1881743 A2 20080123; **EP 1881743 A3 20100428**; CN 101106856 A 20080116; CN 101106856 B 20120125; JP 2013235847 A 20131121

DOCDB simple family (application)
EP 07013491 A 20070710; CN 200710128072 A 20070709; JP 2013151467 A 20130722