

Title (en)

COB LIGHTING DEVICE HAVING IMPROVED LIGHT-DISTRIBUTION, ILLUMINANCE, AND HEAT -DISSIPATION EFFICIENCY

Title (de)

COB-BELEUCHTUNGSVORRICHTUNG MIT VERBESSERTER LICHTVERTEILUNG, LICHTINTENSITÄT UND WÄRMEABLEITUNGSEFFIZIENZ

Title (fr)

DISPOSITIF D'ÉCLAIRAGE COB À DISTRIBUTION DE LUMIÈRE, ÉCLAIREMENT LUMINEUX ET EFFICACITÉ DE DISSIPATION DE CHALEUR AMÉLIORÉS

Publication

EP 3315855 A4 20181212 (EN)

Application

EP 15896458 A 20151126

Priority

- KR 20150090259 A 20150625
- KR 2015012779 W 20151126

Abstract (en)

[origin: EP3315855A1] The present invention relates to a COB lighting device having improved light-distribution, illuminance, and heat-dissipation efficiency that: can reflect emitted light with a reflective plate to prevent glare caused by direct rays of the light; can allow the light traveling forwards from the reflector to have travel paths similar to each other to minimize the amount of light leaked out of an illuminated area, thereby improving luminous intensity; and can allow the light to be uniformly supplied rather than being limited to one point, the COB lighting device comprising: a polygonal prismatic heat-dissipation rod having a thermal conductor formed on at least one of the inside and the outside thereof; a plurality of lighting modules attached to the outer circumferential surface of the heat-dissipation rod in the longitudinal direction, each of which has a plurality of lighting elements arranged in a line; a reflector having the shape of a container that is open at an opposite end thereof, wherein the heat-dissipation rod is fixedly inserted into the central portion of the reflector, and the reflector has a plurality of planar reflective plates that are formed such that side surfaces thereof are in constant contact with each other; a heat-dissipation plate assembly that is in contact with an end portion of the heat-dissipation rod and releases, to the outside, heat conducted from the heat-dissipation rod; and a stabilizer provided on a side of the heat-dissipation plate assembly to supply power to the lighting modules.

IPC 8 full level

F21V 29/71 (2015.01); **F21V 7/04** (2006.01); **F21V 29/74** (2015.01); **F21V 29/51** (2015.01); **F21Y 107/30** (2016.01); **F21Y 115/10** (2016.01)

CPC (source: EP)

F21V 7/048 (2013.01); **F21V 29/51** (2015.01); **F21V 29/71** (2015.01); **F21V 29/74** (2015.01); **F21Y 2107/30** (2016.07); **F21Y 2115/10** (2016.07)

Citation (search report)

- [XY] US 2014185287 A1 20140703 - CUNNINGHAM DAVID W [US]
- [Y] KR 20120044519 A 20120508 - BIKO KOREA CO LTD [KR]
- [I] US 2003227774 A1 20031211 - MARTIN PAUL S [US], et al
- See references of WO 2016208824A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3315855 A1 20180502; **EP 3315855 A4 20181212**; CN 208107995 U 20181116; KR 20170000976 A 20170104; WO 2016208824 A1 20161229

DOCDB simple family (application)

EP 15896458 A 20151126; CN 201590001481 U 20151126; KR 20150090259 A 20150625; KR 2015012779 W 20151126