

Title (en)

Lighting device with an optical system for the control of UGR Index and luminance

Title (de)

Leuchte mit einem optischen System zur Steuerung des UGR Indexes und der Leuchtdichte

Title (fr)

Dispositif d'éclairage avec système optique pour contrôler l'index UGR et la luminance

Publication

EP 2863111 A1 20150422 (EN)

Application

EP 14189107 A 20141015

Priority

IT MI20131711 A 20131015

Abstract (en)

A controlled-emission lighting device (1) comprises at least one light source (2) and an optical system (4) for the control of UGR index and luminance; the optical system (4) comprises a multi-lens optical element (8) formed by a plurality of lenses (9) arranged side-by-side along two directions, and a grid (10), located on an inner face (11), facing towards the light source (2), of the optical element (8); the grid (10) is dimensioned so as to limit the angle of incidence of the light rays that impinge on respective entry surfaces (13), facing towards the inside of the lighting device (1) and towards the light source (2), of the lenses (9); and the lenses (9) have respective exit surfaces (14) shaped so as to project the light rays passing through the grid (10) with emission angles lower than a threshold value.

IPC 8 full level

F21V 5/00 (2015.01); **F21V 11/06** (2006.01); **F21S 8/04** (2006.01); **F21V 5/04** (2006.01); **F21Y 103/00** (2016.01); **F21Y 115/10** (2016.01)

CPC (source: EP US)

F21V 5/007 (2013.01 - EP US); **F21V 5/048** (2013.01 - EP US); **F21V 11/06** (2013.01 - EP US); **F21S 8/04** (2013.01 - EP); **F21Y 2103/10** (2016.07 - EP US); **F21Y 2115/10** (2016.07 - EP US)

Citation (search report)

- [X] US 2008030974 A1 20080207 - ABU-AGEEL NAYEF M [US]
- [X] EP 2461086 A1 20120606 - APPOTRONICS CORP LTD [CN]
- [A] EP 2357399 A1 20110817 - KOITO MFG CO LTD [JP]

Cited by

DE102020104340A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2863111 A1 20150422; **EP 2863111 B1 20161130**; IT MI20131711 A1 20150416

DOCDB simple family (application)

EP 14189107 A 20141015; IT MI20131711 A 20131015