Title (en)

LED MODULE COMPRISING A DOME-SHAPED COLOR CONVERSION LAYER

Title (de)

LED-MODUL MIT KALOTTENFÖRMIGER FARBKONVERSIONSSCHICHT

Title (fr)

MODULE DEL À COUCHE DE CONVERSION DE COULEUR DE TYPE CALOTTE

Publication

EP 2269237 A2 20110105 (DE)

Application

EP 09737877 A 20090429

Priority

- EP 2009003103 W 20090429
- DE 202008005987 U 20080430

Abstract (en)

[origin: WO2009132833A2] An LED module comprises at least one LED chip (4) emitting monochromatic light having a first spectrum, a platform (2) on which the LED chip is mounted, a reflecting wall (9) that is separate from or integrated into the platform and surrounds the LED chip on all sides, and a dispensed layer (11) applied above the LED chip. The dispensed layer extends in a dome-shaped manner beyond the reflecting wall such that the following equation is satisfied: $0.1*b_1 = h_1 = 0.5*b_1$, where h_1 is the height of the dome-shaped dispensed layer, measured from the topmost point of the reflecting wall to the apex of the dome, and b_1 is the diameter of the depression formed by the reflecting wall, measured as the distance from the central axis of the wall.

IPC 8 full level

H01L 33/00 (2010.01); **H01L 33/50** (2010.01); **H01L 33/54** (2010.01); **H01L 33/60** (2010.01)

CPC (source: EP US)

H01L 33/505 (2013.01 - EP US); **H01L 33/54** (2013.01 - EP US); **H01L 33/60** (2013.01 - EP US); H01L 2224/16225 (2013.01 - EP US); H01L 2224/48091 (2013.01 - EP US); H01L 2224/48227 (2013.01 - EP US); H01L 2224/8592 (2013.01 - EP US)

Citation (search report)

See references of WO 2009132833A2

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

DE 202008005987 U1 20090903; CN 102057508 A 20110511; CN 102057508 B 20120822; EP 2269237 A2 20110105; US 2011057226 A1 20110310; US 8502251 B2 20130806; WO 2009132833 A2 20091105; WO 2009132833 A3 20100128

DOCDB simple family (application)

DE 202008005987 U 20080430; CN 200980121307 A 20090429; EP 09737877 A 20090429; EP 2009003103 W 20090429; US 99045709 A 20090429