

Title (en)
RADIATION-EMITTING SEMICONDUCTOR COMPONENT

Title (de)
STRAHLUNGSEMITTIERENDES HALBLEITERBAUTEIL

Title (fr)
COMPOSANT SEMI-CONDUCTEUR ÉMETTANT UN RAYONNEMENT

Publication
EP 2465139 A1 20120620 (DE)

Application
EP 10740230 A 20100805

Priority
• DE 102009037186 A 20090812
• EP 2010061446 W 20100805

Abstract (en)
[origin: WO2011018411A1] A radiation-emitting semiconductor component is provided, comprising: a light-emitting diode chip (1) having at least two emission regions (2a, 2b) that can be operated independently of each other, at least two differently designed conversion elements (31, 32), wherein during operation of the light-emitting diode chips (1) each of the emission regions (2a, 2b) is provided for generating electromagnetic primary radiation, each emission region (2a, 2b) has an emission surface (21, 22) by which at least part of the primary radiation is decoupled from the light-emitting diode chip (1), the conversion elements (31, 32) are provided for absorbing at least part of the primary radiation and for re-emitting secondary radiation, the differently designed conversion elements (31, 32) are disposed downstream of different emission surfaces, and an electric resistance element (4), which is connected in series or parallel to at least one of the emission regions (2a, 2b).

IPC 8 full level
H01L 27/15 (2006.01); **H01L 33/08** (2010.01); **H01L 33/50** (2010.01); **H01L 33/20** (2010.01); **H01L 33/32** (2010.01); **H01L 33/38** (2010.01); **H01L 33/62** (2010.01)

CPC (source: EP KR US)
H01L 27/153 (2013.01 - EP US); **H01L 33/08** (2013.01 - KR); **H01L 33/382** (2013.01 - EP US); **H01L 33/08** (2013.01 - EP US); **H01L 33/20** (2013.01 - US); **H01L 33/32** (2013.01 - US); **H01L 33/50** (2013.01 - EP US); **H01L 33/62** (2013.01 - EP US); **H01L 2224/49107** (2013.01 - EP US); **H01L 2924/3011** (2013.01 - EP US)

Citation (search report)
See references of WO 2011018411A1

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 SE SI SK SM TR

DOCDB simple family (publication)
DE 102009037186 A1 20110217; CN 102473717 A 20120523; EP 2465139 A1 20120620; JP 2013502062 A 20130117; KR 20120040741 A 20120427; US 2012193657 A1 20120802; US 9012926 B2 20150421; WO 2011018411 A1 20110217

DOCDB simple family (application)
DE 102009037186 A 20090812; CN 201080035663 A 20100805; EP 10740230 A 20100805; EP 2010061446 W 20100805; JP 2012524205 A 20100805; KR 20127006427 A 20100805; US 201013389661 A 20100805