

Title (en)
SEMICONDUCTOR LIGHT-EMITTING DEVICE AND METHOD FOR MAKING SAME

Title (de)
LICHTEMITTIERENDES HALBLEITERBAUELEMENT UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)
DISPOSITIF ELECTROLUMINESCENT A SEMI-CONDUCTEUR ET SON PROCEDE DE FABRICATION

Publication
EP 1929545 A4 20140305 (EN)

Application
EP 06791170 A 20060929

Priority
• CN 2006002584 W 20060929
• CN 200510030321 A 20050930

Abstract (en)
[origin: WO2007036164A1] One embodiment of the present invention provides a semiconductor light-emitting device, which comprises: an upper cladding layer; a lower cladding layer; an active layer between the upper and lower cladding layers; an upper ohmic-contact layer forming a conductive path to the upper cladding layer; and a lower ohmic-contact layer forming a conductive path the lower cladding layer. The lower ohmic-contact layer has a shape substantially different from the shape of the upper ohmic-contact layer, thereby diverting a carrier flow away from a portion of the active layer which is substantially below the upper ohmic-contact layer when a voltage is applied to the upper and lower ohmic-contact layers.

IPC 8 full level
H01L 33/00 (2010.01); **H01L 33/32** (2010.01); **H01L 33/14** (2010.01); **H01L 33/38** (2010.01)

CPC (source: EP)
H01L 33/145 (2013.01); **H01L 33/0093** (2020.05); **H01L 33/38** (2013.01); **H01L 2933/0016** (2013.01)

Citation (search report)
• [X] JP 2001244503 A 20010907 - NICHIA KAGAKU KOGYO KK
• [XI] US 2005184300 A1 20050825 - TAZIMA MIKIO [JP], et al
• See references of WO 2007036164A1

Citation (examination)
• JP 2005123526 A 20050512 - OKI DATA KK, et al
• JP 2004172217 A 20040617 - MATSUSHITA ELECTRIC WORKS LTD
• JP H10200163 A 19980731 - SANKEN ELECTRIC CO LTD

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 NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007036164 A1 20070405; **WO 2007036164 A8 20070719**; CN 100388515 C 20080514; CN 1770486 A 20060510; EP 1929545 A1 20080611; EP 1929545 A4 20140305; JP 2009510730 A 20090312; KR 20080049724 A 20080604

DOCDB simple family (application)
CN 2006002584 W 20060929; CN 200510030321 A 20050930; EP 06791170 A 20060929; JP 2008532572 A 20060929; KR 20087005001 A 20080229