

Title (en)

LIGHT-EMITTING SEMICONDUCTOR COMPONENT

Title (de)

LICHT EMITTIERENDES HALBLEITERBAUELEMENT

Title (fr)

COMPOSANT À SEMI-CONDUCTEUR ÉMETTANT DE LA LUMIÈRE

Publication

EP 2901501 A1 20150805 (DE)

Application

EP 13766313 A 20130924

Priority

- DE 102012109109 A 20120926
- DE 102012111123 A 20121119
- EP 2013069814 W 20130924

Abstract (en)

[origin: WO2014048906A1] The invention relates to a light-emitting semiconductor component, having: - a light-emitting semiconductor chip (1) with an active region (11) which, in operation, emits light (31) having a first spectrum; - a wavelength conversion element (2) which is positioned remote from the semiconductor chip (1), is downstream of the semiconductor chip (1) in the beam path of the light (31) having the first spectrum and converts the light (31) having the first spectrum at least partially into light (32) having a second spectrum; and - a filter layer (3), which reflects at least a part (34) of a light (33) incident on the semiconductor component from the outside. The part (34) of the light (33) incident on the semiconductor component from the outside that is reflected by the filter layer (3) has a visible wavelength range and overlaps a colour impression produced by the wavelength conversion element when the semiconductor component is in a switched-off state.

IPC 8 full level

H01L 33/46 (2010.01); **H01L 33/50** (2010.01)

CPC (source: CN EP US)

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H01L 33/507 (2013.01 - US); **H01L 33/508** (2013.01 - US); **H01L 33/60** (2013.01 - US); **H01L 33/58** (2013.01 - EP US);
H01L 2224/48091 (2013.01 - EP US); **H01L 2224/73265** (2013.01 - EP US)

Citation (search report)

See references of WO 2014048906A1

Citation (examination)

- US 2012162964 A1 20120628 - HIKMET RIFAT ATA MUSTAFA [NL], et al
- US 2010012959 A1 20100121 - WILM ALEXANDER [SG], et al
- US 2006171152 A1 20060803 - SUEHIRO YOSHINOBU [JP], et al

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)

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DOCDB simple family (publication)

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US 9373759 B2 20160621; WO 2014048906 A1 20140403

DOCDB simple family (application)

DE 102012111123 A 20121119; CN 201380050223 A 20130924; EP 13766313 A 20130924; EP 2013069814 W 20130924;
US 201314430192 A 20130924