

Title (en)

LIGHT-EMITTING DIODE WITH COMPENSATING CONVERSION ELEMENT AND CORRESPONDING CONVERSION ELEMENT

Title (de)

LEUCHTDIODE MIT KOMPENSIERENDEM KONVERSIONSELEMENT UND ENTPRECHENDES KONVERSIONSELEMENT

Title (fr)

DIODE ÉLECTROLUMINESCENTE À ÉLÉMENT DE CONVERSION COMPENSATEUR ET ÉLÉMENT DE CONVERSION CORRESPONDANT

Publication

EP 2460192 A1 20120606 (DE)

Application

EP 10729840 A 20100629

Priority

- DE 102009035100 A 20090729
- EP 2010059180 W 20100629

Abstract (en)

[origin: WO2011012388A1] Specified is a light-emitting diode comprising: a light-emitting diode chip (1) emitting primary radiation in the spectral range of blue light when operating; a conversion element (34) absorbing one part of the primary radiation and re-emits secondary radiation, wherein: the conversion element (34) comprises a first fluorescent substance (3) and a second fluorescent substance (4); the first fluorescent substance (3) has in an absorption wavelength range (??ab) an absorption that decreases as the wavelength increases and the second fluorescent substance (4) has in the same absorption wavelength range (??ab) an absorption that increases as the wavelength increases; the primary radiation comprises wavelengths that lie in the stated absorption wavelength range (??ab); and the light-emitting diode emits white mixed light from primary radiation and secondary radiation, which has a color temperature of at least 4000K.

IPC 8 full level

C09K 11/77 (2006.01); **H01L 33/50** (2010.01)

CPC (source: EP KR US)

C09K 11/0883 (2013.01 - EP KR US); **C09K 11/7734** (2013.01 - KR); **C09K 11/77342** (2021.01 - EP US); **C09K 11/77347** (2021.01 - EP US); **C09K 11/7774** (2013.01 - EP KR US); **H01L 25/0753** (2013.01 - KR); **H01L 33/504** (2013.01 - EP KR US); **H01L 2224/48091** (2013.01 - EP US); **H01L 2224/48465** (2013.01 - EP US); **H01L 2924/181** (2013.01 - EP US)

Citation (search report)

See references of WO 2011012388A1

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