

Title (en)

LED PACKAGE WITH MULTIPLE ELEMENT LIGHT SOURCE AND ENCAPSULANT HAVING PLANAR SURFACES

Title (de)

LED-GEHÄUSE MIT EINER LICHTQUELLE AUS MEHREREN ELEMENTEN UND KAPSELUNGSMASSE MIT FLACHEN OBERFLÄCHEN

Title (fr)

BOÎTIER DE DIODES ÉLECTROLUMINESCENTES PRÉSENTANT UNE PLURALITÉ DE SOURCES LUMINEUSES ÉLÉMENTAIRES ET ÉLÉMENT D'ENCAPSULATION PRÉSENTANT DES SURFACES PLANES

Publication

EP 2907169 A2 20150819 (EN)

Application

EP 13774900 A 20130930

Priority

- US 201213649052 A 20121010
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- US 2013062640 W 20130930

Abstract (en)

[origin: WO2014058641A2] LED packages are disclosed that are compact and efficiently emit light, and can comprise encapsulants with planar surfaces that refract and/or reflect light within the package encapsulant. The packages can comprise a submount with one or a plurality of LEDs. In packages with a plurality of LEDs, each LED can emit the same or different wavelengths of light. A blanket conversion material layer can be included on at least some of the LEDs and the submount. The encapsulant with planar surfaces can be on the submount, over at least some of the LEDs, with the planar surfaces causing total internal reflection of light within the package. TIR light within the encapsulant can reach the conversion material, where it can be absorbed and emitted omnidirectionally. TIR light can now escape from the encapsulant and allow for efficient emission and a broader emission profile when compared to conventional packages with hemispheric encapsulants.

IPC 8 full level

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CPC (source: CN EP US)

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Citation (search report)

See references of WO 2014058641A2

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