

Title (en)

OPTICAL DEVICES FEATURING TEXTURED SEMICONDUCTOR LAYERS

Title (de)

OPTISCHE BAUELEMENTE MIT TEXTURIERTEN HALBLEITERSCHICHTEN

Title (fr)

DISPOSITIFS OPTIQUES COMPRENANT DES COUCHES A SEMI-CONDUCTEURS TEXTUREES

Publication

**EP 1952449 A4 20110629 (EN)**

Application

**EP 06827176 A 20061031**

Priority

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- US 73203405 P 20051031

Abstract (en)

[origin: WO2007053624A2] A semiconductor sensor, solar cell or emitter, or a precursor therefor, has a substrate and one or more textured semiconductor layers deposited onto the substrate. The textured layers enhance light extraction or absorption. Texturing in the region of multiple quantum wells greatly enhances internal quantum efficiency if the semiconductor is polar and the quantum wells are grown along the polar direction. Electroluminescence of LEDs of the invention is dichromatic, and results in variable color LEDs, including white LEDs, without the use of phosphor.

IPC 1-7

**H01L 33/06**; **H01L 33/24**; **H01L 33/08**; **H01L 33/32**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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- See references of WO 2007053624A2

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DOCDB simple family (application)

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