

Title (en)

OPTOELECTRONIC DEVICE AND METHOD FOR MANUFACTURING SAME

Title (de)

OPTOELEKTRONISCHE VORRICHTUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

DISPOSITIF OPTOÉLECTRONIQUE ET SON PROCÉDÉ DE FABRICATION

Publication

EP 4295406 A1 20231227 (FR)

Application

EP 22709265 A 20220211

Priority

- FR 2101499 A 20210217
- EP 2022053398 W 20220211

Abstract (en)

[origin: WO2022175184A1] The present application relates to an optoelectronic device comprising an array of pixels, each pixel comprising a light-emitting diode (176), the array of pixels comprising at least first pixels in which the light-emitting diode (176) is surmounted by a first photoluminescent conversion layer (201) made of a first inorganic perovskite material, the first photoluminescent conversion layer (201) having a thickness of less than 500 nm. The present application also relates to a method for manufacturing such a device.

IPC 8 full level

H01L 27/15 (2006.01); **H01L 25/16** (2023.01); **H01L 33/00** (2010.01); **H01L 33/44** (2010.01); **H01L 33/50** (2010.01)

CPC (source: EP US)

H01L 27/156 (2013.01 - EP US); **H01L 33/502** (2013.01 - EP); **H01L 25/167** (2013.01 - EP); **H01L 27/153** (2013.01 - EP);
H01L 33/007 (2013.01 - EP); **H01L 33/0093** (2020.05 - EP); **H01L 33/385** (2013.01 - EP); **H01L 33/44** (2013.01 - EP); **H01L 33/504** (2013.01 - EP);
H01L 2933/0041 (2013.01 - EP)

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)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

FR 3119931 A1 20220819; FR 3119931 B1 20240405; EP 4295406 A1 20231227; US 2024128303 A1 20240418; WO 2022175184 A1 20220825

DOCDB simple family (application)

FR 2101499 A 20210217; EP 2022053398 W 20220211; EP 22709265 A 20220211; US 202218276862 A 20220211