

Title (en)

OPTOELECTRONIC SEMICONDUCTOR CHIP AND METHOD FOR PRODUCING AN OPTOELECTRONIC SEMICONDUCTOR CHIP

Title (de)

OPTOELEKTRONISCHER HALBLEITERCHIP UND VERFAHREN ZUR HERSTELLUNG EINES OPTOELEKTRONISCHEN HALBLEITERCHIPS

Title (fr)

PUCE SEMI-CONDUCTRICE OPTOÉLECTRONIQUE ET PROCÉDÉ DE FABRICATION D'UNE PUCE SEMI-CONDUCTRICE OPTOÉLECTRONIQUE

Publication

EP 3853913 A1 20210728 (DE)

Application

EP 19769789 A 20190916

Priority

- DE 102018122684 A 20180917
- EP 2019074685 W 20190916

Abstract (en)

[origin: WO2020058180A1] In at least one embodiment, the optoelectronic semiconductor chip (100) comprises a semiconductor layer sequence (1) and several semiconductor structures (21, 22) having in each case one active region (210). The active regions are respectively designed for the emission and/or absorption of electromagnetic radiation. The active regions of different semiconductor structures are not linked to one another. The semiconductor structures are respectively designed as a nanorod or a microrod. The semiconductor structures are embedded in the semiconductor layer sequence.

IPC 8 full level

H01L 33/08 (2010.01); **H01L 33/00** (2010.01); **H01L 33/20** (2010.01); **H01L 33/24** (2010.01)

CPC (source: EP US)

H01L 31/0352 (2013.01 - US); **H01L 31/035227** (2013.01 - EP); **H01L 31/03529** (2013.01 - EP); **H01L 31/1892** (2013.01 - EP US); **H01L 33/0093** (2020.05 - US); **H01L 33/08** (2013.01 - EP); **H01L 33/20** (2013.01 - EP); **H01L 33/24** (2013.01 - US); **H01L 33/0093** (2020.05 - EP); **H01L 33/24** (2013.01 - EP)

Citation (search report)

See references of WO 2020058180A1

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

DOCDB simple family (publication)

DE 102018122684 A1 20200319; EP 3853913 A1 20210728; US 2022037558 A1 20220203; WO 2020058180 A1 20200326

DOCDB simple family (application)

DE 102018122684 A 20180917; EP 19769789 A 20190916; EP 2019074685 W 20190916; US 201917276492 A 20190916