

Title (en)

OPTICALLY ACTIVE QUANTUM POINT DEFINED BY GATES

Title (de)

OPTISCH AKTIVER UND DURCH GATTER DEFINIERTER QUANTENPUNKT

Title (fr)

POINT QUANTIQUE OPTIQUEMENT ACTIF DÉFINI PAR DES GRILLES

Publication

**EP 4029066 A1 20220720 (DE)**

Application

**EP 20775176 A 20200910**

Priority

- DE 102019006472 A 20190913
- DE 2020100789 W 20200910

Abstract (en)

[origin: WO2021047736A1] The invention relates to an electronic component (10) for generating and emitting electromagnetic waves or individual photons (48), comprising a layer system (12) made of semiconductor materials. A central layer (13) made of gallium arsenide is arranged between a first layer (14) made of aluminum gallium arsenide and a second layer (16) made of aluminum gallium arsenide. A first outer layer (18) made of gallium arsenide is provided on the first layer (14) made of aluminum gallium arsenide, and a second outer layer (20) made of gallium arsenide is also provided on the second layer (16) made of aluminum gallium arsenide.

IPC 8 full level

**H01L 33/38** (2010.01); **H01L 33/06** (2010.01); **H01L 33/30** (2010.01)

CPC (source: EP US)

**H01L 33/06** (2013.01 - EP); **H01L 33/30** (2013.01 - EP US); **H01L 33/38** (2013.01 - EP US); **G06N 10/40** (2022.01 - EP)

Citation (search report)

See references of WO 2021047736A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2021047736 A1 20210318**; EP 4029066 A1 20220720; US 2022344541 A1 20221027

DOCDB simple family (application)

**DE 2020100789 W 20200910**; EP 20775176 A 20200910; US 202017642445 A 20200910