

Title (en)
OPTOELECTRONIC SEMICONDUCTOR CHIP AND METHOD FOR PRODUCING OPTOELECTRONIC SEMICONDUCTOR CHIPS

Title (de)
OPTOELEKTRONISCHER HALBLEITERCHIP UND VERFAHREN ZUR HERSTELLUNG VON OPTOELEKTRONISCHEN HALBLEITERCHIPS

Title (fr)
PUCE SEMI-CONDUCTRICE OPTOÉLECTRONIQUE ET PROCÉDÉ DE FABRICATION DE PUCES SEMI-CONDUCTRICES OPTOÉLECTRONIQUES

Publication
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Application
EP 11743810 A 20110809

Priority

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Abstract (en)
[origin: WO2012022657A1] An optoelectronic semiconductor chip (1) is specified, which comprises a carrier (5) and a semiconductor body (2) having a semiconductor layer sequence, said semiconductor body being arranged on the carrier (5), wherein an emission region (23) and a detection region (24) are formed in the semiconductor body (2) having the semiconductor layer sequence. The semiconductor layer sequence comprises an active region (20), which is arranged between a first semiconductor layer (21) and a second semiconductor layer (22) and is provided in the emission region (23) for generating radiation. The first semiconductor layer (21) is arranged on that side of the active region (20) which faces away from the carrier (5). The emission region (23) has a cutout (25) extending through the active region (20); the first semiconductor layer (21) is electrically conductively connected to a first contact (41) in the emission region (23) via a first connection layer (31), wherein the first connection layer (31) extends in the cutout (25) from the first semiconductor layer (21) in the direction of the carrier (5); the second semiconductor layer (22) is electrically conductively connected to a second contact (42) via a second connection layer (32). The detection region (24) is electrically conductively connected to an additional contact (43). A method for producing an optoelectronic semiconductor chip is furthermore specified.

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