

Title (en)
SEMICONDUCTOR OPTOELECTRONIC DEVICE

Title (de)
OPTOELEKTRONISCHES HALBLEITERELEMENT

Title (fr)
DISPOSITIF OPTO-ÉLECTRONIQUE À SEMI-CONDUCTEURS

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Application
EP 22715549 A 20220304

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Abstract (en)
[origin: WO2022184886A1] The present invention relates to a semiconductor optoelectronic device (10) comprising a junction (12) formed from a stack of layers defining an n-doped region, an intermediate region and a p-doped region, at least one layer, called the modulated layer, of the n-doped region and/or of the p-doped region and/or of the intermediate region, being formed from a plurality of stacks of sublayers, each sublayer differing from the other sublayers of the same stack in one characteristic of the material of the sublayer, which characteristic is called the distinctive characteristic, the thicknesses and the distinctive characteristics of these sublayers being chosen so as to decrease the absorption of photons in the corresponding region with respect to a semiconductor optoelectronic device, called the reference device, that differs only in that each modulated layer is replaced by a non-modulated layer that is of same thickness as the modulated layer and that has identical characteristics thereto with the exception of the distinctive characteristic.

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