

Title (en)

GALLIUM NITRIDE-BASED LED AND A PRODUCTION METHOD THEREFOR

Title (de)

GALLIUMNITRID-BASIERTE LED UND IHR HERSTELLUNGSVERFAHREN

Title (fr)

DIODE ELECTROLUMINESCENTE A BASE DE NITRURE DE GALLIUM ET PROCEDE DE FABRICATION ASSOCIE

Publication

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Application

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Abstract (en)

[origin: WO03009399A1] The invention relates to a method for producing a light-emitting device based on a gallium nitride-based compound semiconductor, comprising a light-emitting layer (2), which is provided with a first and a second main surface and formed from a compound semiconductor based on gallium nitride. The inventive device also comprises a first covering layer (3), which is connected to the first main surface of the light-emitting layer (2) and formed from an n-type compound semiconductor based on gallium nitride, whose composition differs from that of the compound semiconductor of the light-emitting layer. Lastly, the inventive device comprises a second covering layer (4), which is connected to the second main surface of the light-emitting layer (2) and formed from a p-type compound semiconductor based on gallium nitride, whose composition also differs from that of the compound semiconductor of the light-emitting layer. In order to improve the luminescence yield of the device (1), the thickness of the light-emitting layer (2) in the proximity of offsets (10) is less than in the remaining area.

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EP 0599224 A1 19940601 - NICHIA KAGAKU KOGYO KK [JP]

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