

Title (en)

METHOD FOR EPITAXIAL GROWTH OF A GALLIUM NITRIDE FILM SEPARATED FROM ITS SUBSTRATE

Title (de)

VERFAHREN ZUM EPITAXIALWACHSTUM EINES VON SEINEM SUBSTRAT GETRENNTEN GALLIUMNITRIDFILMS

Title (fr)

PROCEDE DE REALISATION PAR EPITAXIE D UN FILM DE NITRURE DE GALLIUM SEPRE DE SON SUBSTRAT

Publication

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Application

EP 03755219 A 20030528

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Abstract (en)

[origin: WO03100839A2] The invention concerns the preparation of gallium nitride films by epitaxy with reduced defect density levels. It concerns a method for producing a gallium nitride (GaN) film by epitaxial deposition of GaN. The invention is characterized in that it comprises at least a step of epitaxial lateral overgrowth and in that it comprises a step which consists in separating part of the GaN layer from its substrate by embrittlement through direct ion implantation in the GaN substrate. The invention also concerns the films obtainable by said method as well as the optoelectronic and electronic components provided with said gallium nitride films.

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