

Title (en)

PROCESS FOR PREPARING A MICROELECTRONIC COMPONENT COMPRISING A LAYER BASED ON A III-V MATERIAL

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES MIKROELEKTRONISCHEN BAUTEILS MIT EINER SCHICHT AUF BASIS EINES III-V-MATERIALS

Title (fr)

PROCÉDÉ DE PRÉPARATION D'UN COMPOSANT MICROÉLECTRONIQUE COMPRENANT UNE COUCHE À BASE D'UN MATÉRIAU III-V

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Application

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Abstract (en)

[origin: WO2022243418A1] The invention relates to a process for preparing a microelectronic component, comprising a clean of the surface of an exposed layer based on a III-V material using a cyclic plasma treatment, each cycle comprising a purge phase and a plasma-treatment phase. During the formation of the plasma, a bias voltage Vbias-substrate is applied to the substrate. The process further comprises deposition, on the cleaned surface, of a subsequent layer. The process allows the exposed layer to be cleaned optimally while minimising, and preferably avoiding, any degradation of the structure. The preparing process thus allows the quality of the interface between the layer based on a III-V material and the subsequent layer to be improved. The electrical properties of the component are therefore improved.

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