

Title (en)

METHOD FOR DEPOSITING III-V SEMICONDUCTOR LAYERS ON A NON III-V SUBSTRATE

Title (de)

VERFAHREN ZUM ABSCHIEDEN VON III-V-HALBLEITERSCHICHTEN AUF EINEM NICHT-III-V-SUBSTRAT

Title (fr)

PROCEDE DE DEPOT DE COUCHES DE SEMI-CONDUCTEURS DES GROUPES III ET V SUR UN SUBSTRAT NE FAISANT PAS PARTIE DES GROUPES III ET V

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Application

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Abstract (en)

[origin: WO03054939A1] The invention relates to a method for depositing III-V semiconductor layers on a non III-V substrate, especially a sapphire, silicon or silicon oxide substrate, or another substrate containing silicon. According to said method, a III-V layer, especially a buffer layer, is deposited on the substrate or on a III-V germination layer, in a process chamber of a reactor containing gaseous starting materials. In order to reduce the defect density of the overgrowth, a masking layer consisting of an essentially amorphous material is deposited directly on the III-V germination layer or directly on the substrate, said masking layer partially covering or approximately partially covering the germination layer. The masking layer can be a quasi-monolayer and can consist of various materials.

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Citation (search report)

See references of WO 03054939A1

Citation (examination)

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