Title (en)

SEMI-POLAR, WURTZITE-TYPE, GROUP III NITRIDE BASED SEMICONDUCTOR LAYERS AND SEMICONDUCTOR COMPONENTS BASED THEREON

Title (de)

SEMIPOLARE WURTZITISCHE GRUPPE-III-NITRID BASIERTE HALBLEITERSCHICHTEN UND DARAUF BASIERENDE HALBLEITERBAUELEMENTE

Title (fr)

COUCHES DE SEMICONDUCTEURS À BASE DE NITRURE DU GROUPE III DE TYPE WURTZITE, SEMI-POLAIRES, ET COMPOSANTS À SEMICONDUCTEURS PRODUITS SUR LA BASE DE CES COUCHES

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Application

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Abstract (en)

[origin: WO2011032546A1] The invention relates to semi-polar, wurtzite-type, group III nitride based semiconductor layers and semiconductor components based thereon. According to the invention, group III nitride layers can be used in a plurality of ways in electronic and optoelectronic fields. The growth of said types of layers occurs, as a rule, on substrates such as sapphire, SiC and recently Si (111). The obtained layers are, as a rule, oriented in the direction of growth in a polar and/or c-axis manner. For many optoelectronic applications, and also for acoustic applications in SAWs, the growth of non or semipolar group III nitride layers is interesting and/or necessary. Said method enables the polarisation reduced group III nitride layers to grow in a simple and economical manner without prior structuring of the substrate.

IPC 8 full level

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