

Title (en)
DEFECT REDUCTION IN SEMICONDUCTOR MATERIALS

Title (de)
DEFEKTVERMINDERUNG IN HALBLEITERMATERIALIEN

Title (fr)
REDUCTION DES DEFAUTS DANS DES MATERIAUX SEMI-CONDUCTEURS

Publication
EP 1540713 A1 20050615 (EN)

Application
EP 03763842 A 20030711

Priority
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Abstract (en)
[origin: WO2004008509A1] An initial epitaxial layer (2) of GaN is grown on a sapphire substrate (2). The epitaxial layer (2) is then etched in a reactive ion etch (RIE) chamber. This etching acts preferentially at defects (3), causing them to become enlarged cavities (5). The cavities (5) are too large in proportion to the crystal lattice to act as defects in the usual sense, and so a further GaN epitaxial layer fills into the cavities. Thus, propagation of defects is avoided.

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IPC 8 full level
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CPC (source: EP)
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See references of WO 2004008509A1

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