Title (en)

ENGINEERED SUBSTRATE STRUCTURE FOR POWER AND RF APPLICATIONS

Title (de)

MANIPULIERTE SUBSTRATSTRUKTUR FÜR LEISTUNGS- UND HF-ANWENDUNGEN

Title (fr)

STRUCTURE DE SUBSTRAT TECHNIQUE POUR APPLICATIONS DE PUISSANCE ET DE RADIOFRÉQUENCE

Publication

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Application

EP 17813933 A 20170613

Priority

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- US 2017037252 W 20170613

Abstract (en)

[origin: WO2017218536A1] A substrate includes a support structure comprising: a polycrystalline ceramic core; a first adhesion layer coupled to the polycrystalline ceramic core; a conductive layer coupled to the first adhesion layer; a second adhesion layer coupled to the conductive layer; and a barrier layer coupled to the second adhesion layer. The substrate also includes a silicon oxide layer coupled to the support structure, a substantially single crystalline silicon layer coupled to the silicon oxide layer, and an epitaxial III-V layer coupled to the substantially single crystalline silicon layer.

IPC 8 full level

H01L 29/12 (2006.01); **H01L 21/20** (2006.01); **H01L 29/36** (2006.01); **H01L 33/00** (2010.01)

CPC (source: CN EP KR)

C30B 25/14 (2013.01 - CN); **C30B 25/183** (2013.01 - CN); **C30B 29/40** (2013.01 - CN); **H01L 21/02293** (2013.01 - KR); **H01L 21/0242** (2013.01 - EP); **H01L 21/02488** (2013.01 - EP); **H01L 21/02491** (2013.01 - EP); **H01L 21/02505** (2013.01 - EP); **H01L 21/02532** (2013.01 - EP KR); **H01L 21/02595** (2013.01 - KR); **H01L 21/3006** (2013.01 - CN); **H01L 21/32055** (2013.01 - KR); **H01L 21/76254** (2013.01 - KR); **H01L 21/823437** (2013.01 - CN); **H01L 29/16** (2013.01 - CN); **H01L 29/20** (2013.01 - CN); **H01L 29/2003** (2013.01 - KR); **H01L 29/267** (2013.01 - CN); **H01L 29/36** (2013.01 - EP KR); **H01L 33/007** (2013.01 - EP); **H01L 33/0075** (2013.01 - KR); **H01L 33/16** (2013.01 - KR); H01L 21/0245 (2013.01 - EP); H01L 21/02538 (2013.01 - EP); H01L 29/2003 (2013.01 - EP)

Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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