

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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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)

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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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- See also references of WO 2017218536A1

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WO 2017218536 A1 20171221; CN 109844184 A 20190604; CN 109844184 B 20211130; CN 114256068 A 20220329; EP 3469119 A1 20190417; EP 3469119 A4 20200226; JP 2019523994 A 20190829; JP 2020074399 A 20200514; JP 2022058405 A 20220412; JP 2023182643 A 20231226; JP 6626607 B2 20191225; JP 7001660 B2 20220119; JP 7416556 B2 20240117; KR 102361057 B1 20220208; KR 20190019122 A 20190226; SG 11201810919U A 20190130; TW 201807839 A 20180301; TW 202203473 A 20220116; TW 202322418 A 20230601; TW 202429726 A 20240716; TW I743136 B 20211021; TW I793755 B 20230221; TW I839076 B 20240411

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