

Title (en)

SiC SEMICONDUCTOR ARRAY WITH ENHANCED CHANNEL MOBILITY

Title (de)

SiC-HALBLEITERANORDNUNG MIT HOHER KANALBEWEGLICHKEIT

Title (fr)

ENSEMBLE SEMI-CONDUCTEUR SiC DOTEÉ D'UNE GRANDE MOBILITÉ DU CANAL

Publication

**EP 0970524 A2 20000112 (DE)**

Application

**EP 98923998 A 19980312**

Priority

- DE 9800738 W 19980312
- DE 19712561 A 19970325

Abstract (en)

[origin: DE19712561C1] An SiC channel area (2) of a semiconductor array comprises bumps (6) running parallel to each other which are formed by misoriented epitaxial growth on its surface (20). The electrical power flow in the channel area (2) is adjusted parallel to the bumps (6). Thus, high charge carrier mobility in the channel area (2) is achieved.

IPC 1-7

**H01L 29/04; H01L 21/04; H01L 29/10; H01L 29/24; H01L 29/739; H01L 29/78**

IPC 8 full level

**H01L 29/749** (2006.01); **H01L 21/04** (2006.01); **H01L 21/337** (2006.01); **H01L 29/04** (2006.01); **H01L 29/10** (2006.01); **H01L 29/12** (2006.01); **H01L 29/24** (2006.01); **H01L 29/739** (2006.01); **H01L 29/78** (2006.01); **H01L 29/808** (2006.01); **H01L 29/06** (2006.01)

CPC (source: EP US)

**H01L 29/045** (2013.01 - EP US); **H01L 29/1033** (2013.01 - EP US); **H01L 29/1608** (2013.01 - EP US); **H01L 29/66068** (2013.01 - EP US); **H01L 29/7395** (2013.01 - EP US); **H01L 29/7802** (2013.01 - EP US); **H01L 29/0657** (2013.01 - EP US)

Citation (search report)

See references of WO 9843299A3

Designated contracting state (EPC)

**DE FR IT**

DOCDB simple family (publication)

**DE 19712561 C1 19980430**; EP 0970524 A2 20000112; JP 2001517375 A 20011002; US 6097039 A 20000801; WO 9843299 A2 19981001; WO 9843299 A3 19981223

DOCDB simple family (application)

**DE 19712561 A 19970325**; DE 9800738 W 19980312; EP 98923998 A 19980312; JP 54440198 A 19980312; US 40726099 A 19990928