

Title (en)

UNIVERSAL SEMICONDUCTOR WAFER FOR HIGH-VOLTAGE SEMICONDUCTOR COMPONENTS

Title (de)

UNIVERSAL-HALBLEITERSCHEIBE FÜR HOCHVOLT-HALBLEITERBAUELEMENTE

Title (fr)

PLAQUETTE DE SEMICONDUCTEUR UNIVERSELLE POUR COMPOSANTS A SEMICONDUCTEUR HAUTE TENSION

Publication

**EP 1092238 A1 20010418 (DE)**

Application

**EP 99915461 A 19990208**

Priority

- DE 9900327 W 19990208
- DE 19816448 A 19980414

Abstract (en)

[origin: DE19816448C1] The invention relates to a universal semiconductor wafer for high-voltage semiconductor components in which at least one layer (5, 6, 7) of a first conduction type is provided on a semiconductor substrate (4) of a first conduction type. A plurality of floating semiconductor regions (8) of the other conduction type are embedded in the boundary surfaces between the semiconductor substrate (4) and the at least one layer. These semiconductor regions are measured such that the measurement of a semiconductor region (8) is smaller compared to the layer thickness of the semiconductor layer (5, 6, 7) and is essentially equal to or less than the distance between the floating semiconductor regions (8) in a boundary surface.

IPC 1-7

**H01L 29/06**

IPC 8 full level

**H01L 29/744** (2006.01); **H01L 21/329** (2006.01); **H01L 21/331** (2006.01); **H01L 21/336** (2006.01); **H01L 29/06** (2006.01); **H01L 29/40** (2006.01); **H01L 29/739** (2006.01); **H01L 29/78** (2006.01); **H01L 29/861** (2006.01); **H01L 21/18** (2006.01); **H01L 21/205** (2006.01); **H01L 21/22** (2006.01); **H01L 21/261** (2006.01); **H01L 21/265** (2006.01); **H01L 29/167** (2006.01)

CPC (source: EP US)

**H01L 29/0623** (2013.01 - EP US); **H01L 29/0634** (2013.01 - EP US); **H01L 29/402** (2013.01 - EP US); **H01L 29/66136** (2013.01 - EP US); **H01L 29/6634** (2013.01 - EP US); **H01L 29/7396** (2013.01 - EP US); **H01L 29/7811** (2013.01 - EP US); **H01L 29/8613** (2013.01 - EP US); **H01L 21/187** (2013.01 - EP US); **H01L 21/22** (2013.01 - EP US); **H01L 21/261** (2013.01 - EP US); **H01L 21/26513** (2013.01 - EP US); **H01L 29/167** (2013.01 - EP US); **H01L 29/744** (2013.01 - EP US); **H01L 2924/0002** (2013.01 - EP US)

Citation (search report)

See references of WO 9953549A1

Designated contracting state (EPC)

DE FR GB IE IT

DOCDB simple family (publication)

**DE 19816448 C1 19990930**; EP 1092238 A1 20010418; JP 2002511657 A 20020416; US 6646304 B1 20031111; WO 9953549 A1 19991021

DOCDB simple family (application)

**DE 19816448 A 19980414**; DE 9900327 W 19990208; EP 99915461 A 19990208; JP 2000544014 A 19990208; US 68892200 A 20001016