

Title (en)

SEMICONDUCTOR COMPONENT WITH A SPLIT FLOATING GATE

Title (de)

HALBLEITERBAUELEMENT MIT EINEM GETEILTEN FLOATING GATE

Title (fr)

COMPOSANT A SEMICONDUCTEUR A GRILLE FLOTTANTE EN DEUX PARTIES

Publication

EP 0892990 A1 19990127 (DE)

Application

EP 97923733 A 19970409

Priority

- DE 9700722 W 19970409
- DE 19614011 A 19960409

Abstract (en)

[origin: DE19614011A1] In a semiconductor component, in particular an EEPROM, an avalanche breakdown from the buried channel (14) to the substrate (10) is avoided by a local thickening of the gate dielectric (insulating structure 22) at the transition to the tunnel dielectric (18). As a potential barrier is thus created, the gate and tunnel dielectrics may have the same thickness. The space required by such a cell is reduced.

IPC 1-7

H01L 29/423; **H01L 29/788**

IPC 8 full level

H01L 21/8247 (2006.01); **H01L 29/423** (2006.01); **H01L 29/788** (2006.01); **H01L 29/792** (2006.01); **H10B 69/00** (2023.01)

CPC (source: EP KR US)

H01L 29/42324 (2013.01 - EP US); **H01L 29/788** (2013.01 - KR); **H01L 29/7883** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IE IT NL

DOCDB simple family (publication)

DE 19614011 A1 19971016; **DE 19614011 C2 20020613**; EP 0892990 A1 19990127; JP 2001508938 A 20010703; JP 3732522 B2 20060105; KR 100349519 B1 20021218; KR 20000005304 A 20000125; TW 339476 B 19980901; US 6177702 B1 20010123; WO 9738446 A1 19971016

DOCDB simple family (application)

DE 19614011 A 19960409; DE 9700722 W 19970409; EP 97923733 A 19970409; JP 53575297 A 19970409; KR 19980708016 A 19981009; TW 86104354 A 19970407; US 16977498 A 19981009