

Title (en)

MIS TRANSISTOR WITH SELF-ALIGNED METAL GRID AND METHOD FOR MAKING IT

Title (de)

MIS-TRANSISTOR MIT EINEM SELBSTJUSTIERTEN METALLISCHEN GATTER UND VERFAHREN ZUR DEREN HERSTELLUNG

Title (fr)

TRANSISTOR MIS A GRILLE METALLIQUE AUTO-ALIGNEE ET SON PROCEDE DE FABRICATION

Publication

EP 0944919 A1 19990929 (FR)

Application

EP 97952059 A 19971215

Priority

- FR 9702300 W 19971215
- FR 9615436 A 19961216

Abstract (en)

[origin: FR2757312A1] The invention concerns a MIS transistor with self-aligned metal grid and the method for making it. The method consists in the following steps: a) producing on a substrate (100) a dummy grid in a material capable of resisting to a thermal treatment; b) forming in the substrate self-aligned source and drain regions (118, 120) on the dummy grid; c) laterally coating the dummy grid with an electrically insulating material (124, 126); d) eliminating the dummy grid and forming in its place a permanent grid (136) in a material with weak resistivity. The invention is useful for making ultrahigh frequency circuits.

IPC 1-7

H01L 21/336; **H01L 29/423**; **H01L 29/49**; **H01L 21/8238**; **H01L 21/28**

IPC 8 full level

H01L 29/43 (2006.01); **H01L 21/28** (2006.01); **H01L 21/336** (2006.01); **H01L 21/8234** (2006.01); **H01L 21/8238** (2006.01); **H01L 27/088** (2006.01); **H01L 29/423** (2006.01); **H01L 29/49** (2006.01); **H01L 29/78** (2006.01)

CPC (source: EP US)

H01L 21/28088 (2013.01 - EP US); **H01L 21/28114** (2013.01 - EP US); **H01L 21/823828** (2013.01 - EP US); **H01L 29/42376** (2013.01 - EP US); **H01L 29/495** (2013.01 - EP US); **H01L 29/4966** (2013.01 - EP US); **H01L 29/6653** (2013.01 - EP); **H01L 29/66545** (2013.01 - EP US); **H01L 29/6659** (2013.01 - EP US)

Citation (search report)

See references of WO 9827582A1

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

FR 2757312 A1 19980619; **FR 2757312 B1 19990108**; EP 0944919 A1 19990929; JP 2001506807 A 20010522; JP 4560600 B2 20101013; US 6346450 B1 20020212; WO 9827582 A1 19980625

DOCDB simple family (application)

FR 9615436 A 19961216; EP 97952059 A 19971215; FR 9702300 W 19971215; JP 52738898 A 19971215; US 31991599 A 19990628