

Title (en)

METHOD FOR FABRICATING A SEMICONDUCTOR PRODUCT WITH A MEMORY AREA AND A LOGIC AREA

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES HALBLEITERPRODUKTS MIT EINEM SPEICHER- UND EINEM LOGIKBEREICH

Title (fr)

PROCEDE DE FABRICATION D'UN PRODUIT SEMICONDUCTEUR COMPRENANT UNE ZONE DE MEMOIRE ET UNE ZONE LOGIQUE

Publication

EP 1412977 A2 20040428 (DE)

Application

EP 02794526 A 20020730

Priority

- DE 10137678 A 20010801
- EP 0208484 W 20020730

Abstract (en)

[origin: WO03015161A2] The invention relates to a method for integrating field-effect transistors for memory and logic applications in a semiconductor substrate (22). According to said method, the gate dielectric (2) and a semiconductor layer (4) are firstly deposited, on the whole surface thereof, both in the logic and memory areas (6) and (8). The gate electrodes (12) are first of all formed in the memory area (8) from these layers. The source and drain regions (56) are implanted and the memory area (8) is coated with an insulating material (20) in a planarized manner. Only then are the gate electrodes (21) formed in the logic area from the semiconductor layer (4) and the gate dielectric (2).

IPC 1-7

H01L 21/8239; **H01L 27/105**

IPC 8 full level

H10B 12/00 (2023.01); **H10B 99/00** (2023.01)

CPC (source: EP KR US)

H01L 21/0332 (2013.01 - KR); **H01L 21/0415** (2013.01 - KR); **H01L 29/4234** (2013.01 - KR); **H10B 12/05** (2023.02 - KR); **H10B 12/09** (2023.02 - EP KR US); **H01L 2924/1306** (2013.01 - KR); **H10B 12/05** (2023.02 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03015161 A2 20030220; **WO 03015161 A3 20030925**; DE 10137678 A1 20030227; EP 1412977 A2 20040428; KR 100606488 B1 20060801; KR 20040017363 A 20040226; TW 557549 B 20031011; US 2004259298 A1 20041223; US 7217610 B2 20070515

DOCDB simple family (application)

EP 0208484 W 20020730; DE 10137678 A 20010801; EP 02794526 A 20020730; KR 20047001442 A 20020730; TW 91117311 A 20020801; US 48530804 A 20040803