

Title (en)

FLASH MEMORY CELL AND PRODUCTION METHOD

Title (de)

FLASH-SPEICHERZELLE UND HERSTELLUNGSVERFAHREN

Title (fr)

CELLULE DE MEMOIRE FLASH ET SON PROCEDE DE PRODUCTION

Publication

EP 1504472 A1 20050209 (DE)

Application

EP 03749842 A 20030509

Priority

- DE 0301488 W 20030509
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Abstract (en)

[origin: WO03096425A1] Disclosed are memory cells which are configured as trench transistors and each of which comprises a floating gate electrode (7) and a control gate electrode (9) on one wall of the trench above a channel region that is located between doped areas (14) for source and drain. Said memory cells are provided with a gate electrode (14) which is disposed in another trench and via which the channel region that is located within a semiconductor segment (13) between the trenches can additionally be triggered. The gate oxide (11) of the gate electrode (12) can be configured in a very thin manner such that a high reading flow is obtained in spite of good data management during triggering via the gate electrode.

IPC 1-7

H01L 27/12; **H01L 27/115**; **H01L 21/84**; **H01L 21/8247**; **H01L 21/28**; **H01L 29/788**

IPC 8 full level

G11C 16/04 (2006.01); **H01L 21/28** (2006.01); **H01L 21/8247** (2006.01); **H01L 21/84** (2006.01); **H01L 27/115** (2006.01); **H01L 27/12** (2006.01); **H01L 29/788** (2006.01); **H01L 29/792** (2006.01)

CPC (source: EP KR US)

G11C 16/0491 (2013.01 - EP KR US); **H01L 21/84** (2013.01 - EP KR US); **H01L 27/1203** (2013.01 - EP KR US); **H01L 29/40114** (2019.07 - EP US); **H01L 29/7881** (2013.01 - EP KR US); **H10B 41/30** (2023.02 - EP KR US); **H10B 41/40** (2023.02 - KR); **H10B 69/00** (2023.02 - EP US)

Citation (search report)

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