

Title (en)

ALTERABLE THRESHOLD SEMICONDUCTOR MEMORY DEVICE.

Title (de)

HALBLEITERSPEICHERANORDNUNG MIT VERÄNDERLICHER SCHWELLE.

Title (fr)

DISPOSITIF DE MEMOIRE A SEMI-CONDUCTEUR A SEUIL MODIFIABLE.

Publication

**EP 0078318 A4 19830624 (EN)**

Application

**EP 82901890 A 19820507**

Priority

US 26238081 A 19810511

Abstract (en)

[origin: WO8204162A1] An alterable threshold memory device (100) includes a semiconductor substrate (11), a memory silicon oxide layer (12) having a thickness lying in the range of 25-40 Angstroms, a silicon nitride layer (13), an interfacial silicon oxide layer (14) having a thickness lying in the range of 30-60 Angstroms, and a polysilicon gate electrode. The device (100) has a high write speed and a large memory window. The nitride layer (13) may have a thickness lying in the range 150-250 Angstroms, enabling the utilization of low write voltages.

IPC 1-7

**H01L 29/78**

IPC 8 full level

**H01L 21/8246** (2006.01); **H01L 21/8247** (2006.01); **H01L 27/112** (2006.01); **H01L 29/788** (2006.01); **H01L 29/792** (2006.01)

CPC (source: EP)

**H01L 29/792** (2013.01)

Citation (search report)

- DE 3032364 A1 19820422 - PHILIPS PATENTVERWALTUNG [DE]
- FR 2090259 A1 19720114 - RCA CORP

Designated contracting state (EPC)

AT BE CH DE FR GB LI NL

DOCDB simple family (publication)

**WO 8204162 A1 19821125**; DK 6283 A 19830110; DK 6283 D0 19830110; EP 0078318 A1 19830511; EP 0078318 A4 19830624; JP S58500683 A 19830428; ZA 823251 B 19830330

DOCDB simple family (application)

**US 8200600 W 19820507**; DK 6283 A 19830110; EP 82901890 A 19820507; JP 50192182 A 19820507; ZA 823251 A 19820511