

Title (en)

HIGH DENSITY CONTACTLESS FLASH EPROM ARRAY USING CHANNEL ERASE

Title (de)

KONTAKTLOSE FLASH-EPROM-MATRIX VON HOHER DICHT E MIT KANALLÖSCHUNG

Title (fr)

MEMOIRE FLASH EPROM SANS CONTACT EN MATRICE HAUTE DENSITE FONCTIONNANT PAR EFFACEMENT CANAL

Publication

**EP 0742956 A1 19961120 (EN)**

Application

**EP 95942910 A 19951127**

Priority

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- US 34598594 A 19941128

Abstract (en)

[origin: WO9617384A1] The present invention provides a contactless flash EPROM array formed in a P-well in a diffused silicon substrate of N-type conductivity. To facilitate a channel erase operation, thin tunnel oxide is formed between the P-well and the overlying polysilicon floating gate EPROM cells. The array is programmed in a conventional EPROM cell array manner. However, in accordance with the invention, the channel erase of a selected row of EPROM cells is accomplished by allowing all bit lines to float, applying a negative erase voltage to the word line of the selected row and holding the substrate at the supply voltage.

IPC 1-7

**H01L 27/115**; G11C 16/06

IPC 8 full level

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CPC (source: EP KR)

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