

Title (en)
SEMICONDUCTOR DEVICE WITH A NON-VOLATILE MEMORY

Title (de)
HALBLEITERBAUTEIL MIT FESTWERTSPEICHER

Title (fr)
COMPOSANT A SEMI-CONDUCTEUR AVEC MEMOIRE REMANENTE

Publication
EP 1119875 A1 20010801 (EN)

Application
EP 00940280 A 20000524

Priority

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Abstract (en)
[origin: WO0075994A1] The invention relates to a semiconductor device with a semiconductor body which is provided at a surface with a programmable and electrically erasable non-volatile memory comprising a matrix of memory cells which each comprise a field effect transistor with floating gate. A device according to the invention is characterized in that each memory cell comprises a select transistor T2 which is connected in series with the floating gate transistor T1, in that the memory cells form a matrix of the NOR type, and in that the select transistor is connected to the source of the floating-gate transistor, while both writing and erasing are carried out on the basis of the Fowler-Nordheim tunneling mechanism.

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