

Title (en)
METHOD FOR THE PRODUCTION OF A MEMORY CELL AND STRUCTURE THEREOF

Title (de)
VERFAHREN ZUR HERSTELLUNG UND AUFBAU EINER SPEICHERZELLE

Title (fr)
PROCEDE DE PRODUCTION ET STRUCTURE D'UNE CELLULE DE MEMOIRE

Publication
EP 1472721 A2 20041103 (DE)

Application
EP 03704257 A 20030127

Priority
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Abstract (en)
[origin: US2003148582A1] The memory cell has a source region and a drain region in semiconductor material and, above a channel region between the source and drain regions, a three-layered layer structure with a storage layer between boundary layers and a gate electrode arranged thereon. The storage layer is replaced above the channel region by an etching layer made of Al₂O₃. During fabrication, the etching layer is etched out laterally and the second boundary layer is thus undercut. The resulting interspaces are filled with the material of the storage layer. The provision of suitable spacers makes it possible to define the dimensions of the memory cell.

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IPC 8 full level
H01L 21/28 (2006.01); **H01L 21/8246** (2006.01); **H01L 27/115** (2006.01); **H01L 29/792** (2006.01)

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See references of WO 03067640A2

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US 2003148582 A1 20030807; **US 6627498 B2 20030930**; CN 100373551 C 20080305; CN 1692473 A 20051102; DE 10205079 A1 20030828; DE 10205079 B4 20080103; EP 1472721 A2 20041103; JP 2006506799 A 20060223; KR 100638930 B1 20061026; KR 20040094423 A 20041109; TW 200303076 A 20030816; TW I251307 B 20060311; WO 03067640 A2 20030814; WO 03067640 A3 20031023

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