

Title (en)

METHOD FOR THE PRODUCTION OF A MEMORY CELL, MEMORY CELL AND MEMORY CELL ARRANGEMENT

Title (de)

VERFAHREN ZUM HERSTELLEN EINER SPEICHERZELLE, SPEICHERZELLE UND SPEICHERZELLEN-ANORDNUNG

Title (fr)

PROCEDE POUR PRODUIRE UNE CELLULE DE MEMOIRE, CELLULE DE MEMOIRE ET ENSEMBLE DE CELLULES DE MEMOIRE

Publication

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Application

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Abstract (en)

[origin: WO03100841A2] The invention relates to a method for the production of a memory cell, a memory cell and a memory cell arrangement. According to the inventive method for the production of a memory cell, a first gate insulating layer is formed on an auxiliary substrate and a floating gate is formed on the first gate insulating layer. An electrically insulating layer is formed on the floating gate and a memory gate electrode is formed on the electrically insulating layer. A substrate is fixed to the memory gate electrode and the auxiliary substrate is partially removed. A second gate-insulating layer is formed on part of an open surface area of the auxiliary substrate and a read gate electrode is formed on the second gate insulating layer. Two source/drain areas are formed between a channel area on an open surface area of the remaining material of the auxiliary substrate such that the channel area at least partially laterally overlaps with the floating gate and with the read gate electrode.

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