Title (en)

DRAM CELL SYSTEM AND METHOD FOR PRODUCING SAME

Title (de)

DRAM-ZELLENANORDNUNG UND VERFAHREN ZU DEREN HERSTELLUNG

Title (fr)

CONFIGURATION DE CELLULE DRAM ET SON PROCEDE DE PRODUCTION

Publication

**EP 1129483 A1 20010905 (DE)**

Application

**EP 99955719 A 19990915**

Priority

- DE 9902939 W 19990915
- DE 19845004 A 19980930

Abstract (en)

[origin: DE19845004A1] The invention relates to a DRAM cell system and a method for the production thereof. The inventive DRAM cell system has folded-bit lines. Memory cells having a surface of 4F<2> can be produced and are arranged in columns and rows, and the bit-lines are parallel to the columns. Bit lines (7, 8) run parallel to the columns. First word lines (9, 10) contact every adjacent second contact structure (A) of a memory cell along a row. Second word lines (12,13) contact the remaining contact structures. Both word lines run parallel to the rows. One of the first word lines and one of the second word lines respectively overlap one of the rows. The word lines and bit lines are separated from each other by insulating layers (6, 11), insulations (I1, I2) and insulating spacers (Sp1, Sp2). Contacts for the word lines and bit lines are produced partly in a self-adjusting manner.

IPC 1-7

**H01L 21/8242**; H01L 27/108

IPC 8 full level

**H01L 21/8242** (2006.01); **H01L 27/108** (2006.01)

CPC (source: EP KR US)

**H10B 12/00** (2023.02 - KR); **H10B 12/0383** (2023.02 - EP US); **H10B 12/053** (2023.02 - EP US); **H10B 12/395** (2023.02 - EP US)

Citation (search report)

See references of WO 0019528A1

Designated contracting state (EPC)

DE FR GB IE IT

DOCDB simple family (publication)

**DE 19845004 A1 20000413**; **DE 19845004 C2 20020613**; EP 1129483 A1 20010905; JP 2003521103 A 20030708; JP 3805624 B2 20060802; KR 100436413 B1 20040616; KR 20010079925 A 20010822; TW 452831 B 20010901; US 6492221 B1 20021210; WO 0019528 A1 20000406; WO 0019528 A9 20001109

DOCDB simple family (application)

**DE 19845004 A 19980930**; DE 9902939 W 19990915; EP 99955719 A 19990915; JP 2000572936 A 19990915; KR 20017003837 A 20010326; TW 88116496 A 19990927; US 80642701 A 20010703