Title (en)

SEMICONDUCTOR ARRANGEMENT COMPRISING TRANSISTORS BASED ON ORGANIC SEMICONDUCTORS AND NON-VOLATILE READ-WRITE MEMORY CELLS

Title (de)

HALBLEITERANORDNUNG MIT TRANSISTOREN AUF BASIS ORGANISCHER HALBLEITER UND NICHTFLÜCHTIGER SCHREIB-LESE-SPEICHERZELLEN

Title (fr)

MONTAGE A SEMI-CONDUCTEURS AVEC TRANSISTORS A BASE DE SEMI-CONDUCTEURS ORGANIQUES ET DE CELLULES DE MEMOIRE D'ECRITURE-LECTURE NON VOLATILES

Publication

**EP 1444698 A2 20040811 (DE)**

Application

**EP 02785070 A 20021115**

Priority

- DE 0204235 W 20021115
- DE 10156470 A 20011116

Abstract (en)

[origin: DE10156470A1] The invention relates to a semiconductor arrangement consisting of transistors, the semiconductor segment of said transistors consisting of an organic semiconductor, and memory cells based on a ferroelectric effect, preferably in a polymer, for using, for example, in RFID tags.

[origin: DE10156470A1] Semiconductor arrangement comprises a semiconductor device having a semiconductor path made from an organic semiconductor and a rewritable storage cell based on the ferroelectric effect in a storage material. Preferably the storage material is an organic polymer having ferroelectric properties or an inorganic material having ferroelectric properties. The organic polymer is a fluorinated polyene, preferably a poly vinylidene fluoride. The inorganic material is a ferroelectric titanate or tantalate.

IPC 1-7

**G11C 11/22**; H01L 51/20; H01L 27/00

IPC 8 full level

**G11C 11/22** (2006.01); **G11C 13/02** (2006.01); **H01L 21/8246** (2006.01); **H01L 27/105** (2006.01); **H01L 27/28** (2006.01); **H01L 51/05** (2006.01); H01L 21/316 (2006.01)

CPC (source: EP KR US)

**B82Y 10/00** (2013.01 - EP US); **G11C 11/22** (2013.01 - EP US); **H01L 27/02** (2013.01 - KR); **H10K 19/00** (2023.02 - US); **H10K 19/80** (2023.02 - EP KR); H01L 21/02164 (2013.01 - EP KR US); H01L 21/0217 (2013.01 - EP KR US); H01L 21/02197 (2013.01 - EP KR US); H01L 21/31691 (2013.01 - US); H10K 10/468 (2023.02 - EP US)

Designated contracting state (EPC)

DE FR GB IE IT NL

DOCDB simple family (publication)

**DE 10156470 A1 20030528**; **DE 10156470 B4 20060608**; CN 1636249 A 20050706; EP 1444698 A2 20040811; JP 2005510865 A 20050421; KR 100633943 B1 20061013; KR 20040053315 A 20040623; TW 200301974 A 20030716; TW I223462 B 20041101; US 2005077606 A1 20050414; US 7208823 B2 20070424; WO 03046922 A2 20030605; WO 03046922 A3 20030814

DOCDB simple family (application)

**DE 10156470 A 20011116**; CN 02822846 A 20021115; DE 0204235 W 20021115; EP 02785070 A 20021115; JP 2003548253 A 20021115; KR 20047007380 A 20021115; TW 91133503 A 20021115; US 49561404 A 20041115