

Title (en)

PRINTABLE ORGANIC NON-VOLATILE PASSIVE MEMORY ELEMENT AND METHOD OF MAKING THEREOF

Title (de)

BEDRUCKBARES ORGANISCHES NICHTFLÜCHTIGES PASSIVES SPEICHERELEMENT UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ÉLÉMENT DE MÉMOIRE ORGANIQUE, IMPRIMABLE, NON VOLATILE PASSIVE ET SA MÉTHODE DE FABRICATION

Publication

EP 1815542 A1 20070808 (EN)

Application

EP 05801292 A 20051024

Priority

- EP 2005055482 W 20051024
- EP 04105412 A 20041029
- EP 05801292 A 20051024

Abstract (en)

[origin: WO2006045764A1] Passive memory devices comprising at least one passive memory element and a support having a non-conductive surface on the at least one side provided with the passive memory element, the passive memory element comprising a first electrode system, an insulating system and a second electrode system, wherein the first electrode system is a pattern system; wherein the first electrode is insulated from the second electrode system; wherein at least one conductive bridge is present between the first and the second electrode systems; wherein in the absence of the at least one conductive bridge there is no direct electrical contact between the first and the second patterned electrode systems; and wherein the systems and the conductive bridges are printable using conventional printing processes; and a process for providing a passive memory device, the passive memory device comprising at least one passive memory element and a support, the support having on the at least one side provided with a passive memory element either a non- conductive surface or a patternable conductive layer, the passive memory element comprising a first patterned electrode system, a second patterned electrode system, an insulating system between the first patterned electrode system and the second patterned electrode system and at least one conductive bridge between the first patterned electrode system and the second patterned electrode system, and wherein in the absence of the at least one conductive bridge there is no direct electrical contact between the first and the second electrode systems, comprising the steps of: realizing a first electrode pattern on the non-conductive surface of the support or in the patternable conductive layer on the support, providing an insulating pattern on the first electrode pattern, providing a second electrode pattern on the insulating pattern, and providing electrical contact between the first electrode pattern and the second electrode pattern at predesignated points, wherein at least one of the steps is realized by a conventional printing process.

IPC 8 full level

H01L 51/40 (2006.01); **G11C 13/02** (2006.01)

CPC (source: EP KR)

B82Y 10/00 (2013.01 - EP); **G11C 13/0014** (2013.01 - EP); **G11C 13/0016** (2013.01 - EP); **G11C 13/02** (2013.01 - KR); **H10B 99/00** (2023.02 - EP KR); **H10K 19/202** (2023.02 - EP KR); **G11C 2213/77** (2013.01 - EP)

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 2006045764 A1 20060504; CN 101048885 A 20071003; CN 101048886 A 20071003; EP 1815542 A1 20070808; EP 1815543 A1 20070808; JP 2008518452 A 20080529; JP 2008518453 A 20080529; KR 20070073834 A 20070710; KR 20070083852 A 20070824; WO 2006045783 A1 20060504

DOCDB simple family (application)

EP 2005055482 W 20051024; CN 200580037272 A 20051025; CN 200580037284 A 20051024; EP 05801292 A 20051024; EP 05803400 A 20051025; EP 2005055510 W 20051025; JP 2007538395 A 20051024; JP 2007538401 A 20051025; KR 20077009732 A 20070427; KR 20077009733 A 20070427