

Title (en)
UTILIZING ATOMIC LAYER DEPOSITION FOR PROGRAMMABLE DEVICE

Title (de)
VERWENDUNG VON ATOMSCHICHTABSCHIEDUNG FÜR EIN PROGRAMMIERBARES BAUELEMENT

Title (fr)
UTILISATION DE DEPOT EN COUCHE ATOMIQUE POUR DISPOSITIF PROGRAMMABLE

Publication
EP 1559146 A1 20050803 (EN)

Application
EP 02761442 A 20020821

Priority
US 0226552 W 20020821

Abstract (en)
[origin: WO2004032256A1] In an aspect, an apparatus is provided that sets and reprograms the state of programmable devices. In an aspect, a method is provided such that an opening (220) is formed through a dielectric (210) exposing a contact (170), the contact (170) formed on a substrate (100). An electrode (230) is conformally deposited on a wall of the dielectric (210), utilizing atomic layer deposition (ALD). A programmable material (404) is formed on the electrode (230) and a conductor (410) is formed to the programmable material (404). In an aspect, a barrier (408) is conformally deposited utilizing ALD, between the electrode (230) and the programmable material (404)

IPC 1-7
H01L 45/00

IPC 8 full level
H01L 27/105 (2006.01); **H01L 27/10** (2006.01); **H01L 27/24** (2006.01); **H01L 45/00** (2006.01)

CPC (source: EP)
H10N 70/011 (2023.02); **H10N 70/231** (2023.02); **H10N 70/826** (2023.02); **H10N 70/8413** (2023.02); **H10N 70/8828** (2023.02);
H10N 70/884 (2023.02); **H10B 63/20** (2023.02)

Citation (search report)
See references of WO 2004032256A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)
WO 2004032256 A1 20040415; AU 2002326709 A1 20040423; CN 1650443 A 20050803; DE 10297784 T5 20050714; EP 1559146 A1 20050803;
GB 0501967 D0 20050309; GB 2407705 A 20050504; JP 2005536071 A 20051124

DOCDB simple family (application)
US 0226552 W 20020821; AU 2002326709 A 20020821; CN 02829486 A 20020821; DE 10297784 T 20020821; EP 02761442 A 20020821;
GB 0501967 A 20020821; JP 2004541413 A 20020821