

Title (en)

PROGRAMMABLE INTERCONNECT STRUCTURES AND PROGRAMMABLE INTEGRATED CIRCUITS.

Title (de)

PROGRAMMIERBARE VERBINDUNGSSTRUKTUREN UND PROGRAMMIERBARE INTEGRIERTE SCHALTUNGEN.

Title (fr)

STRUCTURES D'INTERCONNEXION PROGRAMMABLES ET CIRCUITS INTEGRES PROGRAMMABLES.

Publication

**EP 0593529 A4 19950322 (EN)**

Application

**EP 92913195 A 19920423**

Priority

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- US 69195091 A 19910426

Abstract (en)

[origin: WO9220095A1] An amorphous silicon antifuse (30) has a bottom electrode (38), a dielectric (40) overlying the bottom electrode, amorphous silicon (46) contacting the bottom electrode in a via in the dielectric, and the top electrode (70, 72) over the amorphous silicon. Spacers (66, 68) are provided in the via corners between the amorphous silicon and the top electrode. The spacers smooth the surface above the amorphous silicon, provide good top electrode step coverage, and reduce leakage current.

IPC 1-7

**H01L 21/44; H01L 21/465; H01L 23/48; H01L 27/02; H01L 29/34**

IPC 8 full level

**H01L 21/82** (2006.01); **H01L 21/3205** (2006.01); **H01L 23/52** (2006.01); **H01L 23/525** (2006.01)

CPC (source: EP)

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Citation (search report)

- [A] EP 0166225 A2 19860102 - ENERGY CONVERSION DEVICES INC [US]
- See references of WO 9220095A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

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JP H06509442 A 19941020

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**US 9203387 W 19920423**; AU 2004692 A 19920423; EP 92913195 A 19920423; JP 50072293 A 19920423