

Title (en)

STRUCTURE AND METHOD OF FORMING ELECTRICALLY BLOWN METAL FUSES FOR INTEGRATED CIRCUITS

Title (de)

STRUKTUR UND VERFAHREN ZUR FORMUNG ELEKTRISCH GEBLASENER METALLSICHERUNGEN FÜR INTEGRIERTE SCHALT KREISE

Title (fr)

STRUCTURE ET PROCÉDÉ DE FORMATION DE FUSIBLES MÉTALLIQUES GRILLÉS ÉLECTRIQUEMENT POUR DES CIRCUITS INTÉGRÉS

Publication

**EP 2433303 A1 20120328 (EN)**

Application

**EP 09845033 A 20090522**

Priority

US 2009044952 W 20090522

Abstract (en)

[origin: WO2010134922A1] A fuse structure for an integrated circuit device includes an elongated metal interconnect layer (106) defined within an insulating layer; a metal cap layer (108) formed on only a portion of a top surface of the metal interconnect layer; and a dielectric cap layer (112) formed on both the metal cap layer (108) and the remaining portions of the metal interconnect layer not having the metal cap layer (108) formed thereon; wherein the remaining portions of the metal interconnect layer not having the metal cap layer (108) formed thereon are susceptible to an electromigration failure mechanism so as to facilitate programming of the fuse structure by application of electric current through the elongated metal interconnect layer (106).

IPC 8 full level

**H01L 23/525** (2006.01)

CPC (source: EP)

**H01L 23/5256** (2013.01); **H01L 2924/0002** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2010134922 A1 20101125**; CN 102428563 A 20120425; CN 102428563 B 20140611; EP 2433303 A1 20120328; EP 2433303 A4 20140917; JP 2012527768 A 20121108

DOCDB simple family (application)

**US 2009044952 W 20090522**; CN 200980159306 A 20090522; EP 09845033 A 20090522; JP 2012511797 A 20090522