

Title (en)

ETCHING SOLUTION AND METHOD FOR STRUCTURING A UBM LAYER SYSTEM

Title (de)

ÄTZLÖSUNG UND VERFAHREN ZUR STRUKTURIERUNG EINES UBM-SCHICHTSYSTEMS

Title (fr)

SOLUTION D'ATTAQUE ET PROCÉDÉ DE STRUCTURATION D'UN SYSTÈME DE COUCHES DE MÉTALLISATION SOUS BOSSE

Publication

EP 1989343 A2 20081112 (DE)

Application

EP 07703498 A 20070216

Priority

- EP 2007001363 W 20070216
- DE 102006008261 A 20060222

Abstract (en)

[origin: DE102006008261A1] An etching solution comprises an aluminum layer (1), a copper layer (2) and a layer selected from a nickel-vanadium layer (3), nickel and alloys of nickel, which are arranged between an aluminum layer and a copper layer. The solution contains phosphoric acid, nitric acid, de-ionized water and a halogen component, which releases halogen ions containing these components. The metal cation salts are selected, which are contained in the layer system. Independent claims are also included for the following: (1) the structuring of a layer system involves selecting layers from aluminum, copper, nickel vanadium, nickel and their alloys; and (2) an Under Bump Metallization stack.

IPC 8 full level

C23F 1/02 (2006.01); **C23F 1/16** (2006.01); **C23F 1/18** (2006.01); **C23F 1/44** (2006.01); **H01L 21/60** (2006.01)

CPC (source: EP US)

C23F 1/02 (2013.01 - EP US); **C23F 1/16** (2013.01 - EP US); **C23F 1/18** (2013.01 - EP US); **C23F 1/44** (2013.01 - EP US); **H01L 21/32134** (2013.01 - EP US); **H01L 24/11** (2013.01 - EP US); **H01L 24/13** (2013.01 - EP US); **H01L 2224/0401** (2013.01 - EP US); **H01L 2224/05001** (2013.01 - EP US); **H01L 2224/05124** (2013.01 - EP US); **H01L 2224/05155** (2013.01 - EP US); **H01L 2224/0554** (2013.01 - EP US); **H01L 2224/05647** (2013.01 - EP US); **H01L 2224/114** (2013.01 - EP US); **H01L 2224/116** (2013.01 - EP US); **H01L 2224/13006** (2013.01 - EP US); **H01L 2924/00013** (2013.01 - EP US); **H01L 2924/01005** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US); **H01L 2924/01011** (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01015** (2013.01 - EP US); **H01L 2924/01016** (2013.01 - EP US); **H01L 2924/01019** (2013.01 - EP US); **H01L 2924/01023** (2013.01 - EP US); **H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP US); **H01L 2924/01082** (2013.01 - EP US); **H01L 2924/014** (2013.01 - EP US); **H01L 2924/19043** (2013.01 - EP US)

Citation (search report)

See references of WO 2007096095A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 102006008261 A1 20070830; EP 1989343 A2 20081112; JP 2009527908 A 20090730; US 2009221152 A1 20090903; WO 2007096095 A2 20070830; WO 2007096095 A3 20080207

DOCDB simple family (application)

DE 102006008261 A 20060222; EP 07703498 A 20070216; EP 2007001363 W 20070216; JP 2008555676 A 20070216; US 28029307 A 20070216