

Title (en)

METHOD FOR ELECTRODEPOSITING A METAL, ESPECIALLY COPPER, USE OF SAID METHOD AND INTEGRATED CIRCUIT

Title (de)

VERFAHREN ZUM GALVANISCHEN AUFBRINGEN EINES METALLS, INSbesondere VON KUPFER, VERWENDUNG DIESES
VERFAHRENS UND INTEGRIERTE SCHALTUNGSANORDNUNG

Title (fr)

PROCEDE D'APPLICATION GALVANIQUE D'UN METAL, NOTAMMENT DE CUIVRE, UTILISATION DE CE PROCEDE ET CIRCUIT INTEGRE

Publication

EP 1563534 A1 20050817 (DE)

Application

EP 03767441 A 20031120

Priority

- DE 0303845 W 20031120
- DE 10254815 A 20021123

Abstract (en)

[origin: WO2004049431A1] The invention relates inter alia to a method wherein a contact hole for a conductor (14) is produced in an insulating layer (16). A barrier layer (20) is then applied, followed by a photo-lacquer layer (30) which is applied, irradiated and developed. A galvanic method is subsequently used to produce a copper contact (32) in the contact hole (18). The barrier layer (20) or an additional boundary electrode layer (22) is used as a boundary electrode in the galvanic process. Said method enables critical metal contaminations to be kept to a minimum during manufacturing.

IPC 1-7

H01L 21/768

IPC 8 full level

H01L 21/768 (2006.01)

CPC (source: EP)

H01L 21/76843 (2013.01); **H01L 21/76873** (2013.01); **H01L 21/76879** (2013.01)

Citation (search report)

See references of WO 2004049431A1

Citation (examination)

WIDMANN D.; MADER H.; FRIEDRICH H.: "Technologie hochintegrierter Schaltungen", 1996, SPRINGER-VERLAG

Designated contracting state (EPC)

DE FR

DOCDB simple family (publication)

WO 2004049431 A1 20040610; CN 100585830 C 20100127; CN 1714438 A 20051228; DE 10254815 A1 20040609; EP 1563534 A1 20050817;
EP 2028686 A1 20090225; EP 2028686 B1 20120808; EP 2128899 A1 20091202; JP 2006507675 A 20060302; JP 4246706 B2 20090402;
TW 200419715 A 20041001; TW I272695 B 20070201

DOCDB simple family (application)

DE 0303845 W 20031120; CN 200380103962 A 20031120; DE 10254815 A 20021123; EP 03767441 A 20031120; EP 08167849 A 20031120;
EP 09170565 A 20031120; JP 2004554209 A 20031120; TW 92132086 A 20031114