

Title (en)

Method for promoting adhesion between dielectric substrates and metal layers

Title (de)

Verfahren zur Förderung der Haftung zwischen dielektrischen Substraten und Metallschichten

Title (fr)

Procédé pour favoriser l'adhésion entre des substrats diélectriques et de couches métalliques

Publication

EP 2644744 A1 20131002 (EN)

Application

EP 12075036 A 20120329

Priority

EP 12075036 A 20120329

Abstract (en)

The present invention relates to novel processes for metallization of dielectric substrate surfaces applying organosilane compositions followed by oxidative treatment. The method results in metal plated surfaces exhibiting high adhesion between the substrate and the plated metal while at the same time leaves the smooth substrate surface intact.

IPC 8 full level

C23C 18/20 (2006.01)

CPC (source: EP US)

C23C 18/1641 (2013.01 - US); **C23C 18/1653** (2013.01 - EP US); **C23C 18/1675** (2013.01 - US); **C23C 18/2006** (2013.01 - EP US); **C23C 18/22** (2013.01 - US); **C23C 18/24** (2013.01 - EP US); **C23C 18/28** (2013.01 - US); **C23C 18/285** (2013.01 - EP US); **C23C 18/30** (2013.01 - EP US); **C23C 18/36** (2013.01 - EP US); **C23C 18/38** (2013.01 - US); **C23C 18/40** (2013.01 - EP US); **C23C 18/405** (2013.01 - EP US); **C25D 5/022** (2013.01 - EP US); **C25D 5/56** (2013.01 - EP US); **C25D 3/18** (2013.01 - EP US); **C25D 3/38** (2013.01 - EP US)

Citation (applicant)

- EP 0616053 A1 19940921 - ATOTECH USA INC [US]
- WO 9629452 A1 19960926 - ATOTECH DEUTSCHLAND GMBH [DE], et al
- US 2004112755 A1 20040617 - CZECHKA REGINA [DE], et al
- US 5693209 A 19971202 - BRESSEL BURKHARD [DE], et al
- US 4976990 A 19901211 - BACH WOLF [US], et al
- US 6278185 B1 20010821 - MURALI VENKATESAN [US], et al
- US 6212769 B1 20010410 - BOYKO CHRISTINA M [US], et al
- EP 1054081 B1 20060201 - ATOTECH DEUTSCHLAND GMBH [DE]
- US 5447824 A 19950905 - MUTSAERS CORNELIUS MARCUS J [NL], et al
- WO 8908375 A1 19890908 - BLASBERG OBERFLAECHENTECH [DE]
- EP 0457180 A2 19911121 - LEARONAL UK PLC [GB]

Citation (search report)

- [XD] US 4976990 A 19901211 - BACH WOLF [US], et al
- [X] EP 0322233 A2 19890628 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [X] WO 8802412 A1 19880407 - MACDERMID INC [US]
- [ID] WO 8908375 A1 19890908 - BLASBERG OBERFLAECHENTECH [DE]

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2644744 A1 20131002; EP 2823084 A1 20150114; EP 2823084 B1 20150819; JP 2015516509 A 20150611; JP 6234429 B2 20171122; KR 101927679 B1 20181211; KR 20140143764 A 20141217; TW 201352102 A 20131216; TW I569704 B 20170201; US 2015050422 A1 20150219; WO 2013143961 A1 20131003

DOCDB simple family (application)

EP 12075036 A 20120329; EP 13710864 A 20130321; EP 2013055901 W 20130321; JP 2015502219 A 20130321; KR 20147027285 A 20130321; TW 102111595 A 20130329; US 201314385779 A 20130321