

Title (en)

Method for manufacturing an electronic device by electrodeposition from an ionic liquid

Title (de)

Verfahren zur Herstellung einer elektronischen Vorrichtung durch Elektroablagerung aus einer Ionenflüssigkeit

Title (fr)

Procédé de fabrication d'un dispositif électronique par électrodéposition à partir d'un liquide ionique

Publication

EP 2476784 A1 20120718 (EN)

Application

EP 11151257 A 20110118

Priority

EP 11151257 A 20110118

Abstract (en)

Method for manufacturing an electronic device, the method comprising - providing an electronic intermediate product, said intermediate product having a an electronic conducting layer and - forming a metallic or metalloid layer on an outer surface the electronic conducting layer by electrodeposition using a plating liquid comprising an ionic liquid and metal ions or metalloid ions, wherein during electrodeposition the electronic conducting layer of the intermediate product on which electrodeposition takes place is connected to an electrical power source and the electronic conducting layer on which electrodeposition takes place provides a cathode for the electrodeposition, and wherein the metallic or metalloid layer is formed gradually in the plane parallel to the surface of the electronic conducting layer on which electrodeposition takes place , which gradual forming comprises starting the electrodeposition on a part of the surface of the electronic conducting layer on which electrodeposition takes place relatively close to the connection to the power source before starting the electrodeposition on a part of the surface of the electronic conducting layer on which electrodeposition takes place relatively remote from the connection to the power source.

IPC 8 full level

C25D 3/66 (2006.01); **C25D 5/02** (2006.01); **C25D 5/04** (2006.01)

CPC (source: EP)

C25D 3/665 (2013.01); **C25D 5/04** (2013.01); **C25D 17/008** (2013.01)

Citation (applicant)

- WO 2008127110 A1 20081023 - TNO [NL], et al
- US 2006147346 A1 20060706 - BOUTEN PETRUS C P [NL], et al
- WO 2010093237 A1 20100819 - TNO [NL], et al
- US 2002113548 A1 20020822 - SILVERNAIL JEFFREY ALAN [US]
- WO 2005001945 A2 20050106 - TNO [NL], et al
- WO 2005015173 A1 20050217 - TNO [NL], et al
- WO 03026011 A2 20030327 - OSRAM OPTO SEMICONDUCTORS GMBH [DE]
- WO 03022581 A2 20030320 - SEIKO EPSON CORP [JP], et al
- WO 02082561 A1 20021017 - SEIKO EPSON CORP [JP], et al
- EP 06076435 A 20060718
- EP 06075808 A 20060405
- US 4764440 A 19880816 - JONES STEVEN D [US], et al
- US 5731101 A 19980324 - SHERIF FAWZY G [US], et al
- US 5892124 A 19990406 - OLIVIER HELENE [FR], et al
- WO 0226381 A2 20020404 - SCIONIX LTD [GB], et al

Citation (search report)

- [X] WO 2008127110 A1 20081023 - TNO [NL], et al
- [A] US 5395508 A 19950307 - JOLLY RENAUD [FR], et al
- [A] US 6159354 A 20001212 - CONTOLINI ROBERT J [US], et al
- [A] US 5372699 A 19941213 - RISCHKE JORG W [NL], et al

Cited by

CN105714364A; EP3203511A1; FR3047604A1; US9793141B2; US10600999B2; WO2016146642A1

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 2476784 A1 20120718; WO 2012099466 A2 20120726; WO 2012099466 A3 20130103

DOCDB simple family (application)

EP 11151257 A 20110118; NL 2012050026 W 20120117