

Title (en)

OPTOELECTRONIC COMPONENT AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

OPTOELEKTRONISCHES BAUELEMENT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

COMPOSANT OPTO-ÉLECTRONIQUE ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 2425037 A1 20120307 (DE)

Application

EP 10718924 A 20100421

Priority

- EP 2010055289 W 20100421
- DE 102009019520 A 20090430
- DE 102009022900 A 20090527

Abstract (en)

[origin: WO2010124979A1] The invention relates to an optoelectronic component having a substrate (1), an anode (2) and a cathode (10) as well as at least one active layer (6) arranged between anode and cathode. An amorphous dielectric layer (3) containing or consisting of a metal oxide, a metal nitride or a metal oxynitride is arranged directly on the surface of the anode facing the cathode. The metal contained in the metal oxide, metal nitride or metal oxynitride is selected from one or more of the metals from the group consisting of aluminum, gallium, titanium, zirconium, hafnium, tantalum, lanthanum and zinc.

IPC 8 full level

C23C 16/455 (2006.01); **H01L 21/314** (2006.01); **H01L 27/30** (2006.01); **H01L 51/05** (2006.01); **H01L 51/42** (2006.01); **H01L 51/52** (2006.01); **H05B 33/22** (2006.01)

CPC (source: EP KR US)

H01L 21/02172 (2013.01 - KR US); **H01L 31/0224** (2013.01 - US); **H01L 33/36** (2013.01 - KR US); **H05B 33/22** (2013.01 - EP KR US); **H10K 10/472** (2023.02 - EP KR US); **H10K 30/15** (2023.02 - US); **H10K 30/88** (2023.02 - KR); **H10K 50/805** (2023.02 - US); **H10K 50/81** (2023.02 - US); **H10K 10/80** (2023.02 - US); **H10K 30/88** (2023.02 - EP US); **H10K 50/17** (2023.02 - EP KR US); **H10K 50/18** (2023.02 - US); **H10K 50/813** (2023.02 - EP KR); **H10K 50/84** (2023.02 - US); **Y02E 10/549** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Citation (examination)

- EP 1117277 A1 20010718 - TDK CORP [JP]
- US 2008136320 A1 20080612 - CHOI DONG KWON [KR]
- See also references of WO 2010124979A1

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 SM TR

DOCDB simple family (publication)

WO 2010124979 A1 20101104; CN 102439197 A 20120502; CN 102439197 B 20150401; DE 102009022900 A1 20101118; EP 2425037 A1 20120307; JP 2012525692 A 20121022; JP 2015130344 A 20150716; JP 5740551 B2 20150624; KR 20120042747 A 20120503; US 2012119253 A1 20120517; US 2014117345 A1 20140501; US 8680563 B2 20140325; US 9130189 B2 20150908

DOCDB simple family (application)

EP 2010055289 W 20100421; CN 201080019112 A 20100421; DE 102009022900 A 20090527; EP 10718924 A 20100421; JP 2012507683 A 20100421; JP 2015000285 A 20150105; KR 20117028329 A 20100421; US 201013318341 A 20100421; US 201414152608 A 20140110