

Title (en)

METHOD FOR PRODUCING A PHOTOVOLTAIC CELL WITH A HETEROJUNCTION

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER FOTOVOLTAIKZELLE MIT EINEM HETEROÜBERGANG

Title (fr)

PROCEDE DE FABRICATION D'UNE CELLULE PHOTOVOLTAIQUE A HETEROJONCTION

Publication

EP 3363054 A1 20180822 (FR)

Application

EP 16784238 A 20160929

Priority

- FR 1559909 A 20151016
- FR 2016052473 W 20160929

Abstract (en)

[origin: WO2017064384A1] The invention concerns a method for producing a photovoltaic cell with a heterojunction comprising the following steps:
- depositing a layer of hydrogenated amorphous silicon (2) on a crystalline silicon substrate (1), the layer of hydrogenated amorphous silicon (2) having a thickness of between 5 and 30 nm; - depositing a layer of conductive transparent oxide (3) on the layer of hydrogenated amorphous silicon (2), - doping the layer of hydrogenated amorphous silicon (2) by ion implantation through the layer of conductive transparent oxide (3); - followed by annealing at a temperature of between 150 °C and 350 °C for a period of between 5 minutes and 3 hours.

IPC 8 full level

H01L 31/18 (2006.01); **H01L 31/0224** (2006.01); **H01L 31/0747** (2012.01)

CPC (source: EP)

H01L 31/022466 (2013.01); **H01L 31/022483** (2013.01); **H01L 31/0747** (2013.01); **H01L 31/1804** (2013.01); **H01L 31/1864** (2013.01); **H01L 31/1868** (2013.01); **Y02E 10/547** (2013.01); **Y02P 70/50** (2015.11)

Citation (search report)

See references of WO 2017064384A1

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)

WO 2017064384 A1 20170420; EP 3363054 A1 20180822; FR 3042645 A1 20170421; FR 3042645 B1 20190712; TW 201725750 A 20170716

DOCDB simple family (application)

FR 2016052473 W 20160929; EP 16784238 A 20160929; FR 1559909 A 20151016; TW 105133232 A 20161014