

Title (en)

METHOD OF MANUFACTURING PHOTOVOLTAIC CELLS, PHOTOVOLTAIC CELLS PRODUCED THEREBY AND USES THEREOF

Title (de)

VERFAHREN ZUR HERSTELLUNG VON PV-ZELLEN, AUF DIESE WEISE HERGESTELLTE PV-ZELLEN UND IHRE VERWENDUNG

Title (fr)

PROCÉDÉ DE FABRICATION DE CELLULES PHOTOVOLTAÏQUES, CELLULES PHOTOVOLTAÏQUES PRODUITES SELON CE PROCÉDÉ, ET UTILISATIONS DE CELLES-CI

Publication

EP 2502278 A2 20120926 (EN)

Application

EP 10793049 A 20101117

Priority

- US 59139009 A 20091118
- US 59139109 A 20091118
- IB 2010055219 W 20101117

Abstract (en)

[origin: WO2011061693A2] Novel methods of producing photovoltaic cells are provided herein, as well as photovoltaic cells produced thereby, and uses thereof. In some embodiments, a method as described herein comprises doping a substrate so as to form a p+ layer on one side and an n+ layer on another side, removing at least a portion of the n+ layer, and then forming a second n+ layer, such that a concentration of the n-dopant in the second n+ layer is variable throughout a surface of the substrate.

IPC 8 full level

H01L 31/0236 (2006.01); **H01L 31/032** (2006.01); **H01L 31/18** (2006.01)

CPC (source: EP)

H01L 31/02168 (2013.01); **H01L 31/0236** (2013.01); **H01L 31/02363** (2013.01); **H01L 31/0321** (2013.01); **H01L 31/068** (2013.01); **H01L 31/0684** (2013.01); **H01L 31/1804** (2013.01); **Y02E 10/547** (2013.01); **Y02P 70/50** (2015.11)

Citation (search report)

See references of WO 2011061693A2

Citation (examination)

- WO 2009010585 A2 20090122 - IMEC INTER UNI MICRO ELECTR [BE], et al
- EP 2077587 A1 20090708 - KYOCERA CORP [JP]
- HEZEL R ED - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS: "A NEW HIGH EFFICIENCY SOLAR CELL CONCEPT BASED ON TRUNCATED PYRAMIDS", WORLD CONFERENCE ON PHOTOVOLTAIC ENERGY. WAIKOLOA, DEC. 5 - 9, 1994; [WORLD CONFERENCE ON PHOTOVOLTAIC ENERGY], NEW YORK, IEEE, US, vol. CONF. 1, 5 December 1994 (1994-12-05), pages 1466 - 1469, XP000680102, ISBN: 978-0-7803-1460-3, DOI: 10.1109/WCPEC.1994.520226

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

DOCDB simple family (publication)

WO 2011061693 A2 20110526; **WO 2011061693 A3 20120105**; CA 2780913 A1 20110526; CA 2781085 A1 20110526; CN 102725854 A 20121010; CN 102725854 B 20151125; CN 102754215 A 20121024; EP 2502277 A2 20120926; EP 2502278 A2 20120926; JP 2013511838 A 20130404; JP 2013511839 A 20130404; JP 6027443 B2 20161116; WO 2011061694 A2 20110526; WO 2011061694 A3 20120119

DOCDB simple family (application)

IB 2010055219 W 20101117; CA 2780913 A 20101117; CA 2781085 A 20101117; CN 201080061602 A 20101117; CN 201080061605 A 20101117; EP 10793049 A 20101117; EP 10793317 A 20101117; IB 2010055221 W 20101117; JP 2012539461 A 20101117; JP 2012539462 A 20101117