

Title (en)
SOLAR CELL HAVING POROUS STRUCTURE AND METHOD FOR FABRICATION THEREOF

Title (de)
SOLARZELLE MIT PORÖSER STRUKTUR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
CELLULE SOLAIRE AYANT UNE STRUCTURE POREUSE ET SON PROCÉDÉ DE FABRICATION

Publication
EP 2181464 A2 20100505 (EN)

Application
EP 08793370 A 20080820

Priority

- KR 2008004857 W 20080820
- KR 20070084157 A 20070821
- KR 20070106215 A 20071022
- KR 20070131101 A 20071214
- KR 20080001763 A 20080107

Abstract (en)
[origin: WO2009025502A2] A solar cell comprises a silicon substrate having a first impurity region, and a semiconductor layer having a second impurity region, which has a porous structure consisting of a plurality of holes and is doped with a second impurity different from a first impurity used to form the first impurity region. Especially, the solar cell also includes another semiconductor layer doped with another first impurity having a high concentration, which is interposed between the silicon substrate having the first impurity region and the semiconductor layer having the second impurity region, as well as a passivation layer or an anti-reflective layer formed on an upper surface of the porous structure so as to passivate the silicon substrate.

IPC 8 full level
H01L 31/0236 (2006.01); **H01L 31/0216** (2014.01); **H01L 31/028** (2006.01); **H01L 31/072** (2012.01)

CPC (source: EP)
H01L 31/02168 (2013.01); **H01L 31/02363** (2013.01); **H01L 31/0284** (2013.01); **H01L 31/072** (2013.01); **Y02E 10/547** (2013.01)

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
WO 2009025502 A2 20090226; WO 2009025502 A3 20090423; EP 2181464 A2 20100505; EP 2181464 A4 20150401; JP 2010527163 A 20100805

DOCDB simple family (application)
KR 2008004857 W 20080820; EP 08793370 A 20080820; JP 2010508317 A 20080820