

Title (en)

SOLUTION FOR INCREASING WAFER SHEET RESISTANCE AND/OR PHOTOVOLTAIC CELL POWER DENSITY LEVEL

Title (de)

LÖSUNG FÜR ERHÖHTE WAFERFOLIENBESTÄNDIGKEIT UND/ODER ERHÖHTE LEISTUNGSDICHTE EINER PV-ZELLE

Title (fr)

SOLUTION DESTINEE A AUGMENTER LA RESISTANCE DE COUCHE DE PLAQUETTE ET/OU LE NIVEAU DE DENSITE DE PUISSANCE DE CELLULE PHOTOVOLTAÏQUE

Publication

**EP 2387801 A2 20111123 (EN)**

Application

**EP 10716465 A 20100111**

Priority

- EP 2010000076 W 20100111
- US 14447909 P 20090114
- US 22568509 P 20090715

Abstract (en)

[origin: WO2010081661A2] Treating thin film amorphous or mono- or multi-crystalline silicon wafer substrate for use in a photovoltaic cell, the wafer substrate having at least one of a pn- or np junction and a partial phosphosilicate or borosilicate glass layer on a top surface of the wafer substrate, to increase at least one of (a) the sheet resistance of the wafer and (b) the power density level of the photovoltaic cell made from said wafer. The treatment solution being an acidic treatment solution of a buffered oxide etch (BOE) solution of at least one tetraalkylammonium hydroxide, acetic acid, at least one non-ionic surfactant, at least one metal chelating agent, a metal free source of ammonia, a metal free source of fluoride ions, and water, mixed with an oxidizer solution and optionally water.

IPC 8 full level

**H01L 31/068** (2012.01); **H01L 31/18** (2006.01)

CPC (source: EP KR)

**C11D 3/2075** (2013.01 - EP); **C11D 3/30** (2013.01 - EP); **C11D 3/39** (2013.01 - KR); **C11D 3/3947** (2013.01 - EP); **H01L 21/3213** (2013.01 - KR); **H01L 31/068** (2013.01 - EP KR); **H01L 31/18** (2013.01 - KR); **H01L 31/1804** (2013.01 - EP); **H01L 31/1876** (2013.01 - EP); **C11D 2111/22** (2024.01 - EP); **Y02E 10/547** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

See references of WO 2010081661A2

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 2010081661 A2 20100722**; **WO 2010081661 A3 20101007**; AU 2010205945 A1 20110901; BR PI1006176 A2 20190924; CA 2749836 A1 20100722; CN 102282682 A 20111214; CN 102282682 B 20160706; EP 2387801 A2 20111123; IL 213936 A0 20110731; JP 2012515444 A 20120705; KR 20110105396 A 20110926; MX 2011007413 A 20110721; RU 2011134068 A 20130220; SG 172973 A1 20110829; TW 201036058 A 20101001; ZA 201105863 B 20120425

DOCDB simple family (application)

**EP 2010000076 W 20100111**; AU 2010205945 A 20100111; BR PI1006176 A 20100111; CA 2749836 A 20100111; CN 201080004496 A 20100111; EP 10716465 A 20100111; IL 21393611 A 20110705; JP 2011545669 A 20100111; KR 20117018830 A 20100111; MX 2011007413 A 20100111; RU 2011134068 A 20100111; SG 2011050853 A 20100111; TW 99100956 A 20100114; ZA 201105863 A 20110811