

Title (en)
ION IMPLANTATION AND ANNEALING FOR HIGH EFFICIENCY BACK-CONTACT BACK-JUNCTION SOLAR CELLS

Title (de)
IONENIMPLANTATION UND -GLÜHUNG FÜR HOCHEFFIZIENTE SOLARZELLEN MIT RÜCKSEITENKONTAKT UND -BINDUNG

Title (fr)
IMPLANTATION D'ION ET RECUIT POUR DES CELLULES SOLAIRES À RENDEMENT ÉLEVÉ À JONCTION ARRIÈRE ET CONTACT ARRIÈRE

Publication
EP 2715797 A4 20150527 (EN)

Application
EP 12793962 A 20120529

Priority
• US 201161490859 P 20110527
• US 2012039901 W 20120529

Abstract (en)
[origin: WO2012166749A2] A back contact back junction thin-film solar cell is formed on a thin-film semiconductor solar cell. Preferably the thin film semiconductor material comprises crystalline silicon. Emitter regions, selective emitter regions, and a back surface field are formed through ion implantation and annealing processes.

IPC 8 full level
H01L 31/18 (2006.01)

CPC (source: EP KR)
H01L 21/26513 (2013.01 - EP); **H01L 31/02363** (2013.01 - EP); **H01L 31/035281** (2013.01 - EP); **H01L 31/04** (2013.01 - KR); **H01L 31/0682** (2013.01 - EP); **H01L 31/18** (2013.01 - KR); **H01L 31/1804** (2013.01 - EP); **H01L 31/1864** (2013.01 - EP); **H01L 21/26586** (2013.01 - EP); **H01L 21/268** (2013.01 - EP); **H01L 21/324** (2013.01 - EP); **Y02E 10/547** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)
• [IY] US 2010304522 A1 20101202 - RANA VIRENDRA V [US], et al
• [Y] US 2010300518 A1 20101202 - MOSLEHI MEHRDAD M [US], et al
• [Y] US 2010124619 A1 20100520 - XU BAOMIN [US], et al
• [A] KR 20100128153 A 20101207 - MEERE CO INC [KR], et al
• [A] US 2009227094 A1 20090910 - BATEMAN NICHOLAS [US], et al
• [A] US 2009308439 A1 20091217 - ADIBI BABAK [US], et al
• [A] US 2010052088 A1 20100304 - CAREY JAMES E [US], et al

Designated contracting state (EPC)
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DOCDB simple family (publication)
WO 2012166749 A2 20121206; **WO 2012166749 A3 20130328**; EP 2715797 A2 20140409; EP 2715797 A4 20150527; KR 101396027 B1 20140519; KR 20140041602 A 20140404

DOCDB simple family (application)
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