

Title (en)
METHOD FOR MAKING A PHOTOVOLTAIC MATERIAL OR DEVICE, RESULTING MATERIAL OR DEVICE, AND SOLAR CELL COMPRISING SAME

Title (de)
HERSTELLUNGSVERFAHREN EINES PHOTOVOLTAISCHEN MATERIALS ODER ANORDNUNG, SO HERGESTELLTES MATERIAL ODER ANORDNUNG UND DIESES MATERIAL ODER ANORDNUNG ENTHALTENDE SOLARZELLE

Title (fr)
PROCEDE DE FABRICATION D'UN MATERIAU OU DISPOSITIF PHOTOVOLTAIQUE, MATERIAU OU DISPOSITIF AINSI OBTENU ET PHOTOPILE COMPRENANT UN TEL MATERIAU OU DISPOSITIF

Publication
EP 0770268 A1 19970502 (FR)

Application
EP 95925885 A 19950713

Priority
• FR 9500945 W 19950713
• FR 9408885 A 19940713

Abstract (en)
[origin: WO9602948A1] A method for making a photovoltaic material or device, the resulting material or device, and a solar cell comprising such a material or device, are disclosed. The method comprises processing the rear surface of a single-crystal silicon chip region, wafer or slice to form a rear field as well as electrical contact areas or points, then processing the front surface to form a surface emitter thin film, a shallow p-n junction and at least one very thin highly doped continuous planar substructure buried in the emitter and/or the base and provided with a number of crystalline and electric interfaces, particularly two L-H interfaces and two crystalline heterointerfaces, and finally heat treating said chip region, wafer or slice to form, in said emitter film, a heterostructure of different materials or of materials having different crystallinities, coinciding with the selected doping profile.

IPC 1-7
H01L 31/068; H01L 31/18

IPC 8 full level
H01L 31/00 (2006.01); **H01L 31/068** (2012.01); **H01L 31/18** (2006.01); **H01L 31/20** (2006.01)

CPC (source: EP US)
H01L 31/068 (2013.01 - EP US); **H01L 31/1804** (2013.01 - EP US); **H01L 31/1864** (2013.01 - EP US); **H01L 31/1872** (2013.01 - EP US); **Y02E 10/547** (2013.01 - EP US); **Y02P 70/50** (2015.11 - EP US)

Citation (search report)
See references of WO 9602948A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
WO 9602948 A1 19960201; EP 0770268 A1 19970502; FR 2722612 A1 19960119; FR 2722612 B1 19970103; US 5935345 A 19990810

DOCDB simple family (application)
FR 9500945 W 19950713; EP 95925885 A 19950713; FR 9408885 A 19940713; US 76594897 A 19970113