

Title (en)

WAFER GRADING AND SORTING FOR PHOTOVOLTAIC CELL MANUFACTURE

Title (de)

WAFERKLASSIFIZIERUNG UND -SORTIERUNG ZUR HERSTELLUNG PHOTOVOLTAISCHER ZELLEN

Title (fr)

CLASSIFICATION ET TRI DE PLAQUETTE POUR LA FABRICATION DE CELLULES PHOTOVOLTAÏQUES

Publication

**EP 2801107 A4 20151216 (EN)**

Application

**EP 12848635 A 20121107**

Priority

- AU 2011904618 A 20111107
- AU 2012001358 W 20121107

Abstract (en)

[origin: WO2013067573A1] Methods and systems are presented for analysing samples of a semiconductor material, such as silicon wafers useful for manufacturing photovoltaic cells, for the purpose of assigning grades to the samples, and optionally sorting them into quality bins. The samples are subjected to a photoluminescence-based analysis and at least one non-photoluminescence-based analysis, and the data processed to obtain information on one or more sample properties. The samples are then graded, and optionally sorted, based on these one or more properties. In preferred embodiments the grades are indicative of the performance of photovoltaic cells to be manufactured from the samples.

IPC 8 full level

**H01L 21/66** (2006.01); **B07C 5/34** (2006.01); **B07C 5/342** (2006.01); **G01N 21/63** (2006.01); **G01N 21/64** (2006.01); **G01N 21/95** (2006.01); **H01L 31/18** (2006.01); **H02S 50/10** (2014.01)

CPC (source: CN EP)

**B07C 5/342** (2013.01 - CN EP); **G01N 21/6456** (2013.01 - CN EP); **G01N 21/6489** (2013.01 - CN EP); **H01L 31/182** (2013.01 - CN EP); **H02S 50/15** (2014.12 - EP); **G01N 21/9501** (2013.01 - EP); **Y02E 10/546** (2013.01 - EP); **Y02P 70/50** (2015.11 - EP)

Citation (search report)

- [XAI] DE 102009021799 A1 20101125 - FRAUNHOFER GES FORSCHUNG [DE]
- See references of WO 2013067573A1

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 2013067573 A1 20130516**; CN 104025276 A 20140903; EP 2801107 A1 20141112; EP 2801107 A4 20151216

DOCDB simple family (application)

**AU 2012001358 W 20121107**; CN 201280065768 A 20121107; EP 12848635 A 20121107