

Title (en)  
SOLAR CELL (SLIVER) SUB-MODULE FORMATION

Title (de)  
SUBMODUL-BILDUNG FÜR EINE SOLARZELLE (SLIVER)

Title (fr)  
FORMATION D'UN SOUS-MODULE DE CELLULE SOLAIRE (ARGENT)

Publication  
**EP 1779415 A4 20111228 (EN)**

Application  
**EP 05769785 A 20050809**

Priority

- AU 2005001193 W 20050809
- AU 2004904479 A 20040809
- AU 2004904476 A 20040809
- AU 2004904478 A 20040809
- AU 2005903172 A 20050617

Abstract (en)  
[origin: WO2006015430A1] A solar cell sub-module (100) for a photovoltaic device, including a plurality of elongate solar cells (slivers) (101) mounted in a structure that maintains the elongate solar cells in a longitudinally parallel and generally coplanar configuration, the structure providing one or more conductive pathways (201) electrically interconnecting the elongate solar cells (101). Also claimed are inventions related to releasing elongate substrate from a wafer frame; providing a plurality of mutually spaced elongate storage bins with a particular spacing; dispensing elongate solar cells into an alignment jig and attaching the cells to a substrate; engaging a length of electrical interconnect with a n engagement tool having spaced engagement sections and applying a cutting tool; forming an electrical connection in a photovoltaic module with a conductor defining an indirect path between locations to compensate for thermal expansion; maintaining the solar cell orientation of sliver solar cells when releasing them from a wafer frame; engaging only opposing faces of elongate substrates, interconnected by a wafer frame, when releasing them; storing elongate substrate in a stacked configuration with a translation mechanism.

IPC 8 full level  
**H01L 21/301** (2006.01); **B26D 7/02** (2006.01); **B65G 47/24** (2006.01); **B65H 1/02** (2006.01); **B65H 3/44** (2006.01); **G11B 17/26** (2006.01); **H01L 21/58** (2006.01); **H01L 21/60** (2006.01); **H01L 21/68** (2006.01); **H01L 31/0352** (2006.01); **H01L 31/05** (2006.01); **H01L 31/052** (2006.01); **B23K 101/40** (2006.01)

CPC (source: EP KR)  
**H01L 21/67092** (2013.01 - EP); **H01L 21/68721** (2013.01 - EP); **H01L 31/035281** (2013.01 - EP); **H01L 31/042** (2013.01 - EP); **H01L 31/05** (2013.01 - KR); **H01L 31/0504** (2013.01 - EP); **H01L 31/0508** (2013.01 - EP); **H01L 31/18** (2013.01 - EP); **H01L 31/188** (2013.01 - EP); **H01L 2924/0002** (2013.01 - EP); **Y02E 10/50** (2013.01 - EP)

Citation (search report)

- [XI] US 6380477 B1 20020430 - CURTIN LAWRENCE F [US]
- See references of WO 2006015430A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 2006015430 A1 20060216**; CA 2576868 A1 20060216; EP 1779415 A1 20070502; EP 1779415 A4 20111228; IL 181199 A0 20070704; JP 2008509564 A 20080327; JP 5219512 B2 20130626; KR 101257786 B1 20130430; KR 20070074550 A 20070712

DOCDB simple family (application)  
**AU 2005001193 W 20050809**; CA 2576868 A 20050809; EP 05769785 A 20050809; IL 18119907 A 20070207; JP 2007525128 A 20050809; KR 20077005620 A 20050809