

Title (en)

MULTI-FUNCTIONAL PHOTOVOLTAIC SKYLIGHT AND METHODS OF MAKING THE SAME

Title (de)

MULTIFUNKTIONALES FOTOVOLTAIKDACHFENSTER UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

PUITS DE LUMIÈRE PHOTOVOLTAÏQUE MULTIFONCTION ET SES PROCÉDÉS DE FABRICATION

Publication

**EP 2852983 A1 20150401 (EN)**

Application

**EP 13726630 A 20130513**

Priority

- US 201213477400 A 20120522
- US 2013040695 W 20130513

Abstract (en)

[origin: WO2013176911A1] Certain examples relate to improved solar photovoltaic systems, and/or methods of making the same. Certain improved building-integrated photovoltaic systems may include concentrated photovoltaic skylights having a cylindrical lens array. The skylight may include an insulated glass unit, which may improve the solar heat gain coefficient. The photovoltaic skylight and lens arrays may be used in combination with strip solar cells and lateral displacement tracking systems. Such techniques may advantageously help to reduce cost per watt related, in part, to the potentially reduced amount of semiconductor material to be used for such example embodiments. A photovoltaic skylight may permit diffuse daylight to pass through into an interior of a building so as to provide lighting inside the building, while the strip solar cells absorb the direct sunlight and convert it to electricity.

IPC 8 full level

**B29D 11/00** (2006.01); **E04D 13/03** (2006.01); **F21S 11/00** (2006.01); **H01L 31/048** (2014.01); **H01L 31/054** (2014.01)

CPC (source: EP)

**E04D 13/03** (2013.01); **H01L 31/0488** (2013.01); **H01L 31/0543** (2014.12); **H01L 31/0547** (2014.12); **H02S 20/26** (2014.12); **B29D 11/00298** (2013.01); **F21S 11/00** (2013.01); **Y02A 30/60** (2017.12); **Y02B 10/10** (2013.01); **Y02E 10/52** (2013.01)

Citation (search report)

See references of WO 2013176911A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**WO 2013176911 A1 20131128**; EP 2852983 A1 20150401; TW 201403846 A 20140116

DOCDB simple family (application)

**US 2013040695 W 20130513**; EP 13726630 A 20130513; TW 102117557 A 20130517