

Title (en)  
CONCENTRATOR PHOTOVOLTAIC DEVICE, PV CONCENTRATOR MODULE FORMED THEREFROM AND PRODUCTION PROCESS THEREFOR

Title (de)  
KONZENTRATOR-PHOTOVOLTAIK-EINRICHTUNG, DARAUS GEBILDETES PV- KONZENTRATORMODUL SOWIE HERSTELLVERFAHREN HIERFÜR

Title (fr)  
DISPOSITIF PHOTOVOLTAIQUE CONCENTRATEUR, MODULE CONCENTRATEUR PHOTOVOLTAIQUE FORME DE CES DISPOSITIFS, AINSI QUE PROCEDE DE PRODUCTION CORRESPONDANT

Publication  
**EP 1891681 A1 20080227 (DE)**

Application  
**EP 06722855 A 20060510**

Priority  
• DE 2006000804 W 20060510  
• DE 102005025687 A 20050603  
• DE 102005033272 A 20050715

Abstract (en)  
[origin: WO2006128417A1] The invention relates to a photovoltaic device for directly converting solar power into electrical power using a solar cell which has a smaller areal expanse than a light inlet area on the photovoltaic device, an optical unit for concentrating or focusing the solar radiation entering through the light inlet area onto a prescribed region which is determined by the relatively small area of the solar cell, is at a distance from the light inlet area and has a smaller area than the light inlet area, and a transparent support on which the solar cell is fitted. For simpler and economic manufacture of the device, it is proposed that the support be a transparent light outlet body through which the concentrated or focused solar radiation can pass and that the solar cell be fitted on a side of the light outlet body which is remote from the light inlet area and/or the optical unit. In addition, a PV concentration module formed from a plurality of such photovoltaic devices and an advantageous production method therefor are proposed.

IPC 8 full level  
**H01L 31/052** (2006.01)

CPC (source: EP KR US)  
**H01L 31/048** (2013.01 - EP US); **H01L 31/052** (2013.01 - EP US); **H01L 31/054** (2014.12 - KR); **H01L 31/0543** (2014.12 - EP US); **Y02E 10/52** (2013.01 - EP US)

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)  
**DE 102005033272 A1 20061207**; AU 2006254570 A1 20061207; EP 1891681 A1 20080227; JP 2008543066 A 20081127; KR 20080021706 A 20080307; TW 200735390 A 20070916; US 2009277493 A1 20091112; WO 2006128417 A1 20061207

DOCDB simple family (application)  
**DE 102005033272 A 20050715**; AU 2006254570 A 20060510; DE 2006000804 W 20060510; EP 06722855 A 20060510; JP 2008513913 A 20060510; KR 20077030488 A 20071227; TW 95117901 A 20060519; US 91585506 A 20060510