

Title (en)  
PHOTOVOLTAIC ELEMENT ARRANGEMENT SYSTEM

Title (de)  
FOTOVOLTAIKELEMENTANORDNUNGSSYSTEM

Title (fr)  
SYSTÈME D'AGENCEMENT D'ÉLÉMENTS PHOTOVOLTAÏQUES

Publication  
**EP 3488522 A1 20190529 (EN)**

Application  
**EP 17787870 A 20170720**

Priority  
• BG 11234116 A 20160725  
• BG 2017000017 W 20170720

Abstract (en)  
[origin: WO2018018100A1] This invention refers to a photovoltaic element arrangement system which will can be used for the generation of electric power from solar radiation. A system was created, composed of photovoltaic elements (4), within a frame (2), forming a photovoltaic module (1), placed on top of a supporting structure (3). According to the invention, in each photovoltaic module (1) two or more than two of the photovoltaic elements (4) are arranged in the same plane or in different planes, in contact with each other and forming rows of elements. Each two of these neighbouring planes form v and/or A - shaped rows, at an angle  $\beta$  between them, within the range from  $52^\circ$  to  $108^\circ$ . The plane of each row of photovoltaic elements (4) is at an angle  $\alpha$  against the mounting surface of the module (1), within the range from  $36^\circ$  to  $64^\circ$ . The adjacent v and/or A - shaped rows of photovoltaic elements (4) form a spatial shape similar to a roofing construction of a sequence of double-sloped roofs. The same system is implemented in a similar manner for the construction of the photovoltaic modules within photovoltaic power plants.

IPC 8 full level  
**H02S 20/20** (2014.01)

CPC (source: EA EP)  
**H02S 20/20** (2014.12 - EA EP); **F24S 20/25** (2018.04 - EA EP); **Y02B 10/10** (2013.01 - EP); **Y02E 10/50** (2013.01 - EP)

Citation (search report)  
See references of WO 2018018100A1

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 2018018100 A1 20180201**; **WO 2018018100 A4 20180329**; BG 112341 A 20180131; BG 67028 B1 20200316; EA 036209 B1 20201014; EA 201900076 A1 20190731; EP 3488522 A1 20190529

DOCDB simple family (application)  
**BG 2017000017 W 20170720**; BG 11234116 A 20160725; EA 201900076 A 20170720; EP 17787870 A 20170720