

# (12) International Application Status Report

**Received at International Bureau:** 05 July 2012 (05.07.2012)

**Information valid as of:** 07 December 2012 (07.12.2012)

**Report generated on:** 18 January 2021 (18.01.2021)

**(10) Publication number:**

WO2013/002093

**(43) Publication date:**

03 January 2013 (03.01.2013)

**(26) Publication language:**

Japanese (JA)

**(21) Application Number:**

PCT/JP2012/065738

**(22) Filing Date:**

20 June 2012 (20.06.2012)

**(25) Filing language:**

Japanese (JA)

**(31) Priority number(s):**

2011-142142 (JP)

**(31) Priority date(s):**

27 June 2011 (27.06.2011)

**(31) Priority status:**

Priority document received (in compliance with PCT Rule 17.1)

**(51) International Patent Classification:**

**H01L 31/042** (2006.01)

**(71) Applicant(s):**

Sharp Kabushiki Kaisha [JP/JP]; 22-22, Nagaike-cho, Abeno-ku, Osaka-shi, Osaka 5458522 (JP) *(for all designated states except US)*

YUI Hideomi [JP/]; () *(for US only)*

MAEDA Tsuyoshi [JP/]; () *(for US only)*

KAMADA Tsuyoshi [JP/]; () *(for US only)*

UCHIDA Hideki [JP/]; () *(for US only)*

UMEDA Tokiyoshi [JP/]; () *(for US only)*

**(72) Inventor(s):**

YUI Hideomi; ()

MAEDA Tsuyoshi; ()

KAMADA Tsuyoshi; ()

UCHIDA Hideki; ()

UMEDA Tokiyoshi; ()

**(74) Agent(s):**

FUNAYAMA Takeshi; 1-9-2, Marunouchi, Chiyoda-ku, Tokyo 1006620 (JP)

**(54) Title (EN):** PHOTOVOLTAIC POWER GENERATION DEVICE

**(54) Title (FR):** DISPOSITIF DE GÉNÉRATION D'ÉNERGIE PHOTOVOLTAÏQUE

**(54) Title (JA):** 太陽光発電装置

**(57) Abstract:**

**(EN):** A photovoltaic power generation device is provide with: a solar cell module having a light-collecting member for incidenting light into at least one main surface and for emitting the light from at least one edge surface after propagating the light through the interior of the light-collecting member, and a solar cell element disposed on the aforementioned edge surface of the light-collecting member and for generating power by receiving the light emitted from said edge surface; and a tracking device for rotating the solar cell module in a direction along a virtual plane that intersects with the aforementioned main surface of the light-collecting member.

**(FR):** L'invention concerne un dispositif de génération d'énergie photovoltaïque qui comprend : un module de cellule solaire ayant un élément de collecte de lumière destiné à rendre incidente une lumière sur au moins une surface principale et destiné à émettre la lumière d'au moins une surface de bord après propagation de la lumière à travers l'intérieur de l'élément de collecte de lumière, et un élément cellule solaire disposé sur la surface de bord susmentionnée de l'élément de collecte de lumière et destiné à générer une énergie par réception de la lumière émise de ladite surface de bord ; et un dispositif de suivi destiné à faire tourner le module de cellule solaire dans une direction le long d'un plan virtuel qui vient en intersection avec la surface principale susmentionnée de l'élément de collecte de lumière.

(JA): 太陽光発電装置は、光を少なくとも一つの主面から入射させ内部で伝播させて少なくとも一つの端面から射出させる集光部材と、前記集光部材の前記端面に設置されて前記端面から射出された光を受光して電力を発生する太陽電池素子と、を有する太陽電池モジュールと、前記集光部材の前記主面と交差する仮想面に沿う方向に前記太陽電池モジュールを回転させる追尾装置と、を備える。

**International search report:**

Received at International Bureau: 09 August 2012 (09.08.2012) [JP]

**International Report on Patentability (IPRP) Chapter II of the PCT:**

Not available

**(81) Designated States:**

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM