

Alerta

Energía Solar CSP

| Base explorada | Restricción | Registros |
|---------------------------|-------------------|------------------------------------|
| Repositorio INAPIPROYECTA | 1995-2011 | 20 |
| Código filtrado | | |
| Palabra clave | Área: ERNC | Sub área: Energía Solar CSP |

PATENTES

Non-Tracked Low Concentration Solar Concentrator, Solar Concentrator Array and Waveguide Concentrator

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|---------------|---------------------|--|--------------------------|
| EP20110150318 | País: EE.UU. | Solicitante: SHARP KABUSHIKI KAISHA | Fecha: 2011/01/06 |
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Inventores: TILLIN, MARTIN DAVID, ; WALTON, EMMA JAYNE, ; GASS, PAUL ANTONY, ; ALET, PIERRE-JEAN

Resumen: A low concentration solar apparatus for collecting solar radiation and concentrating it to a receiving device (16) such as a photovoltaic cell or thermovoltaic cell, comprising a non-tracked waveguide concentrator (14) with integral light turning element (12). It is thus possible to provide a solar apparatus for generating power in a very cost effective manner compared to conventional solar apparatus such as photovoltaic modules.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20110727&CC=EP&NR=234
8342A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20110727&CC=EP&NR=2348342A1&KC=A1)

▶ SYSTEMS FOR COST-EFFECTIVE CONCENTRATION AND UTILIZATION OF SOLAR ENERGY

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|---------------|---------------------|---|--------------------------|
| WO2010CA00500 | País: EE.UU. | Solicitante: NORMAN, RICHARD, ; DAUPHIN, PHILIPPE, ; DE ST . CROIX , FREDERICK | Fecha: 2010/04/09 |
|---------------|---------------------|---|--------------------------|

Inventores: NORMAN, RICHARD, ; DAUPHIN, PHILIPPE, ; DE ST . CROIX , FREDERICK

Resumen: The present invention is primarily directed to cost-effective systems for using large reflective elements that track the sun on two axes to concentrate solar energy onto a receiver that can convert the sun's optical energy to a form usable for extensive displacement of combustion of fossil fuels. The structures of the tracker frame, tracking mechanism and tracker supports are co-optimized with the optical elements and the receiver for high efficiency, low cost, and ease of assembly, making moderate and large-scale implementations cost-competitive with fossil fuels for peak power, and, with suitable storage, for base-load power and dispatchable peaking power in sunny locations. Improvement to small-tracker two-axis systems and one-axis tracking systems that focus in two dimensions are also included, as are improvements in systems for space-based solar power.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101021&CC=WO&NR=2010118503A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101021&CC=WO&NR=2010118503A1&KC=A1)

▶ CONDENSING PHOTOVOLTAIC POWER GENERATION UNIT AND CONDENSING PHOTOVOLTAIC POWER GENERATION SYSTEM, AND CONDENSING LENS, CONDENSING LENS STRUCTURE, AND PRODUCTION METHOD OF CONDENSING LENS STRUCTURE

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|---------------|--------------------|--|--------------------------|
| EP20060757110 | País: Japón | Solicitante: SHARP KABUSHIKI KAISHA | Fecha: 2006/06/07 |
|---------------|--------------------|--|--------------------------|

Inventores: ANZAWA, OSAMU, ; UEDA, KOSUKE, ; TANAKA, MASAO

Resumen: A concentrating solar power generation unit comprises a solar cell element, a mounting plate on which is mounted the solar cell element, which is bonded to a receiver, a light shield that covers the mounting plate, a frame disposed perpendicularly from the ends on two facing sides of a light shield, a concentrating lens that is disposed corresponding to the upper end of the frame across from the light shield and that concentrates sunlight (Ls) on a light receiving region of the solar cell element, and a translucent substrate that fixes (fastens) the concentrating lens and is mounted to the upper end of the frame.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20080305&CC=EP&NR=1895597A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20080305&CC=EP&NR=1895597A1&KC=A1)

▶ CONCENTRATED SOLAR POWER GENERATION USING SOLAR RECEIVERS

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|---------------|---------------------|--|--------------------------|
| WO2011US52051 | País: EE.UU. | Solicitante: WILSON SOLARPOWER CORPORATION, ; TREECE, WILLIAM, DEAN, ; ANDERSON, BRUCE, ; BROWN, DAN, ; BENNHOLD, FLORIAN, ; HILGERT, CHRISTOPH | Fecha: 2011/09/16 |
|---------------|---------------------|--|--------------------------|

Inventores: TREECE, WILLIAM, DEAN, ; ANDERSON, BRUCE, ; BROWN, DAN, ; BENNHOLD, FLORIAN, ; HILGERT, CHRISTOPH

Resumen: Inventive concentrated solar power systems using solar receivers, and related devices and methods, are generally described.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20120322&CC=WO&NR=2012037532A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPDOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20120322&CC=WO&NR=2012037532A2&KC=A2)

▶ OPTICAL MEMBER FOR LIGHT CONCENTRATION AND CONCENTRATOR PHOTOVOLTAIC MODULE

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|---------------|--------------------|--|--------------------------|
| EP20090731096 | País: Japón | Solicitante: SHARP KABUSHIKI KAISHA | Fecha: 2009/04/03 |
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Inventores: YANG, MINJU

Resumen: A concentrating optical member (50) concentrates sunlight (Lsa) onto a solar cell (10) that generates power using a solar cell element (11) mounted on a receiver substrate (20). The concentrating optical member (50) includes a first optical member (51) having a first refractive index that is disposed on the side on which sunlight (Ls) is incident and a second optical member (52) having a second refractive index that is disposed on the side on which the solar cell element (11) is disposed. The first refractive index and the second refractive index have different values. A concentrating solar power generation module (40) includes the solar cell (10) and the concentrating optical member (50).

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
FT=D&date=20110126&DB=EPDOC&locale=en_EP&CC=EP&NR=2278630A1&KC=A1&ND=4](http://worldwide.espacenet.com/publicationDetails/biblio?FT=D&date=20110126&DB=EPDOC&locale=en_EP&CC=EP&NR=2278630A1&KC=A1&ND=4)

CONCENTRATING SOLAR POWER WITH GLASSHOUSES

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|---------------|---------------------|---|--------------------------|
| WO2011US42891 | País: EE.UU. | Solicitante: GLASSPOINT SOLAR, INC, ; VON BEHRENS, PETER EMERY | Fecha: 2011/07/02 |
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Inventores: VON BEHRENS, PETER EMERY

Resumen: A protective transparent enclosure (such as a glasshouse or a greenhouse) encloses a concentrated solar power system. The concentrated solar power system includes one or more solar concentrators and one or more solar receivers. Thermal power is provided to an industrial process, electrical power is provided to an electrical distribution grid, or both. In some embodiments, the solar concentrators are parabolic trough concentrators with one or more lateral extensions. In some embodiments, the lateral extension is a unilateral extension of the primary parabolic trough shape. In some embodiments, the lateral extensions are movably connected to the primary portion. In some embodiments, the lateral extensions have a focal line separate from the focal line of the base portion. In some embodiments, the greenhouse is a Dutch Venlo style greenhouse.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20120112&CC=WO&NR=201206255A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20120112&CC=WO&NR=201206255A2&KC=A2)

CONCENTRATING PHOTOVOLTAIC UNIT AND METHOD FOR MANUFACTURING CONCENTRATING PHOTOVOLTAIC UNIT

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|---------------|--------------------|--|--------------------------|
| EP20080871106 | País: Japón | Solicitante: SHARP KABUSHIKI KAISHA | Fecha: 2008/12/24 |
|---------------|--------------------|--|--------------------------|

Inventores: OKAMOTO, CHIKAO, ; TANAKA, MASAO

Resumen: A concentrating solar power generation unit 1 according to an embodiment of the present invention includes: a concentrating lens panel 10 in which a plurality of concentrating lenses 12 are arranged on a light transmitting panel substrate 11; a solar cell mounting plate 21 in which solar cells 20 are mounted corresponding to the concentrating lenses 12; and a first direction side supporting wall 32 that extends in a direction intersecting the solar cell mounting plate 21 and that supports a first direction side 13 of the light transmitting panel substrate 11, wherein a panel positioning portion 15 that defines the position of the concentrating lens panel 10 is formed in the first direction side 13, and a positioning portion-engagement portion 34 with which the panel positioning portion 15 is engaged is formed in an upper portion of the first direction side supporting wall 32.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100929&CC=EP&NR=2234171A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100929&CC=EP&NR=2234171A1&KC=A1)

➊ Solar Concentrator plant

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|---------------|---------------------|--|--------------------------|
| EP20070380083 | País: España | Solicitante: SOLUCAR, INVESTIGACION Y DESARROLLO (SOLUCAR R&D), S.A | Fecha: 2007/03/28 |
|---------------|---------------------|--|--------------------------|

Inventores: FERNANDEZ QUERO, VALERIO, ; SANCHEZ GONZALES, MARCELINO, ; OSUNA GONZALES-AGUILAR, RAFAEL

Resumen: A solar concentrator plant, which using a heat transfer fluid in any thermodynamic cycle or system for using process heat, comprises: - two-dimensional solar concentrator means for heating the heat transfer fluid from a temperature T1 to a temperature T2; - three-dimensional solar concentrator means for overheating the heat transfer fluid from a temperature T2 to a temperature T3; such that the advantages of working at high-temperatures of the three-dimensional solar concentrator means are taken advantage of with overall costs similar to those of two-dimensional solar concentrator means.; In a specific application for generating electric power, the two-dimensional solar concentrator means consist of a parabolic trough collector (1), while the three-dimensional solar concentrator means consist of a heliostat field and central tower (2) for generating overheated steam that expands in a turbine (6) coupled to an electric generator (7).

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20080220&CC=EP&NR=1890035A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20080220&CC=EP&NR=1890035A2&KC=A2)

➋ CONCENTRATING SOLAR POWER WITH GLASSHOUSES

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|---------------|---------------------|---|--------------------------|
| WO2010US22780 | País: EE.UU. | Solicitante: GLASSPOINT SOLAR, INC., ; MACGREGOR, RODERICK, ; VON BEHRENS, PETER EMERY | Fecha: 2010/02/01 |
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Inventores: MACGREGOR, RODERICK, ; VON BEHRENS, PETER EMERY

Resumen: A protective transparent enclosure (such as a glasshouse or a greenhouse) encloses a concentrated solar power system (e.g. a thermal and/or a photovoltaic system). The concentrated solar power system includes one or more solar concentrators and one or more solar receivers. Thermal power is provided to an industrial process, electrical power is provided to an electrical distribution grid, or both. In some embodiments, the solar concentrators are dish-shaped mirrors that are mechanically coupled to a joint that enables rotation at a fixed distance about respective solar collectors that are fixed in position with respect to the protective transparent enclosure. In some embodiments, the solar collectors are suspended from structure of the protective transparent enclosure and the solar concentrators are suspended from the solar collectors.; In some embodiments, the greenhouse is a Dutch Venlo style greenhouse.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100805&CC=WO&NR=2010088632A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100805&CC=WO&NR=2010088632A2&KC=A2)

► PHOTOVOLTAIC CONCENTRATION MODULE AND DEVICE

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|---------------|---------------------|------------------------------|--------------------------|
| EP20080736706 | País: España | Solicitante: ISOFOTON | Fecha: 2008/02/25 |
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Inventores: DIAZ LUQUE, VICENTE, ; CABRERA GODOY, JAVIER, ; EXPOSITO CORRAL, DAVID, ; ALVARES RICO, JOSE LUIS

Resumen: The invention relates to a photovoltaic concentration module and device. The device includes: a primary lens (10) configured to concentrate incident solar radiation and to generate a first concentrated radiation; a solar cell (30) configured to collect the first concentrated radiation; and a substrate (40) enabling the electrical connection and thermal dissipation of the solar cell, whereby the solar cell (30) and the substrate (40) are mechanically associated so as to form an electric power generation unit. The photovoltaic concentration module includes a series of the aforementioned devices.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101110&CC=EP&NR=2249399A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20101110&CC=EP&NR=2249399A1&KC=A1)

► SOLAR CELL, LIGHT CONCENTRATING PHOTOVOLTAIC POWER GENERATION MODULE, LIGHT CONCENTRATING PHOTOVOLTAIC POWER GENERATION UNIT, SOLAR CELL MANUFACTURING METHOD AND SOLAR CELL MANUFACTURING APPARATUS

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| EP20070807693 | País: Japón | Solicitante: SHARP KABUSHIKI KAISHA | Fecha: 2007/09/21 |
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Inventores: NAKAMURA, KENTA, ; YANG, MINJU, ; INOUE, SHINGO

Resumen: A solar cell (10) according to one embodiment of the present invention includes a concentrating solar cell element (11) that generates power by converting sunlight (Ls) into electricity; and a receiver substrate (20) on which the solar cell element (11) is placed. A covering portion (30) that covers and protects the solar cell element (11) is formed on the receiver substrate (20). The covering portion (30) includes a U-shaped sealing frame (31) that is formed on a surface of the receiver substrate (20), has an opening (31s), and surrounds the periphery of the solar cell element (11) at a position away from the periphery; a light-transmitting covering plate (32) that is bonded to the sealing frame (31) and covers the solar cell element (11); and a resin sealing portion (33) in which a sealing region defined by the sealing frame (31) and the light-transmitting covering plate (32) is filled with sealing resin.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090624&CC=EP&NR=2073279A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090624&CC=EP&NR=2073279A1&KC=A1)

► SOLAR CELL, PHOTOCONCENTRATION-TYPE PHOTOVOLTAIC MODULE, AND METHOD FOR MANUFACTURING SOLAR CELL

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| EP20090770014 | País: Japón | Solicitante: SHARP KABUSHIKI KAISHA | Fecha: 2009/06/09 |
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Inventores: ARIKAWA, KAZUHIKO

Resumen: A solar cell having high heat resistance, reliability and weather resistance that prevents extraneous matter (rain water, dust and the like) from entering, a concentrating solar power generation module and a solar cell manufacturing method are provided. A solar cell 21 includes an optical member 40 that allows concentrated sunlight Ls to pass therethrough, a solar cell element 23 that converts the sunlight Ls that has passed through the optical member 40 into electricity, and a receiver substrate 22 on which the solar cell element 23 is placed. The solar cell 21 includes a first adhesive portion 31 that is adhered to the receiver substrate 22 and that is formed into a frame shape surrounding the solar cell element 23, a pedestal portion 45 that is in contact with the receiver substrate 22 and that is adhered to the first adhesive portion 31 so as to surround the solar cell element 23, and an optical member 40 (first tabular optical member 40f) disposed in an interior region of a perimeter frame 45f of the pedestal portion 45.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20110420&CC=EP&NR=231
2646A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20110420&CC=EP&NR=2312646A1&KC=A1)

► CONCENTRATING PHOTOVOLTAIC APPARATUS

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| EP20060822086 | País: Japón | Solicitante: DAIDO STEEL CO.,LTD | Fecha: 2006/10/24 |
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Inventores: ARAKI, KENJI, ; YANO, TAIZO, ; UOZUMI, HISAFUMI

Resumen: To provide a concentrator solar photovoltaic power generating apparatus with high durability and little deterioration of a transparent resin by light. MEANS FOR SOLUTION In the concentrator solar photovoltaic power generating apparatus 10, since the white resin member (shielding member) 64 to shield the transparent resin member 62 interposed between the bottom end surface of the homogenizer (columnar optical member) 50 and the solar cell 34 is provided, the bonded surface is not damaged due to deterioration of the transparent resin member 62 by light and, consequently, deterioration of the solar cell 34 due to entering moisture is restrained and high durability of the concentrator solar photovoltaic power generating apparatus 10 is achieved. Since the white resin member (shielding member) 64 is non-transparent colored resin member covering the transparent resin member 62, the white resin member 64 prevents deterioration of the transparent resin member 62 by sunlight, for the sunlight is difficult to reach the transparent resin member 62.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090708&CC=EP&NR=207
7586A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090708&CC=EP&NR=2077586A1&KC=A1)

► SOLAR CONCENTRATOR APPARATUS WITH LARGE, MULTIPLE, CO-AXIAL DISH REFLECTORS

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|---------------|---------------------|--|--------------------------|
| WO2009US43377 | País: EE.UU. | Solicitante: ARIZONA BOARD OF REGENTS ON BEHALF OF UNIVERSITY OF ARIZONA, ; ANGEL, ROGER, P, ; DAVISON, WARREN, B | Fecha: 2009/05/08 |
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Inventores: ANGEL, ROGER, P, ; DAVISON, WARREN, B

Resumen: A two-axis solar tracker apparatus is disclosed having multiple dish-shaped monolithic reflectors for concentrating sunlight. The dish-shaped monolithic reflectors are co-axially aligned in an array supported by a moveable frame. The moveable frame forms the elevation structure of a two-axis tracker that has control means for following the movement of the sun across the sky. Each dish-shaped monolithic reflector produces a region of concentrated sunlight suitable for generation of solar energy. A generator is positioned at the focus of each reflector. A preferred generator uses photovoltaic cells to generate electricity at a high output power due to the high solar power input that is directed to the generator by the dish-shaped monolithic reflector.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20091119&CC=WO&NR=2009140174A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20091119&CC=WO&NR=2009140174A2&KC=A2)

► SOLAR ENERGY CONVERTER USING OPTICAL CONCENTRATION THROUGH A LIQUID

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|---------------|---------------------|--------------------------------------|---------------------------|
| WO2002US17256 | País: EE.UU. | Solicitante: TANAKA, KUNIHIDE | Fecha: 2002/05 /31 |
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Inventores: TANAKA, KUNIHIDE

Resumen: Solar cells (1010) operating in liquid (1016) have an increased operating efficiency resulting from two independent physical phenomena, an increase in output current from the solar cells (1010) simply by wetting the front and back of the solar cells (1010) using a mounting table (1002), and enhanced collection of light through refraction and inner reflection of light in the liquid (1016). Dielectric liquids (1016) are found to increase output power efficiency of n/p junction solar cells (1010) and also function as a medium for optical concentration. The properties of dielectric liquid (1016) permit the construction of a solar cell panel (1000) with a suitable geometry for functioning as an optical concentrator.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20030103&CC=WO&NR=03001610A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20030103&CC=WO&NR=03001610A1&KC=A1)

► SOLAR CONCENTRATOR FOR HEAT AND ELECTRICITY

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|---------------|----------------------------|---|--------------------------|
| WO1995NZ00084 | País: Nueva Zelanda | Solicitante: JOHNSON, COLIN, FRANCIS | Fecha: 1995/09/14 |
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Inventores: JOHNSON, COLIN, FRANCIS

Resumen: A solar concentrator for producing usable power as heat and electricity uses a heliostat (1502) to concentrate solar radiation (1509) onto an absorbing surface such as, or including, a solar cell array (1511) capable of absorbing power from the radiation, meanwhile removing heat (such as from long-wave infra-red radiation) from the surface with fluid heat transfer means (1503, 1504), then making effective use of that low-grade heat. Thus the solar cell array is kept relatively cool and a larger proportion of the solar energy incident on the reflector unit is used. The invention uses electricity (1506) from the solar cells to move a transporting fluid through a heat exchanger (1504). Excess electricity may be available for local storage or use (1510), or feeding (1512) to the power distribution grid. Applications include warming swimming pools (1501) - where pool water remains cooler than the maximum cell temperature, heating hot-water supplies using excess electricity, or warming, lighting and ventilating spaces.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=19960321&CC=WO&NR=9608683A1&KC=A1](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=19960321&CC=WO&NR=9608683A1&KC=A1)

► SOLAR POLY FARM FOR SOLAR POWER GENERATION AND AGRICULTURE

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| WO2007US82910 | País: EE.UU. | Solicitante: ZINGHER, ARTHUR, R | Fecha: 2007/10/29 |
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Inventores: ZINGHER, ARTHUR, R

Resumen: The solar poly farm provides both at least two "crops" (functions): irrigated agriculture and highly concentrated solar photovoltaic (HCS PV) power generation. Also this includes a water source and means for water flow which are shared by both crops. During the day, this water flow carries away heat to facilitate HCS PV power generation. During the night, this water flow provides irrigation for agriculture. The water flow subsystem includes a valve(s) to change between these two functions. There is a solar concentrator mirror and solar receiver, including photovoltaic (PV) cell(s). These are mounted on means to track the sun, atop support structures. These also provide support for climbing plants.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20080502&CC=WO&NR=2008052224A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20080502&CC=WO&NR=2008052224A2&KC=A2)

► BROADBAND REFLECTORS, CONCENTRATED SOLAR POWER SYSTEMS, AND METHODS OF USING THE SAME

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|---------------|---------------------|---|--------------------------|
| WO2009US68944 | País: EE.UU. | Solicitante: 3M INNOVATIVE PROPERTIES COMPANY, ; HEBRINK, TIMOTHY, J.,, ; CLEAR, SUSANNAH, C.,, ; GILBERT, LAURENCE R.,, ; WEBER, MICHAEL F.,, ; YU, TA-HUA,, ; CHEN, DANIEL TING-YUAN,, ; SHERMAN, AUDREY A., | Fecha: 2009/12/21 |
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| Inventores: | HEBRINK, TIMOTHY, J.,, ; CLEAR, SUSANNAH, C.,, ; GILBERT, LAURENCE R.,, ; WEBER, MICHAEL F.,, ; YU, TA-HUA,, ; CHEN, DANIEL TING-YUAN,, ; SHERMAN, AUDREY A., |
| Resumen: | Broadband reflectors include a UV-reflective multilayer optical film and a VIS/IR-reflective layer. In various embodiments, the VIS/IR reflective layer may be a reflective metal layer or a multilayer optical film. Concentrated solar power systems and methods of harnessing solar energy using the broadband reflectors and optionally comprising a celestial tracking mechanism are also disclosed |
| Enlace: | http://worldwide.espacenet.com/publicationDetails/biblio? DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20100708&CC=WO&NR=2010078105A1&KC=A1 |

► SOLAR CONCENTRATOR AND ASSOCIATED ENERGY CONVERSION APPARATUS

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| WO2011US00966 | País: EE.UU. | Solicitante: HILLIARD, DONALD, BENNETT | Fecha: 2011/05/26 |
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| Inventores: | HILLIARD, DONALD, BENNETT |
| Resumen: | The disclosed invention relates to apparatus utilized for concentrated solar power, and more particularly, high-concentration reflective concentrators that are constructed as a compound concentrator utilizing flexible high-reflectance layers that are produced by roll-to-roll manufacturing. In its first preferred embodiment, the disclosed solar concentrator is utilized in conjunction with a solar-energy conversion device located within the volume of the concentrator, and, in the first preferred embodiment, this device is solar-thermal receiver tube utilizing absorbing media wherein absorption occurs at a liquid-particle interface, whereby the limitations of Kirchhoff's Law are circumvented and emissive losses are minimized. In another embodiment, the disclosed concentrator is utilized to irradiate a modular assembly housing an array of multi-junction photovoltaic modules. Various other solar-energy conversion devices are disclosed for use in the disclosed apparatus. |
| Enlace: | http://worldwide.espacenet.com/publicationDetails/biblio? DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20111201&CC=WO&NR=20111201A1&KC=A1 |

REFLECTOR MODULE OF SOLAR CONCENTRATOR

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| WO2008KR03979 | País: Corea | Solicitante: KIM, CHEOL SOO | Fecha: 2008/07/07 |
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Inventores: KIM, CHEOL SOO

Resumen: Disclosed herein is a reflector used to concentrate the light of a solar concentrator which is intended to produce power or heat water using the energy of highly concentrated sunlight. The reflector of the solar concentrator includes reflector modules which are connected to each other. Each of the reflector modules includes a thin reflecting plate and a reflecting frame which has a predetermined curvature and supports the reflector plate. The respective reflector modules form independent focal points having different focal distances, and are adjustable such that all of the focal points overlap at a light receiving part, thus acquiring a high concentration ratio and enabling the easy manufacture and maintenance of the reflector.

Enlace: [http://worldwide.espacenet.com/publicationDetails/biblio?
DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090115&CC=WO&NR=2009008644A2&KC=A2](http://worldwide.espacenet.com/publicationDetails/biblio?DB=EPODOC&II=0&ND=3&adjacent=true&locale=en_EP&FT=D&date=20090115&CC=WO&NR=2009008644A2&KC=A2)

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