

What patents do solar companies have?

They include Schott Solar, SunPower and PowerLight patents for PV mountings and shingles, a Stanford patent describing a bi-level contact PV cell, a DOE patent for multi-junction PV cells, and Abacus Controls and MRIGlobal (National Renewable Energy Laboratory) patents for PV power management and storage.

How many SunPower patents are there?

The list is headed by three SunPower patents, including patents describing back contact solar cells (US #7,468,485) and solar cell installations (US #8,158,877). Each of these patents has been cited by more than ten times as many subsequent patents as expected.

Who owns a solar cell patent?

This SETO-funded family (whose representative patent¹³ is US #5,053,083) is assigned to Stanford University. It describes bi-level contact solar cells, and is linked to 238 PV patent families assigned to leading organizations. These include patent families owned by eight of the ten leading organizations (i.e. all except Merck and Fuji Film).

What are some examples of solar patents?

These include patent families owned by eight of the ten leading organizations (i.e. all except Merck and Fuji Film). Examples include patents for solar cell encapsulation assigned to DuPont, solar cell interconnects assigned to Applied Materials, and thin-film PV cells assigned to Total SA (SunPower).

How many solar patent families are there?

This patent family is linked to 85 subsequent patent families assigned to the leading PV organizations. These include Canon patents describing solar modules, IBM patents for solar concentrators, and Total SA patents related to solar panel installation.

What is a Schott Solar patent?

The patent at the head of Table 9 (US #7,435,897) is a Schott Solar patent describing apparatus for mounting PV systems on buildings. It has been cited by 149 subsequent patents, which is more than twelve times as many citations as expected for a patent from its issue year and patent classification.



This research searches for promising solar power technologies by text mining 2280 global patents and 5610 literature papers of the past decade (January 2008 to June 2018). First, a solar power knowledge ontology schema a?]



First Solar, a thin-film solar manufacturer, is starting a patent infringement investigation based on tunnel-oxide passivated contact technology used in crystalline silicon solar manufacturing.. First Solar secured TOPCon patents through its acquisition of TetraSun in 2013. Prior to its acquisition, the California-based startup had developed proprietary cell a?]



solar power power bank view bank solar Prior art date 2020-09-22 Legal status (The legal status is an assumption and is not a legal conclusion. Google has not performed a legal analysis and makes no representation as to the accuracy of the status listed.) 2020-09-22 Priority to US29/751,476 priority Critical patent/USD918828S1/en 2021-05-11



Join Roger Billings as he explores the science behind solar power and its potential for a sustainable future. Plus, learn all about patents??what they are, how they protect new inventions, and why they're crucial for innovation. learning about solar panels and patents was really interesting. Reply. Caiden Hiner on October 24, 2024 at 11:46



A solar powered car cover that includes a three layer design, wherein a first layer includes a solar panel array; a series of heating elements that creates a second layer of the car cover; and a bottom layer that is placed under the heating elements for direct contact on a vehicle surface. The first layer may further include a battery pack, where the battery pack stores energy generated a?]



-15 Priority to US13/144,690 priority Critical patent/US20130092457A1/en 2012-02-29 Assigned to Fisker Automotive, Inc. reassignment Fisker Automotive, Inc. ASSIGNMENT OF ASSIGNORS INTEREST Solar power supply control system and control method for vehicle US8742615B2 (en) * 2011-01-14: 2014-06-03: GM Global Technology Operations LLC



-12 Priority to US14/620,471 priority Critical patent/US9346563B1/en 2015-03-03 Priority to US14/636,396 priority patent/US9511881B1/en Solar power drawn from space-based satellites is not a new concept. It was present in the Journal Science in 1968 and patented by Dr. Peter E. Glaser in 1973. During the energy crisis of the 1970's



Patent Document 2 discloses a solar cell module and a method of manufacturing the same. i??e,? i?1i??e!,i?? 2i?? e??eJPY, i??i??i ?i?? ea?e?? e?? e., i ?i!? e?(C)e2?i?? i ?e(C)i??i?,, i??e,? i ?e(C)i??i?, i??i?? i ?i,ue??e?? i ?1 i??e? 1/4 i?? e?? i ?2 i??e? 1/4 i??, i??e,? i ?1 i??e? 1/4 i??i?? i ?e.1e3 1/4 i??e,? i ?2 i??e? 1/4 i??i?? i ?e.1i?? i ?e,?i ?i? 1/4 e!?



-22 Priority to EP88200315A priority patent/EP0283069B1/en In order to efficiently operate a solar powered system which has a dish, it is important that the dish be continuously aimed in the direction of incident sunlight. Hence dishes typically comprise tracking systems which develop the correct combination of azimuth and elevation



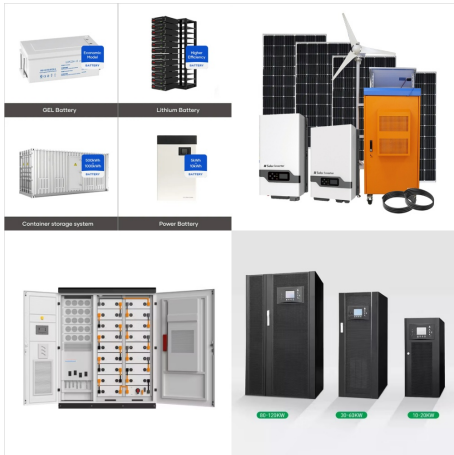
Exploiting the invention includes acts of making, selling, using or importing the solar panel.⁴ Australian Patents Act 1990, Schedule 1. In the case of a manufacturing patent, these rights extend to solar panels that were made according to the patented manufacturing process and then imported into Australia.



Abstract: The present invention is aimed at providing a float aggregate which can be manufactured at low cost and has countermeasures against wind pressure suitable for use on water. According to the present invention, provided is a float aggregate formed by connecting a plurality of floats configured for mounting a solar panel thereon, wherein the solar panel is a?



A solar power camouflage system and apparatus are disclosed. The system includes a number of solar panels coupled to a net. The panels colored to produce a camouflage effect. A maximum power point tracking device coupled to the solar panels to manage to maintain the optimal voltage and current drawn through the panels. An energy storage device is coupled to the maximum a?]



The development of solar panels and solar technology has continued to progress over the years to modern times. Many thousands of subsequent patents have been filed that incorporate photovoltaic systems, a?



solar power power bank bank view solar Prior art date 2017-05-26 2017-05-26 Priority to US29/605,624 priority Critical patent/USD817866S1/en 2017-05-31 Assigned to SHENZHEN LDTEK TECHNOLOGY CO., LTD. reassignment SHENZHEN LDTEK TECHNOLOGY CO., LTD. ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).



citations and a PIF of 24.4, the patent entitled "Solar module mounting method and clip" is the most influential patent within the solar panels group [89]. It was applied for by an American inventor called Jefferson Shingleton in 2001. The patent family contains a domestic application at the USPTO and an international PCT application.



the main purpose of the present invention which will be described subsequently in greater detail, is to provide a more efficient and dependable power generation system utilizing wind and solar power generation and having features allowing the opportunity to harvest two renewable energy types into a hybrid power generation capability. This makes a wind turbine more fault-tolerant a?]



A voltage regulator converts the electrical energy from the solar cell array into a DC power within a preset voltage range and providing the DC power on an output connector plug. At least one auxiliary plug adapter can be further included, each having a socket adapted for an electrical connection with the output connector plug of the voltage



A solar power generation system is provided for more efficiently and cost-effectively generating and delivering power. The solar power generation system includes a plurality of distributed power converter nodes each configured to convert DC power received from a solar module into a deadband DC waveform. The deadband DC power generated by each power converter node a?]



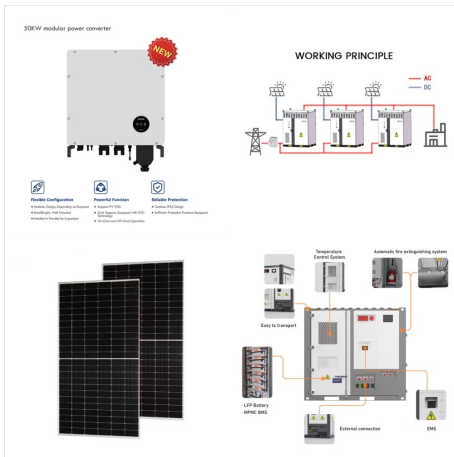
A trash compactor designed for public use is powered by a photovoltaic cell array. This allows the trash compactor to be placed in locations where no power is available, but with frequent human traffic. The compaction feature allows the unit to be emptied less often than a typical trash container. The trash compactor can include a storage system to store power for compaction a?)



Abstract: Determining solar panel placement enables sales representatives and homeowners to modify a solar power system by adding or removing solar panels or arrays of solar panels, or changing module type. The user sees the corresponding solar energy production update instantly in a user interface.



Shoals claimed Voltage was infringing on patents for solar panel connectors related to Shoals' Big Lead Assembly (BLA) connectors and wire harnesses. The ITC issued an initial ruling finding that Voltage did violate Sec. 337 of the Tariff Act of 1930 by importing infringing LYNX trunk bus products into the United States.



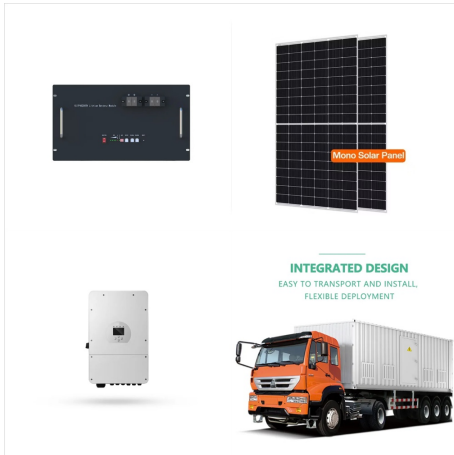
A solar power system for a drone. The system including a shell with at least one solar cell adapted for placement on an exterior surface of a drone. 2017-07-28 Priority to US15/663,387 priority Critical patent/US20180029477A1/en 2018-02-01 Publication of US20180029477A1 publication Critical patent/US20180029477A1/en Status Abandoned legal



A solar array (e.g., solar array 12), also known as a solar panel array or photovoltaic array, refers to a grouping or arrangement of multiple solar panels that are designed to capture sunlight (e.g., solar energy 14) and convert it into electricity (e.g., electrical output signal 16) using photovoltaic (PV) technology.



A solar powered charging station uses photovoltaic panels to generate electrical energy for use directly and/or for storage in electrical batteries for use during night operation. 2020-01-08 Priority to US16/736,863 priority Critical patent/US11356051B2/en 2020-01-28 Assigned to SkyHook Solar Corp reassignment SkyHook Solar Corp ASSIGNMENT



The portfolio's earliest priority date is September 2009 and some of the patents will remain in force until 2034. The main patents on offer generally relate to using an inverter-based power generation source as a STATic synchronous COMPensator (STATCOM), by utilizing its reactive power capacity and method of use.



A solar-powered charger includes a solar panel configured to generate electrical energy at a first voltage level. The charger also includes a converter configured to receive the electrical energy from the solar panel, perform temperature compensation, and output the electrical energy to a load at a second voltage level. The second voltage level could be a?]