



Are green energy technology patents declining? Although most green energy technologies have seen a downward trendin the annual number of patents published since 2012, the decline has been most pronounced in nuclear power generation technologies and alternative energy production technologies.



Are green energy patents accelerating or decelerating? Yet this period of accelerated growth in the number of published green energy patents has been followed by a period of decelerationa??even a slow decline.



Are green energy patents a result of public environmental policies? This study examines the number of green energy patents as one outcome of various public environmental policies such as environmental stringency and environmental taxes and regulations in technology leading countries. Availability of new data makes it feasible for us to evaluate green innovation policy effects.



What is a green patent? A green patent is granted for green technology or environmentally friendly technology,like waste,wind power,geothermal energy,solar energy,tidal power,and biomass. A green patent can be one given for technology that could not be harmful to the environment or for a technology that actively stops any further environmental deterioration.



When did energy innovation-related patenting expand? We find that energy innovation-related patenting has first expanded exponentially up until 2013,both in terms of the total number of patent families and PCT international patent applications in green energy technologies.





How many green tech patents have been filed? Over 61,000 patentsof green tech have been filed of which 90% are regarding waste management and alternative energy production and the remaining related to other areas such as energy conservation,transportation,nuclear power,agriculture,and forestry.



The invention belongs to the technical field of photovoltaic building materials, and discloses hollow LOW-radiation perovskite power generation glass for photovoltaic building integration. The self-cleaning coating of the hollow LOW-radiation perovskite power generation glass has higher hydrophobicity, prevents dust and other pollutants from adhering, improves the transmission a?



1 . Power Generation by Solar Power Plant November 2024 Solar Power Plant Panel Output (MW) Forecast Power Generation (kWh) (A) Actual Power Generation (kWh) (B) Difference (kWh) (B) - (A) Ichigo Kiryu Okuzawa 1.33 99,964 109,738 +9,773 Ichigo Motomombetsu 1.40 84,052 80,445 -3,606 Ichigo Muroran Hatchodaira 1.24 76,623 97,381 +20,758



The Mann Patent (U.S. Pat. No. 7,321,173) discloses a light for illuminating a portion of a roadway that is powered by a series of wind receptacles and photovoltaic cells to facilitate the generation and storage of electrical energy required to illuminate the light. A kind of solar wind-energy power generation integrated device US11085415B1



Solar power systems and their related technologies have developed into a globally utilized green energy source. Given the relatively high installation costs, low conversion rates and battery capacity issues, solar energy is still not a widely applied energy source when compared to traditional energy sources. Despite the challenges, there are many innovative a?





A recently granted patent (Publication Number: US11901592B2) discloses an innovative Solid Oxide Fuel Cell (SOFC) system that includes a fuel cell module and a cooling system. The cooling system comprises various components such as a radiator, water tank, water pump, DC step-down transformer, fan, condenser, current sensor, and flowmeters.



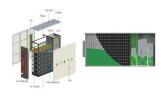
The role of renewable energy in global power generation is growing a?? particularly for solar power. Thanks to increasing innovation and decreasing costs, global solar capacity has doubled from 2018 to 2021. According to Nature Communications, solar power is currently on track to become the world's dominant source of power by 2050.. If you're a?



Abstract: Systems and methods for generating and a controller for controlling generation of geothermal power in an organic Rankine cycle (ORC) operation to thereby supply electrical power to one or more of in-field operational equipment, a grid power structure, and an energy storage device. In an embodiment, during hydrocarbon production, a temperature of a a?|



According to GlobalData's company profile on First Solar, Photovoltaic roof tiles was a key innovation area identified from patents. First Solar's grant share as of March 2024 was 39%. Grant share is based on the ratio of number of grants to total number of patents. Method for treating absorber layer in photovoltaic device



What solar energy photoelectric curtain wall was a photovoltaic generation in construction material is integrated, is the advanced form of BIPV (BIPV). The elementary cell of solar photoelectric glass metope is an electro-optical package, and electro-optical package is to carry out the array that series and parallel combines by several solar battery sheets. Encapsulate the battery sheet a?





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Power Generation by Solar Power Plant July 2021 Solar Power Plant Panel Output (MW) Forecast Power Generation (kWh) (A) Actual Power Generation (kWh) (B) Difference (kWh) (B) - (A) Ichigo Kiryu Okuzawa 1.33 134,953 141,051 +6,098 Ichigo Motomombetsu 1.40 138,051 210,619 +72,568 Ichigo Muroran Hatchodaira 1.24 131,161 129,756 -1,405



Abstract: In various embodiments, a process for configuring or commissioning a solar power system includes receiving, at a controller, hardware identifiers of a plurality of power electronics modules to be configured. Each of the plurality of power electronics modules of at least a portion of the plurality of power electronics modules is associated with a corresponding a?



In addition, a comparison is made between solar thermal power plants and PV power generation plants. Based on published studies, PVa??based systems are more suitable for smalla??scale power



A recently granted patent (Publication Number: US11888440B2) discloses a universal solar module box designed to be mounted on a solar module. The innovative design includes a junction box platform with a base plate, blade block, and cover, along with a singular modular diode block that serves as a replaceable unit.





2ND INTERNATIONAL CONFERENCE ON GREEN ENERGY AND SUSTAINABLE DEVELOPMENT (GESD 2019) 30a??31 May 2019. Chongqing, China. Previous Article; Next Article; As an important part of a new type of renewable energy, solar power generation has a well-developed prospect and is valued by all the countries in the world. The a?



The ultra low cost printable solar cell technology complemented with a range of other related technologies, currently in research phase, to improve the power output of printable photovoltaic cells a?? such as dye-sensitised solar a?





Perovskite/silicon tandem solar cells have the potential to achieve high efficiencies through improvements to the optical and electrical parameters of perovskite/silicon tandem devices, via photon management, particularly using the optical band-edge shifting properties of silicon via surface modification of silicon. Silicon can directly extract the light a?





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Keywords: solar power; energy generation; patent portfolio; clustering; LDA; word2vec; develop an internationally competitive green industry [3]. Solar research is associated with the current





Power Generation by Solar Power Plant January 2022 Solar Power Plant Panel Output (MW) Forecast Power Generation (kWh) (A) Actual Power Generation (kWh) (B) Difference (kWh) (B) - (A) Ichigo Kiryu Okuzawa 1.33 111,992 128,419 +16,427 Ichigo Motomombetsu 1.40 82,600 35,737 -46,863 Ichigo Muroran Hatchodaira 1.24 74,699 75,802 +1,103



The granted patent (Publication Number: US11960271B2) discloses an apparatus designed as a power plant early warning device to be installed within a power plant. The device is equipped with a signal a?



-14 Publication of US20160204650A1 publication Critical patent/US20160204650A1/en Status Abandoned legal the environmentally green solar energy is collected as a DC current output to charge controller by an insulated conductor running inside charging pole 11 to an equipment box 18 located at the base of the pole 11 or under the seat



The spectre of climate change looms large, demanding a global shift towards environmentally sustainable solutions. At the forefront of this transition lies green technology a?? a rapidly evolving field where innovation plays a crucial role. This blog delves into the intersection of climate change and intellectual property, exploring the surge in green technology patents, analyzing patent



Kyocera Corp., a Japanese ceramics and electronics manufacturer and . leading provider of solar power systems, has filed a patent application US20180287217 that discloses electricity storage apparatus, and an electricity storage system a?