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**短期專利說明書**

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[54] OFFSHORE FLOATING-TYPE SOLAR ENERGY GENERATING APPARATUS AND SYSTEM 一種海上漂浮式太陽能發電裝置及系統

[57] This short-term patent application discloses an offshore floating-type solar energy generating apparatus and system suitable for a sea water environment. The floating-type solar energy generating system includes solar cell panels, a power distribution device, an MPPT controller, a charger, a battery, a transformer, a protection sub-circuit, an offshore floating unit, and other physical support systems. The solar cell panels are connected in series-parallel to form a solar cell panel array. A protection sub-circuit is employed to provide additional protection to the solar cells; the MPPT controller is employed to guarantee a maximum power output of the solar cell panels. The cell panels are mounted to the floating unit that may float on the sea water and have a certain tilt angle. The present invention applies photovoltaic power generation offshore, optimizes the efficiency of the power generation system, and enhances safety.

本短期專利公開了一種適用於海水環境的海上漂浮式太陽能發電裝置及系統。該漂浮式太陽能發電系統由太陽能電池板、電能分配裝置、MPPT 控制器、充電器、蓄電池、變換器、保護子電路、海上漂浮單元和其他物理支持系統組成。太陽能電池板採用串並聯連接，形成太陽能電池板陣列。採用保護子電路以提供太陽能電池的額外保護，採用 MPPT 控制器保證太陽能電池板的最大功率輸出。電池板安裝在能漂浮於海水上的漂浮單元，且具有一定的傾斜角度。所採用的連接方法可以在發電裝置中連接多個面板。本實用新型將光伏發電應用於海上，並優化了發電系統的效率，提高了安全性。

