

ABSTRACT

A floating photovoltaic power station and a load-bearing system thereof are provided according to the present application. The load-bearing system of the floating photovoltaic power station includes an aisle floating body providing buoyancy and forming a first operation and maintenance passage. The aisle floating body is provided with a fixing portion for fixedly connecting with a front side of a photovoltaic assembly, and one photovoltaic assembly is only fixedly connected to one aisle floating body located on the front side of the photovoltaic assembly. In the load-bearing system of the floating photovoltaic power station, the aisle floating body can support the photovoltaic assembly, and can provide buoyancy at the same time. Compared with the floating body only providing buoyancy in the conventional technology, the number of components is reduced, thereby effectively reducing the cost. Moreover, when the wave fluctuation causes displacement difference of the adjacent aisle floating bodies, since one photovoltaic assembly is only fixedly connected to one aisle floating body located on the front side thereof, the influence of the displacement difference on the single photovoltaic assembly is effectively reduced, thereby reducing the probability of damage to the photovoltaic assembly and prolonging the service life of the photovoltaic assembly.

(Figure 7)