

[TITLE OF THE DOCUMENT] ABSTRACT

[Abstract]

[Problem] A closed circulation type land-based aquaculture system having a lower environmental load compared to conventional breeding systems is provided.

[Means to solve the problem] A closed circulation type land-based aquaculture system 100 is equipped with a breeding water tank 300, a heat insulating member 320 covering the breeding water tank 300, a filtration tank 310, a circulation pump 340 supplying breeding water from the filtration tank 310 to the breeding water tank 300, a temperature sensor 302, a solar power generation panel 200, a converter 510, a storage battery 240, a distributor 520, a solar water heater 210, and a control unit 500. The breeding water tank 300 and the filtration tank 310 are adjacent one another, and the circulation pump 340 is a DC pump. The circulation pump 340 is located below a water level of either the breeding water tank 300 or the filtration tank 310, whichever is lower, and supplies the water in the filtration tank into the breeding water tank 300, such that a desired discharge rate may be achieved with the use of the DC pump with a low electric power consumption.

[Selected Drawing] FIG. 2