

ABSTRACT

The present invention provides a desalination apparatus and a desalination method for desalting saline water such as seawater by efficiently evaporating the saline water with use of the solar heat, i.e., natural energy, and then efficiently condensing the vapor. The apparatus includes a structural body 1 in which a hermetically enclosed interior space is formed, a partition 4 dividing the interior space into an evaporation chamber 2 and a condensation chamber 3, a sunlight-permeable member 5 constituting an upper surface and a front surface of the evaporation chamber 2, and at least one of a fin 8 and a cooling water passage 15 provided on a wall of the condensation chamber 3. The evaporation chamber 2 and the condensation chamber 3 communicate with each other at an upper portion of the interior space. The evaporation chamber 2 has an inlet 9 of saline water and an outlet 10 of the saline water which has been evaporated and concentrated. The condensation chamber 3 has an output port 13 of condensed water.