

MOLTEN SALT CIRCULATION APPARATUS AND CIRCULATION METHOD

ABSTRACT

Provided is a molten salt circulation apparatus and a circulation method that make it possible to facilitate handling of a molten salt by lowering a freezing point of the molten salt and reduce heating energy for maintaining the molten salt in a liquid state when operation is stopped. A circulation apparatus comprising: a tank 1 for reserving a molten salt S composed of at least one of sodium nitrite, sodium nitrate, and potassium nitrate; heaters 2 and 3 for heating the molten salt S in the tank 1; a pump 4 for sending out the molten salt S from the tank 1; a circulation path 10 for circulating the molten salt S sent out from the tank 1 and returning the molten salt S to the tank 1; and a water supply source 5 for supplying water into the tank 1 is used to dilute the molten salt S with water supplied from the water supply source 5 to lower the freezing point of the molten salt S, heat the molten salt S diluted with the water by using the heaters 2 and 3 to maintain a liquid state of the molten salt S, and circulate the molten salt S through the circulation path 10 by driving the pump 4.

[FIG. 1]