

METHOD AND APPARATUS FOR MAKING ICE USING SUPERCOOLED WATER

ABSTRACT

[Abstract]

This invention relates to a method and apparatus in which supercooled water generated in a supercooling vessel is transformed into ice through a cancellation of its supercooled condition without being laid open in an atmosphere.

Supercooled water is introduced from a horizontal and tangential direction to a lower portion of a vertically arranged cylindrical housing. A circulation-flow cancels the supercooling of the supercooled water thereby collecting generated ice near the axis of the cylindrical housing. Then, the supercooled water and the ice are forced into a jet-flow and passed through a nozzle which is arranged near the central axis of the cylindrical housing at an upper position of the lower portion, toward a central portion of the housing. The residual supercooling of the supercooled water is cancelled by a convection current streaming up and down formed of said jet-flow. Thus, the most part of the supercooling of the supercooled water is cancelled by the circulation-flow and the jet-flow.

[Selected drawing] Fig. 1