ABSTRACT

A tank state estimating method of estimating a state in a tank at a predetermined point in time on a sailing course of an LNG carrier is provided. The LNG carrier carrying LNG stored in the tank as a cargo. The tank state estimating method includes: a first step of acquiring information related to specification of the tank; a second step of acquiring information related to a state in the tank at a start point of a target section on the course; a third step of acquiring information on a predictive value of liquid fluctuation of the LNG in the tank during the section, the predictive value being obtained on a basis of a weather forecasting value during the section and information on the weather forecasting value; and a fourth step of calculating the state in the tank at an end point of the section by thermal transfer calculation based on thermodynamics on a basis of the information acquired in the first to third steps in assuming that a heat input to the tank during the section is used for vaporization of the LNG in the tank.

Fig. 2