

BALLAST WATER TREATMENT SYSTEM AND METHOD OF BALLAST WATER TREATMENT

ABSTRACT OF THE DISCLOSURE

A ballast water management system for treating ballast water containing a variety of organisms is disclosed. The apparatus comprises:(i) a pre-treatment system including filtering device to purify water by removing suspended solids, silts, and scaling caused by precipitation of soluble salts in the conductive medias of the ballast water;(ii) ballast water pump for generating a pressurized ballast water stream for treating;(iii) an electrochemical cell having titanium coated anode and a titanium plated cathode, wherein an inlet of the cell is connected to the ballast water pump and an outlet of the electrochemical cell is connected to a ballast tank which is used to collect treated ballast water;(iv) a control panel being used to control the management system by sending signal and reading to operational team, the control panel being in communication with equipment of the system; and (v) a ballast water tank for storing treated ballast water for discharging, thereby water in the electrochemical cell is oxidized to produce oxidizing agent to remove the microorganism in the ballast tank. The present invention also relates to a method of treating ballast water.

(FIG. 1)