

Abstract

BALLAST WATER TREATMENT METHODS AND APPARATUS

A liquid or water treatment apparatus comprising one or both of an electrodialysis cell and a cavitation unit. The cavitation unit generates cavitation in the liquid by flow of the liquid into a constriction where cavitation bubbles are formed and then to an outlet where cavitation bubbles implode, and the constriction includes an aperture formed by walls which are long and narrowly spaced in a plane normal to the flow direction. The electrodialysis cell is arranged with an inlet flow path for directing only part of a quantity of water to be treated through the electrodialysis cell, and an outlet flow path for returning a product of the electrodialysis cell to the remainder of the water.

Figure 1c