

ABSTRACT

A technique capable of determining a suitable or optimum exclusive region (bumper) setting value and improving the accuracy and others of ship collision avoidance support and automatic ship maneuvering as a result is provided. A ship maneuvering calculation device 1 calculates setting information of an automatic ship collision avoidance program 3 for achieving a function of an automatic ship collision avoidance device 2 of a vessel. The ship maneuvering calculation device 1 generates a plurality of exclusive region values 103 that are different in at least a shape and a size as parameter values for an exclusive region set around a vessel, repeatedly executes simulation calculation using the automatic ship collision avoidance program (a copy 13) while changing a condition 102 and the parameter values, calculates an evaluation value 105 corresponding to the parameter value, based on the result of the simulation calculation, determines an optimum value 106 of the exclusive region, based on the evaluation value, and sets the optimum value 106 of the exclusive region to the automatic ship collision avoidance program 3.

Figure 10