

Title (en)
Finned rudder

Title (de)
Flossenruder

Title (fr)
Gouverne à ailettes

Publication
EP 2110311 A2 20091021 (EN)

Application
EP 09152042 A 20090204

Priority
JP 2008109270 A 20080418

Abstract (en)
A fin that generates thrust in the forward motion direction by utilizing rising, falling, and swirling flows near a rudder surface is attached to a rudder to improve the propulsion performance. The invention provides a finned rudder, disposed aftward of a screw propeller that rotates clockwise as viewed from the stern side during forward motion, for changing the course of a ship and provided with a first fin and a second fin in respective rudder surfaces. A first end of the first fin is attached at a position higher than a center position of the screw propeller on a leading edge side of a central portion of the rudder surface, and a first end of the second fin is attached at a position lower than the center position of the screw propeller on the leading edge side of the central portion of the rudder surface. A second end of the first fin extends at an upward inclination to a position inside the rotation radius of the screw propeller where the upward flow is strong, and a second end of the second fin extends horizontally to a position inside the rotation radius of the screw propeller where the downward flow is strong.

IPC 8 full level
B63H 25/38 (2006.01); **B63H 25/52** (2006.01)

CPC (source: EP)
B63H 25/38 (2013.01); **B63H 25/381** (2013.01)

Citation (applicant)
• JP H06305487 A 19941101 - HITACHI SHIPBUILDING ENG CO
• JP H11139395 A 19990525 - KAWASAKI HEAVY IND LTD

Cited by
CN107310704A; EP2754609A1; WO2021239963A1

Designated contracting state (EPC)
DE ES

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
EP 2110311 A2 20091021; **EP 2110311 A3 20111005**; **EP 2110311 B1 20130501**; CN 101559828 A 20091021; CN 101559828 B 20111207; ES 2411475 T3 20130705; JP 2009255835 A 20091105

DOCDB simple family (application)
EP 09152042 A 20090204; CN 200910009826 A 20090124; ES 09152042 T 20090204; JP 2008109270 A 20080418