

Title (en)  
Rudder for a ship

Title (de)  
Ruder für ein Schiff

Title (fr)  
Gouvernail pour bateau

Publication  
**EP 2272751 A2 20110112 (EN)**

Application  
**EP 10154249 A 20100222**

Priority  
KR 20090009001 U 20090710

Abstract (en)  
Disclosed herein is a ship rudder (4) disposed behind a propeller (2) at a stern of a ship (1) to control a movement direction of the ship. The rudder includes a middle blade (4a) located around an axis of the propeller and upper and lower blades (4b, 4c) located at upper and lower sides of the middle blade. The middle blade has a leading edge part having a bilaterally symmetrical shape with respect to a plane passing through the axis of the propeller and a perpendicular centerline of the rudder. The upper blade (4b) has a leading edge part twisted with respect to the plane passing through the axis of the propeller and the perpendicular centerline of the rudder to be biased in a reverse rotational direction of the propeller. The lower blade (4c) has a leading edge part twisted with respect to the plane passing through the axis of the propeller and the perpendicular centerline of the rudder to be biased in a forward rotational direction of the propeller. The leading edge part of the middle blade does not form a step, with respect to the leading edge parts of the upper and lower blades, at sides of the rudder in twisted directions of the upper and lower blades, but forms steps, where the leading edge part of the middle blade meets the leading edge parts of the upper and lower blades, at sides of the rudder in directions opposite to the twisted directions of the upper and lower blades, respectively.

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

CPC (source: EP KR)  
**B63H 19/08** (2013.01 - EP); **B63H 25/38** (2013.01 - EP KR); **B63H 2025/388** (2013.01 - EP)

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

Designated extension state (EPC)  
AL BA RS

DOCDB simple family (publication)  
**EP 2272751 A2 20110112**; **EP 2272751 A3 20110824**; **EP 2272751 B1 20120905**; CN 101948006 A 20110119; CN 104627347 A 20150520; DK 2272751 T3 20130102; ES 2393657 T3 20121227; JP 2011016512 A 20110127; JP 5161248 B2 20130313; KR 200447816 Y1 20100223

DOCDB simple family (application)  
**EP 10154249 A 20100222**; CN 201010123524 A 20100226; CN 201410659673 A 20100226; DK 10154249 T 20100222; ES 10154249 T 20100222; JP 2010034521 A 20100219; KR 20090009001 U 20090710