

Title (en)

Turn control system for a ship propulsion unit

Title (de)

Drehsteuersystem für eine Schifffantriebseinheit

Title (fr)

Système de contrôle de rotation pour unité de propulsion de bateaux

Publication

EP 2107000 A2 20091007 (EN)

Application

EP 09155676 A 20090320

Priority

JP 2008078428 A 20080325

Abstract (en)

A ship propulsion unit (4) is fixed to a turning cylinder (8) which is turnable relative to a ship body. A pinion (12) of a drive shaft of a servo motor (3) is engaged with a turning ring (10) of the turning cylinder (8). A turning position command inputted from an operating wheel (16) to a control board (18) causes, via a servo amplifier (2), a servo motor (3) to be driven. The actual turning position of the ship propulsion unit (4) is detected by a tracking transmitter (14), and servo control is performed to bring the deviation between the turning position specified by the turning position command and the actual turning position to 0. A generator (40) is driven by a drive shaft (30) of a main engine for driving a propeller (5) of the ship propulsion unit, and the electric power generated by the generator (40) is supplied to the servo amplifier (2). The electric power required to control the turning position of the ship propulsion unit (4) can be generated using a main engine.

IPC 8 full level

B63H 5/125 (2006.01); **B63H 25/24** (2006.01); **B63H 25/42** (2006.01)

CPC (source: EP)

B63H 5/125 (2013.01); **B63H 23/24** (2013.01); **B63H 25/24** (2013.01); **B63H 25/42** (2013.01)

Citation (applicant)

- JP 2007008189 A 20070118 - OSHIMA SHIPBUILDING CO LTD
- JP 2004131061 A 20040430 - ALSTOM
- JP H0671399 U 19941007

Cited by

CN115562098A; US10654191B2; US10246379B2; US9738562B2; US10350787B2; US8584864B2; US10570064B2; US11878948B2; US9790131B2; US10683237B2; US11660779B2; US10927042B2; US11773019B2; US9758437B2; US11773031B2

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2107000 A2 20091007; **EP 2107000 A3 20120418**; **EP 2107000 B1 20130918**; ES 2435915 T3 20131226; JP 2009227235 A 20091008; JP 5058861 B2 20121024

DOCDB simple family (application)

EP 09155676 A 20090320; ES 09155676 T 20090320; JP 2008078428 A 20080325