

Title (en)

METHOD FOR OPERATING A SHIP PROPULSION SYSTEM AND SHIP PROPULSION SYSTEM

Title (de)

VERFAHREN ZUM BETREIBEN EINES SCHIFFSANTRIEBSSYSTEMS UND SCHIFFSANTRIEBSSYSTEM

Title (fr)

PROCÉDÉ DE FONCTIONNEMENT D'UN SYSTÈME DE PROPULSION DE NAVIRE ET SYSTÈME DE PROPULSION DE NAVIRE

Publication

EP 3377403 A1 20180926 (DE)

Application

EP 16736817 A 20160630

Priority

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- EP 2016065250 W 20160630

Abstract (en)

[origin: WO2017084773A1] Method for operating a ship propulsion system (11), wherein the ship propulsion system (11) has a ship's engine (12), optionally a transmission (16), a propeller shaft (14) and an adjustable propeller (15), wherein the transmission (16) is connected between the ship's engine (12) and the adjustable propeller (15) coupled to the propeller shaft (14), in such a way that the transmission (16) converts a rotational speed of an engine shaft (13) of the ship's engine (12) into a rotational speed of the propeller shaft (14), and wherein the adjustable propeller (15) can be adjusted in order to adjust a pitch angle of the adjustable propeller (15), wherein a setpoint rotational speed is determined for the propeller shaft (14) and a setpoint pitch angle for the adjustable propeller (15) on the control side and automatically on the basis of an adjustable propeller characteristic diagram and as a function of an operator-side drive request to the ship propulsion system, and wherein a setpoint operating point, specifically a setpoint rotational speed and a setpoint torque, are determined for the ship's engine (12) on the control and automatically on the basis of a ship's engine characteristic diagram side as a function of the operator-side drive request and as a function of the setpoint rotational speed for the propeller shaft (14). An actual operating point of the ship's engine (12) is determined as a function of a measured actual rotational speed and a measured actual torque, wherein it is checked on the control side as a function of the actual operating point of the ship's engine (12) and automatically on the basis of the adjustable propeller characteristic diagram and the ship's engine characteristic diagram whether, when the drive power is constant, the set point rotational speed for the propeller shaft (14) and the setpoint pitch angle for the adjustable propeller (15) can be varied while reducing fuel consumption of the ship's engine (12), wherein, when this is possible, the setpoint rotational speed for the propeller shaft (14), the setpoint pitch angle for the adjustable propeller (15) and the setpoint operating point of the ship's engine (12) are adapted.

IPC 8 full level

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Citation (search report)

See references of WO 2017084773A1

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