

Title (en)  
SHIP STEERING MACHINE

Title (de)  
SCHIFFSSTEUERUNGSMASCHINE

Title (fr)  
MACHINE DE DIRECTION DE NAVIRE

Publication  
**EP 4006359 A1 20220601 (EN)**

Application  
**EP 20844319 A 20200706**

Priority  
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Abstract (en)  
A ship steering gear (1) according to one embodiment includes: a hydraulic actuator (3) that rotates a rudder stock (22) coupled to a rudder plate (21); two axial piston hydraulic pumps (4) that are connected to the hydraulic actuator (3) such that a closed circuit is formed between the hydraulic actuator (3) and the hydraulic pumps (4); and two electric motors (5) that drive the hydraulic pumps (4). The ship steering gear (1) further includes: first detectors (61, 62) that detect electric power, or electric currents, supplied to the electric motors (5); a second detector (63) that detects a rudder angle  $\theta$  that is an angle of the rudder plate (21) relative to a center line (10) of a hull; and a torque calculator (7) that calculates a torque applied to the rudder stock (22) based on the electric power, or the electric currents, detected by the first detectors (61, 62) and the rudder angle  $\theta$  detected by the second detector (63).

IPC 8 full level  
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