

Title (en)

Ship's rudder angularly positioned by an electric motor

Title (de)

Von einem elektrischen Motor angetriebenes Schiffsruder

Title (fr)

Gouverne de navire asservie en position angulaire par un moteur électrique

Publication

EP 1384661 A1 20040128 (FR)

Application

EP 03102053 A 20030709

Priority

FR 0209438 A 20020725

Abstract (en)

The ships steering system includes a conical seating (2) in which the helm (1) is pivotally mounted. The helm (1) is controlled by an asynchronous electric motor. This motor transmits the necessary couple electromagnetically, without contact, and thus wear within the device is much reduced. The steering system for a ship includes a seating (2) forming part of the structure of the ship, in which the rudder or helm (1) is pivotally mounted. The helm (1) is controlled in its angular position by an electric motor (5,6) comprising a stator (5) rigidly fixed to the seating, and a rotor (6) rigidly fixed to the helm. The motor is an asynchronous device, supplied with a power converter. This orientation motor is supplied by with variable frequency and voltage signals, and transmits the necessary couple to the helm electromagnetically in order to control its position. Being applied electromagnetically, there is no physical contact between the moving parts, thus eliminating the problem of wear. The helm itself may include a conical section, mounted within a conical seating, and the electric motor is formed within this conical shape.

Abstract (fr)

La gouverne de navire comprend une assise (2) faisant partie de la structure du navire, dans laquelle est monté pivotant un gouvernail (1), ce gouvernail (1) étant asservi en position angulaire par un moteur (5, 6). Le moteur est un moteur électrique comprenant un stator (5) rigidement fixé à ladite assise (2), et un rotor (6) rigidement fixé audit gouvernail (1). Ce moteur d'orientation est alimenté à fréquence et tension variables et transmet le couple nécessaire à l'asservissement du gouvernail par voie électromagnétique, c'est à dire sans contact physique, ce qui élimine les problèmes d'usure. D'autre part, la gouverne est simplifiée par la réduction du nombre d'équipements qui la constituent, ce qui facilite son installation à bord et contribue à améliorer sa fiabilité. <IMAGE>

IPC 1-7

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IPC 8 full level

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CPC (source: EP US)

B63H 25/14 (2013.01 - EP US); **B63H 25/26** (2013.01 - EP US)

Citation (search report)

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