Title (en)

APPARATUS FOR THE VARIATION OF THE OPERATING POSITIONS OF AN OLEODYNAMIC AZIMUTH STERN MOUNTED ON A MOTORIZED VESSEL

Title (de)

VORRICHTUNG ZUR VERÄNDERUNG DER BETRIEBSSTELLUNGEN EINES AUF EINEM MOTORISIERTEN SCHIFF BEFESTIGTEN OLEODYNAMISCHEN AZIMUT-HECKS

Title (fr)

APPAREIL PERMETTANT DE FAIRE VARIER DES POSITIONS DE FONCTIONNEMENT D'UNE POUPE AZIMUTALE OLÉODYNAMIQUE MONTÉE SUR UN BATEAU MOTORISÉ

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2021059105A1] The apparatus according to the present invention comprises an oleodynamic kinematic mechanism 1 consisting of an attachment plate 2 removably connected to the transom of a vessel N, provided with oleodynamic connection means 200, and an attachment plate 4 jointly connected to an oleodynamic rotary joint 3 of an oleodynamic azimuth stern A. The kinematic mechanism 1 also comprises hollow tubular oleodynamic means 11 for passage of a pressurized liquid coming from the engine unit of the vessel, whose ends 111, 112 are provided with means 14, 5, and 15, 6 connected in such a way as to possibly rotate in circular seats 21, 41 respectively of the attachment plates 2, 4 respectively. Further cylindrical elements 12, 13 of the kinematic mechanism 1 are connected to a mechanical cylindrical joint 16 operating as an articulated joint for a pair of pistons 172, 182 of oleodynamic means 17, 18 respectively, provided with cylinders 171, 181 respectively connected in such a way as to possibly rotate in further circular seats 221, 421 respectively of the attachment plates 2, 4 respectively. The activation of said cylinder- and piston-based oleodynamic means 17, 18, triggered by the oleodynamic fluid passing through the oleodynamic connection means, makes it possible a rotation of the kinematic mechanism around the Y, Z axes, thus individually or simultaneously providing the tilt, trim movements of the oleodynamic azimuth stern. The rotation of the propeller around its own vertical X axis takes place by way of an oleodynamic motor 30 supplied by means directly connected to the removable plate 2 and placed above the rotary joint 3 which drives a gear mechanism 31 jointly connected to the rotary joint.

IPC 8 full level

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