

Title (en)

Control system for a two or more speed motorised winch

Title (de)

Steuerungssystem für eine motorisierte Winde mit mindestens zwei Geschwindigkeiten

Title (fr)

Système de contrôle pour un treuil motorisé ayant au moins deux vitesses

Publication

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Application

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Priority

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Abstract (en)

[origin: EP2179959A1] The invention relates to a control system (1) for a motorised winch (2), preferably for nautical use, with two or more speeds. The motorised winch (2), in particular, comprises a main motion input shaft (10), a drum (20) for winding a line (100) and a plurality of gears (25) operatively arranged between the main shaft (10) and the drum (20) and adapted to define in the winch (2) at least two different gear ratios. Motor means (3) are active on the aforementioned main shaft (10) for transmitting the motion to the winch (2). The control system (1) of the invention comprises detector means (40, 41, 42, 43, 44) adapted to identify the gear ratio active in the winch (2) and control means (50) active on the motor means (3) to adjust the torque and/or speed delivered by the motor means (3) based upon the detected gear ratio. In particular, the control means (50) act on the motor means (3) to increase the torque and/or speed delivered to the winch (2) when a long gear ratio is active in the winch (for example, in the case of three-speed winches, when the first or second speed is selected), whereas they do not act when a short gear ratio is active in the winch (for example, when the third speed is selected). In this way, the performance of the winch at the longer gear ratios is improved, allowing in particular the winch to bear, at such gear ratios, a traction load on the line greater than that which can be borne, the gear ratio selected being equal, by known winches.

IPC 8 full level

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CPC (source: EP)

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Cited by

CN113860198A; CN102602808A; RU2678522C1; US10202264B2; WO2023187293A1; FR3134091A1; WO2016128464A1

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