Title (en)

WINCH

Publication

EP 0139673 B1 19870616 (EN)

Application

EP 84901076 A 19840307

Priority

FI 830749 A 19830307

Abstract (en)

[origin: WO8403487A1] A winch device which comprises a working rope to be wound in onto a reel of its own for pulling or lifting a load as well as a control rope, likewise to be wound in onto a reel of its own, for controlling the operation of the winch. The invention is in particular concerned with a method for controlling the operation of the winch so that the working rope and the control rope are wound in, and can be wound out, respectively, in the same direction and at the same speed. According to the invention, this is accomplished so that a tendency is produced in the control rope to be pulled in, that the winding-in of the working-rope reel is caused by allowing the control rope to be pulled in over a certain advance distance relative the working rope, and that the speed of winding-in of the working rope is restricted, or the winding-in of the working rope is stopped, respectively, by restricting the winding-in of the control rope relative the winding-in of the working rope. In a winch device for carrying out the invention, the operation has been accomplished by means of friction couplings (15, 29) that receive drive power as well as by means of rotational wedge members (4, 32) controlling their connecting and disconnecting, respectively, the axial state of expansion of the said rotational wedge members being adjusted by means of the said relative ratio of movement of the control rope (45) and the working rope (48).

IPC 1-7

B66D 1/40; B66D 1/14

IPC 8 full level

B66D 1/14 (2006.01); B66D 1/26 (2006.01); B66D 1/42 (2006.01)

CPC (source: EP)

B66D 1/14 (2013.01); B66D 1/26 (2013.01)

Cited by

US8386090B1

Designated contracting state (EPC)

AT BE CH DE FR GB LI SE

DOCDB simple family (publication)

WO 8403487 A1 19840913; DE 3464231 D1 19870723; DK 525984 A 19841105; DK 525984 D0 19841105; EP 0139673 A1 19850508; EP 0139673 B1 19870616; FI 70870 B 19860718; FI 70870 C 19861027; FI 830749 A0 19830307; FI 830749 L 19840908; JP S60500666 A 19850509; SU 1514243 A3 19891007

DOCDB simple family (application)

FI 8400023 W 19840307; DE 3464231 T 19840307; DK 525984 A 19841105; EP 84901076 A 19840307; FI 830749 A 19830307; JP 50115984 A 19840307; SU 3816004 A 19841106