Title (en)

METHOD AND DEVICE FOR THE POWER SUPPLY FOR RACK AND PINION LIFTS

Title (de

VERFAHREN UND VORRICHTUNG ZUR STROMVERSORGUNG FÜR ZAHNSTANGENGENAUFZÜGE

Title (fr)

PROCÉDÉ ET DISPOSITIF PERMETTANT UNE ALIMENTATION ÉLECTRIQUE POUR DES ASCENSEURS À CRÉMAILLÈRE

Publication

EP 2691333 A1 20140205 (EN)

Application

EP 11862820 A 20110329

Priority

SE 2011050359 W 20110329

Abstract (en)

[origin: WO2012134363A1] The invention concerns a method and an arrangement for the power supply for a lift of the type in which drive machinery (109) is supported by a load carrier (107) and can drive the load carrier in a first and a second direction along a track along an essentially vertical mast (110) by means of the interaction between a cogged wheel (111) and cogged rod (112). In order to reduce the requirement for external power and in this way to reduce the costs of the power supply system of the lift as a whole, the method is proposed according to: that a load carrier (107) is arranged, that the load carrier (107) is arranged to support an electrically operated electric motor (109) that is a component of the drive machinery, which electric motor is selected such that it generates a flow of energy during regenerative operation, that the electric motor (109) is arranged such that it can drive the load carrier (107) in the first direction along the track and can drive the load carrier during inverse regenerative operation to generate a flow of energy during braking and motion in the second direction along the track, that the load carrier (107) is arranged to support an energy storage system (10) that includes an energy store (60) designed to store, receive and release electrical energy, that the load carrier (107) is provided with a first current-transfer bus (11) that allows the energy flow that is emitted from the electric motor (109) during braking and regenerative operation to be transferred from the electric motor to the energy store (60) that is part of the energy storage system (10) and, when necessary, to be inversely transferred from the energy store to the drive motor, and that the load carrier (107) is arranged to increase its potential energy during acceleration or motion upwards along the mast through the influence of energy that has been obtained from the energy store (60).

IPC 8 full level

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