

Title (en)

POWER SUPPLY SYSTEM FOR RACK AND PINION LIFTS AND METHOD FOR POWERING THESE

Title (de)

STROMVERSORGUNGSSYSTEM FÜR ZAHNSTANGEN UND ANTRIEBSVERFAHREN DAFÜR

Title (fr)

SYSTÈME D'ALIMENTATION EN ÉNERGIE POUR ÉLÉVATEURS À PIGNON ET CRÉMAILLÈRE ET PROCÉDÉ D'ALIMENTATION EN ÉNERGIE DE CES ÉLÉVATEURS

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Application

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Abstract (en)

[origin: WO2011105959A1] The invention concerns a power supply system for a lift of the type in which drive machinery is supported by a load carrier (1, 2) and drives by means of a cogged wheel and cogged rod the load carrier along a track on a mast (5) and in which the drive machinery of the load carrier is supplied with power from a unit at ground level. In order to achieve a more efficient system, the invention is characterised in that: a) an electrically operated electric motor (3, 4) that is a component of the drive machinery arranged to drive the load carrier (1, 2) in first and second directions along the mast (5) and to generate electrical energy during the driving of the load carrier in a second, opposing, direction through regenerative operation of the electric motor, b) an energy storage system (10) that is a component of the unit at ground level that includes an energy store (11) for the storage of energy, c) a principal power network (12) arranged at ground level, from which electrical energy can be withdrawn, d) a power transfer bus (13, 13') with which it is possible to transfer electrical energy between the drive machinery of the load carrier (1, 2), the energy storage system (10) and the principal power network (12) that produces power, e) a control and monitoring system (17) for the monitoring and control of the flows of electrical energy between the electric motor (3, 4) of the load carrier, the energy store (11) at ground level and the principal power network (12).

IPC 8 full level

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