

Title (en)

Hydraulic lifting equipment for battery-propelled handling trucks or the like

Title (de)

Hydraulische Hubvorrichtung für batteriegetriebene Flurförderzeuge oder dergleichen

Title (fr)

Equipement de levage hydraulique pour chariots de manutention mûs par batterie ou analogues

Publication

EP 0630853 B1 19971008 (DE)

Application

EP 94103149 A 19940303

Priority

DE 4317782 A 19930528

Abstract (en)

[origin: US5505043A] A hydraulic lift device for battery operated industrial trucks comprising a hydraulic ram, a hydraulic machine operating as a pump in a load raising cycle and as a motor in a load lowering cycle, a separately excited DC machine operating as a motor in the load raising cycle and as a generator in the load lowering cycle, and energy recovering circuitry which is fed by the DC machine in the load lowering cycle. A load holding valve is disposed in the fluid path between the hydraulic ram and the hydraulic machine. Speed of the DC machine is set by a speed control. A separate field current control includes a desired value setting circuit for determining a desired value for the field current (IFSoll) from a predetermined relationship between the speed (nIst) and the armature current (IASoll). Power switches are associated with the field winding and the armature, and are actuated by the current control. The power switches are arranged and controlled such that the intensity and the direction of the current through the armature and field winding are defined. The current control comprises a directional setting control for the lowering and raising cycle generating signals to control the load holding valve.

IPC 1-7

B66F 9/24; H02P 3/14; H02P 3/18

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP1193211A3; CN106545531A; EP1188709A3; DE19709475A1; DE102011053958A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

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