

Title (en)

Energy recovery drive and control device for the down ride phase of electrohydraulic working lifts

Title (de)

Energierückgewinnungsantrieb und Steuervorrichtung für die Abwärtsphase des elektrohydraulischen Betriebs von Aufzügen

Title (fr)

Appareil de traction avec récupération d'énergie et dispositif de contrÔle pour la phase de descente d'un ascenseur électrohydraulique

Publication

**EP 0829445 A1 19980318 (EN)**

Application

**EP 96120572 A 19961220**

Priority

IT MI961898 A 19960913

Abstract (en)

In down ride phases of electrohydraulic drive lifts, the motor-driven pump unit (1) is caused to rotate in the same or the opposite direction with respect to the one operating in the up ride phases without the help of special electronic devices controlling the motor (allowing or not allowing energy recovery). Having reached the rated speed of the motor-driven pump and the network frequency applied to the motor, the unit carries out a function of brake for the outlet of the operating fluid, causing a pressure that sustains the hydraulic circuit and the closing of valve (6) for the connection to pump (2). In this way a non electronic control is obtained of the down ride speed by electric motor (3) and of motor-driven pump (2). In such conditions, the electric motor can operate as a generator, possibly giving back energy to the feed line. Such action allows to obtain also a drastic reduction in temperature increase of the operating fluid. <IMAGE>

IPC 1-7

**B66B 9/04**

IPC 8 full level

**B66B 9/04** (2006.01); **F15B 21/14** (2006.01)

CPC (source: EP)

**B66B 9/04** (2013.01); **F15B 21/14** (2013.01)

Citation (search report)

- [X] US 4723107 A 19880202 - SCHMID MARTIN [DE]
- [X] DE 3836212 A1 19890524 - KONE ELEVATOR GMBH [CH]
- [X] DE 4402653 A1 19950803 - JUNGHEINRICH AG [DE]
- [A] WO 9405583 A1 19940317 - CAPTINE PTY LTD [AU], et al

Cited by

ITNA20110041A1; ITMI20130651A1; JP2018193192A; US6971481B2; US7134528B2; WO03002877A1; US6996937B2; US6860068B2; US7770331B2

Designated contracting state (EPC)

AT BE CH DE DK ES FI FR GB GR IE LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 0829445 A1 19980318**; IT 1288416 B1 19980922; IT MI961898 A1 19980313

DOCDB simple family (application)

**EP 96120572 A 19961220**; IT MI961898 A 19960913