

Title (en)

METHOD AND DEVICE FOR LIFTING AND LOWERING A LOAD BY A HYDRAULIC LINEAR MOTOR

Publication

**EP 0254840 B1 19930505 (DE)**

Application

**EP 87108004 A 19870603**

Priority

CH 236986 A 19860611

Abstract (en)

[origin: EP0254840A2] The lifting device has a hydraulic linear motor (1), which is made up of a double-acting hydraulic cylinder (2) and two stationarily anchored piston rods (4), connected to the piston (3). A cage (14) is effectively connected to the hydraulic cylinder (2) via a roller (12) of a cable line (13), fastened at the upper end (10) of the hydraulic cylinder (2). The hydraulic drive (19) is connected via a control unit through its supply lines (34, 35) to connection points (58) of the hollow-drilled piston rods (4), and consequently to the hydraulic cylinder (2). In order to keep the drive power of the hydraulic drive (19) small, the overall load is compensated, at least partly, by a counterweight (41), which is fastened to the hydraulic cylinder (2). This succeeds in achieving both a small drive power and a low starting current for the lifting device, but without thereby creating unfavourable leverage ratios. <IMAGE>

IPC 1-7

**B66B 9/04; B66F 7/04**

IPC 8 full level

**B66B 1/04** (2006.01); **B66B 9/04** (2006.01)

CPC (source: EP)

**B66B 1/24** (2013.01); **B66B 9/04** (2013.01)

Cited by

CN116374892A; DE4413165A1; EP3436388A4; DE102007045321A1; EP2199244A1; ITGE20080106A1; DE102007045321B4; US6845872B2; US6505711B1; US6513627B1; WO2019226084A1; WO02064487A1; WO0014006A1; WO0071456A1; WO2017171597A1; WO0114238A1; WO2005082766A3

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