

Title (en)
METHOD AND DEVICE FOR CONTROLLING A HYDRAULIC ELEVATOR

Title (de)
VERFAHREN UND VORRICHTUNG ZUR STEUERUNG EINES HYDRAULISCHEN AUFZUGS

Title (fr)
PROCEDE ET DISPOSITIF POUR COMMANDER UN ASCENSEUR HYDRAULIQUE

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Application
EP 00901018 A 20000131

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Abstract (en)
[origin: WO0046138A1] The invention relates to a method for controlling a hydraulic elevator whose car (1) can be displaced by a hydraulic drive mechanism consisting of a lifting plunger (2) and a lifting cylinder (3) due to the fact that hydraulic oil can be fed through a cylinder line (4) to the hydraulic drive mechanism (2, 3) or evacuated from said hydraulic drive mechanism (2, 3) by means of a pump (10) that cooperates with at least one control valve unit (5, 15), for instance a first control valve unit (5) and optionally a second control valve unit (5), wherein the flow of the hydraulic oil is controlled by measuring means and operation of the elevator can be controlled and regulated by a control apparatus (20) designed for implementing said method. According to the invention, the load of the elevator car (1) is determined by a load pressure sensor (18) detecting pressure PZ in the cylinder line (4) when the elevator car(1) is not in operation. When the elevator car (1) is ascending, pressure PZ in the cylinder line (4) is controlled preferably in a constant manner by changing the control of the second control valve unit (15) in such a way that movement of the elevator car (1) can be controlled in a very precise manner. When the elevator car is descending, the drop in pressure PZ in the cylinder line (4) is regulated by changing the first control valve unit (5) in such a way that the descending movement of the elevator cabin (1) can also be controlled in a very precise manner. The invention further relates to a device for implementing said method. The invention can be used in hydraulic elevators installed in residential and industrial buildings.

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