Safety equipment of a lift installation

Description

The invention relates to a method of monitoring the movement of a lift cage and to safety equipment for carrying out the method.

A lift installation is installed in a building or attached thereto. It essentially consists of a cage which is connected by way of support means with a counterweight or with a second cage. The cage is moved along substantially vertical guide rails by means of a drive which acts selectably on the support means or directly on the cage or counterweight. The lift installation is used for transporting persons and goods within the building over single or several storeys.

The lift installation comprises devices for safeguarding the lift cage in the case of failure of the drive, support means or other lift components. These safeguards usually include a number of safety measures. A first safety measure is, for example, switching-off of the lift drive and actuation of drive brakes in order to stop the lift cage. This is usually carried out by interruption of a lift safety circuit. A further safety measure comprises activation of safety-brake devices or corresponding safety brakes. These can, when required, brake the lift cage on the guide rails or at brake rails. The safety measures are these days increasingly controlled by so-called electronic limiters which monitor movements of the lift cage.

A method for secure detection of movement states of a lift installation is known from EP 1602610. In that case, several movement variables are detected at different locations and compared with one another and multi-stage braking measures are initiated if impermissible deviations are ascertained.

Monitoring equipment is known from a further publication WO2010/107409, wherein a cleaned or filtered speed signal is calculated from a combination of speed measurement and acceleration measurement.

Similar monitoring equipment is known from JP2009/023823, wherein a cleaned speed signal is calculated from a combination of travel distance measurement and acceleration

SAFETY DEVICE OF AN ELEVATOR SYSTEM

Description

The invention relates to a method of monitoring the movement of a lift cage and to safety equipment for carrying out the method.

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