Lift rail

The present invention relates to an elevator rail having more than one guide contour. The invention also relates to a guide system and an elevator system which have such elevator rails.

In an elevator system, a moving body, i.e., an elevator car or a counterweight, is typically displaced vertically along a travel path between different floors or levels within a structure. Typically, each moving body is guided by two elevator rails which are often attached independently of one another to different shaft walls. At least in tall buildings, an elevator type is usually used in which the elevator car is held by rope or belt-like suspension elements and displaced within an elevator shaft by moving the suspension elements by means of a drive machine. In order to at least partially compensate for the load of the elevator car to be moved by the drive machine, a counterweight is usually attached to an opposite end of the suspension elements. This counterweight has at least the same mass as the elevator car. As a rule, the mass of the counterweight exceeds that of the elevator car by half of the payload to be transported permissibly by the elevator car. Depending on the type of elevator, a plurality of counterweights and/or a plurality of elevator cars can also be provided in an elevator system.

DE20105144 U1 shows an elevator system which guides two counterweights inside two hollow elevator rails.

EP3103753 A1 shows an elevator rail system which is formed from sheet metal and, as a functional combination in the same component, contains guide contours for the counterweight and the car.

Among other things, there can be a need for a guide system, an elevator rail and/or an elevator system in which a base surface and/or a space requirement for the elevator system is low and in which the total costs for the elevator system can nevertheless be kept low. Furthermore, there can be a need for a counterweight and an elevator system equipped with said counterweight, in which a number of elevator components used to hold and guide the counterweight can be kept small and thus an installation effort and