frame 1 is moved to the other floor to land the upper car 2.

When the door of the upper car 2 is opened to allow the passengers get off, similarly to the operation executed when the door of the lower car 3 is opened, the elevator controller 10 preliminarily shuts off the monitoring function of the lower car 3 (step A17). More specifically, the door-open run protection function is preliminarily inactivated by shutting down the power supply 54a of the lower car monitoring device 54 shown in FIG. 5. The detection error of the door-open run can be thereby prevented when the lower car 3 is positioned outside the door-open run protection zone while the door of the upper car 2 is opened.

When the passengers have got off the upper car 2, the entire operation of the elevator including the upper car 2 and the lower car 3 is stopped (step A18). After this operation, the operation is stopped until a maintenance person receiving an abnormality alarm of inter-floor adjustment visits a site and checks the elevator.

The lower car 3 is first landed on the rescue floor and then the upper car 2 is landed on the rescue floor in FIG. 7, but the upper car 2 may be first landed on the rescue floor.

FIG. 8 shows a shutdown timing of a car monitoring power at the rescue operation.

When abnormal conditions occur in the inter-floor adjustment, the ~~lower~~ upper car monitoring power supply ~~54a~~53a is shut down while the lower car 3 is landed on the rescue floor and the passengers are allowed to get off by opening the door. In contrast, the ~~upper~~ lower car monitoring power supply ~~53a~~54a is shut down while the upper car 2 is landed on the rescue floor and the passengers are allowed to get off by opening the door. Accordingly, the operation cannot be stopped by the door-open run protection function even when one of the

WHAT IS CLAIMED IS:

1. An elevator with an inter-floor adjustment function, including a car frame in which at least two cars are vertically connected to each other and being capable of adjusting a distance between the cars in the car frame,

the elevator comprising:

a monitoring module configured to monitor a landing state of each of the cars and to stop an operation when ~~the car~~ at least one of the cars is positioned outside a predetermined door-open run protection zone when a door of ~~the car~~ at least one of the cars is open;

a rescue operation module configured to execute a rescue operation, to land each of the cars on a rescue floor, and to open a door of the car at occurrence of abnormality in the inter-floor adjustment function; and

a function shutoff module configured to shut off a function of the monitoring module for a car other than the car having the door opened on the rescue floor, of the cars, while the rescue operation is executed by the rescue operation module.

2. The elevator of Claim 1, further comprising a stop position determining module configured to determine whether the car other than the car having the door opened on the rescue floor, of the cars, is stopped near the door-open run protection zone,

wherein if it is determined by the stop position determining module that the car is stopped near the door-open run protection zone, the function shutoff module shuts off the function of the monitoring module for the car.

3. The elevator of any one of Claims 1 and 2, wherein the monitoring module comprises a plurality of units configured to monitor a landing state of each of the cars independently, and the function shutoff module shuts down a power supply of a unit corresponding to

the car, of the units.