system is switched to a backup operation (emergency operation), and it is continued with a specified car only. In this case, in the full DCS, a specified car is caused to stop at all the floors one by one, since a user is unable to specify a designation floor in a car. However, such an operation greatly reduces transport efficiency, and inconveniences users.

SUMMARY

According to an aspect, there is provided an elevator system comprising:

a hall destination controller installed in a hall;

a first controller which selects one of a plurality of cars as a designated car and causes the designated car to move to a registration floor, under a DCS control which considers a destination floor registered by a user using the hall destination controller; and

second controllers which control operations of the cars in accordance with an instruction given by the first controller,

wherein if a failure has occurred in the first controller performing the DCS control, one of the second controllers which is set as a master in advance converts a first call signal of a DCS control system into a second call signal, so as to continue the operations,

wherein the first call signal of the DCS control system is output from the hall destination controller and includes the destination floor and the registration floor, and

wherein the second call signal is used in a group management control system and includes a traveling direction and the registration floor.

~~According to one aspect, there is provided~~ Herein disclosed is an elevator system comprising:

a hall destination controller installed in a hall;

a first controller which selects one of a

plurality of cars as a designated car and causes the designated car to move to a registration floor, under a DCS control which considers a destination floor registered by a user using the hall destination controller; and

second controllers which control operations of the cars in accordance with an instruction given by the first controller,

wherein if a failure has occurred in the DCS control by the first controller, one of the second controllers which is set as a master in advance converts a first call signal of a DCS control system which is output from the hall destination controller into a second call signal to be used in a group management control system, and continues an operation.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a block diagram showing the configuration of an elevator system according to an embodiment.

FIG. 2 is a block diagram showing the functional configuration of an elevator controller in the embodiment.

FIG. 3 is a flowchart showing the operation of the elevator system according to the embodiment.

FIG. 4 is a view showing a concrete example to explain an operation of the elevator system according to the embodiment in the case where a failure is caused in the elevator system.

FIG. 5 is a view showing an example of an indication of a designated car which is given in a hall destination controller in the embodiment.

FIG. 6 is a view showing an example of an indication of a destination floor which is given in one of indicators for elevators in the embodiment.

DETAILED DESCRIPTION

Embodiments will be described with reference to

the accompanying drawings.

In general, according to one embodiment, an elevator system includes: a hall destination controller installed in a hall; a first controller which selects one of a plurality of cars as a designated car and causes the designated car to move to a registration floor, under a DCS control which considers a destination floor registered by a user with the hall destination controller; and a plurality of second

WHAT IS CLAIMED IS:

1. An elevator system comprising:

a hall destination controller installed in a hall;

a first controller which selects one of a plurality of cars as a designated car and causes the designated car to move to a registration floor, under a DCS control which considers a destination floor registered by a user using the hall destination controller; and

second controllers which control operations of the cars in accordance with an instruction given by the first controller,

wherein if a failure has occurred in the first controller performing the DCS control ~~by the first controller~~, one of the second controllers which is set as a master in advance converts a first call signal of a DCS control system ~~which is output from the hall destination controller~~ into a second call signal ~~to be used in a group management control system, and~~, so as to continue~~s~~ ~~an~~ the operations,

wherein the first call signal of the DCS control system is output from the hall destination controller and includes the destination floor and the registration floor, and

wherein the second call signal is used in a group management control system and includes a traveling direction and the registration floor.

2. The elevator system of Claim 1, wherein the second controller set as the master comprises:

signal conversion means for converting the first call signal of the DCS control system which is output from the hall destination controller into the second call signal to be used in the group management control system;

assignment control means for selecting an optimal one of the cars as the designated car based on the second call signal obtained by the signal conversion

means, and causing the car selected as the designated car to move to a floor at which the destination floor is registered; and

operation control means for registering the destination floor in the car selected as the designated car by the assignment control means, and causing the selected car to move to the destination floor after the selected car is moved to the floor at which the destination floor is registered.

3. The elevator system of Claim 2, wherein the signal conversion means determines a traveling direction of the selected car based on a relationship between the destination floor and the registration floor which are indicated by the first call signal, and adds the traveling direction to the registration floor to convert the first call signal into the second call signal.

4. The elevator system of Claim 2, wherein the second controller set as the master further comprises first display control means for causing an indicator provided in the hall destination controller to indicate a name of the car selected as the designated car by the assignment control means, as information on a car on which the user is to get.

5. The elevator system of Claim 2, wherein the second controller set as the master further comprises second display control means for causing one of indicators provided for the cars, respectively, to indicate the destination floor as a floor to which the designated car is to move, the one of the indicators being associated with the designated car.

6. The elevator system of Claim 2, wherein the second controller set as the master further comprises notification means for notifying an external section of a failure of the first controller performing the DCS control.