FIG. 4 is a flowchart showing a process for displaying the result of change in the group controller according to the embodiment.

FIG. 5 shows specific examples for explaining the relationship between the originally/newly allocated car and the destination floor in connection with change in allocation according to the embodiment.

FIG. 6 shows specific examples for explaining the relationship between the originally/newly allocated car and the destination floor in connection with change in allocation according to the embodiment.

FIG. 7 shows an example of car display which is applied when the allocation has been changed according to another embodiment.

SUMMARY

According to one aspect, there is provided elevator group control system for controlling driving of a plurality of cars, the system comprising:

a hall destination controller configured to register a destination floor of a user in a hall of an arbitrary floor;

a controller configured to allocate the destination floor registered by the hall destination controller to an optimal car out of the plurality of cars, and to change allocation of the destination floor to another car in accordance with a riding state of the optimal car; and

a plurality of displays which are provided in the hall such that the displays correspond to the cars, the displays configured to display a relationship between the originally/newly allocated car and the destination floor in connection with change in allocation in the controller with a basic symbolic indication, wherein

the displays include a first display corresponding to the originally allocated car,

the first display displays the destination floor to be deleted by the change in allocation and the newly

allocated car with a predetermined symbolic indication,

the displays further include a second display corresponding to the newly allocated car, and

the second display displays the destination floor to be added by the change in allocation and the originally allocated car with a predetermined symbolic indication.

Tthere is also provided an elevator group control system for controlling driving of a plurality of cars, the system comprising:

a hall destination controller configured to register a destination floor of a user in a hall of an arbitrary floor;

a controller configured to allocate the destination floor registered by the hall destination controller to an optimal car out of the plurality of cars, and to change allocation of the destination floor to another car in accordance with a riding state of the optimal car; and

a plurality of displays which are provided in the hall such that the displays correspond to the cars, the displays configured to display a relationship between the originally/newly allocated car and the destination floor in connection with change in allocation in the controller with a basic symbolic indication.

DETAILED DESCRIPTION

Embodiments will be described hereinafter with reference to the accompanying drawings.

In general, according to one embodiment, an

elevator group control system controls the driving of a plurality of cars. The system includes a hall destination controller, a controller and a plurality of displays. The hall destination controller is configured to register a destination floor of a user in a hall of an arbitrary floor. The controller is configured to allocate the destination floor registered by the hall destination controller to an optimal car out of the plurality of cars, and to change allocation of the destination floor to another car in accordance with a riding state of the optimal car. The displays are provided in the hall such that the displays correspond to the cars. The displays are configured to display a relationship between the originally/newly allocated car and the destination floor in connection with change in allocation in the controller with a basic symbolic indication.

FIG. 1 is a block diagram showing a configuration of an elevator group control system according to an

WHAT IS CLAIMED IS:

1. An elevator group control system for controlling driving of a plurality of cars, the system comprising:

a hall destination controller configured to register a destination floor of a user in a hall of an arbitrary floor;

a controller configured to allocate the destination floor registered by the hall destination controller to an optimal car out of the plurality of cars, and to change allocation of the destination floor to another car in accordance with a riding state of the optimal car; and

a plurality of displays which are provided in the hall such that the displays correspond to the cars, the displays configured to display a relationship between the originally/newly allocated car and the destination floor in connection with change in allocation in the controller with a basic symbolic indication, wherein

the displays include a first display corresponding to the originally allocated car,

the first display displays the destination floor to be deleted by the change in allocation and the newly allocated car with a predetermined symbolic indication,

the displays further include a second display corresponding to the newly allocated car, and

the second display displays the destination floor to be added by the change in allocation and the originally allocated car with a predetermined symbolic indication.

~~2. The elevator group control system of Claim 1, wherein~~

~~the displays include a first display corresponding to the originally allocated car,~~

~~the first display displays the destination floor to be deleted by the change in allocation and the newly allocated car with a predetermined symbolic indication,~~

~~the displays further include a second display corresponding to the newly allocated car, and~~

~~the second display displays the destination floor to be added by the change in allocation and the originally allocated car with a predetermined symbolic indication.~~

~~3~~2. The elevator group control system of Claim ~~2~~1, wherein

the first display alternately displays the destination floor to be deleted by the change in allocation and the newly allocated car, and

the second display alternately displays the destination floor to be added by the change in allocation and the originally allocated car.

~~4~~3. The elevator group control system of Claim ~~2~~1, wherein

the first display displays the destination floor to be deleted by the change in allocation and the newly allocated car in a first color different from a color of a normal case, and

the second display displays the destination floor to be added by the change in allocation and the originally allocated car in a second color different from the first color.

~~5~~4. The elevator group control system of Claim ~~4~~3, wherein

the first display emphasizes the change in allocation by applying reversing display to the newly allocated car, and

the second display emphasizes the change in allocation by applying reversing display to the originally allocated car.

~~6~~5. The elevator group control system of Claim ~~2~~1, wherein

the first display displays the destination floor to be deleted by the change in allocation and the newly allocated car with the predetermined symbolic indication until the originally allocated car passes a floor on which the destination floor is registered, and

the first display displays another symbolic indication in place of the symbolic indication indicating the newly allocated car when the newly allocated car arrives at the floor and leaves the floor before the originally allocated car passes the floor.

~~7~~6. The elevator group control system of Claim ~~2~~1, wherein

the first display deletes display of the symbolic indication of the destination floor to be deleted by

the change in allocation and the newly allocated car when the originally allocated car passes a floor on which the destination floor is registered, and

the second display deletes display of the symbolic indication of the destination floor to be added by the change in allocation and the originally allocated car when the newly allocated car arrives at the floor and leaves the floor.

~~8~~7. The elevator group control system of Claim ~~2~~1, wherein

the first display displays the destination floor to be deleted by the change in allocation with a number and displays the newly allocated car with an alphabetical letter, and

the second display displays the destination floor to be added by the change in allocation with a number and displays the originally allocated car with an alphabetical letter.

~~9~~8. The elevator group control system of Claim 1, further comprising a plurality of generators which are provided in the hall such that the generators correspond to the cars, the generators configured to generate an audible alarm when allocation is changed by the controller.

~~10~~9. The elevator group control system of Claim ~~9~~8, wherein

the generators include a generator which corresponds to the originally allocated car and generates a first audible alarm, and

the generators further include a generator which corresponds to the newly allocated car and generates a second audible alarm having a tone different from a tone of the first audible alarm.