another task. Therefore, in the case of using RTS, it is necessary to take an efficient processing procedure.

SUMMARY

~~In general, according to one embodiment,~~According to one aspect, there is provided An elevator-group management system which is provided with a group management controller and a plurality of car controllers, and controls a plurality of cars with the car controllers under a control of the group management controller, the group management controller comprising: assignment request issuing means for issuing an assignment request to the car controllers when a new hall call is made, assigning an assignment request call and virtual calls to each of the car controllers when the assignment request is issued, the assignment request call corresponding to the new hall call, the virtual calls being assumed to be made and causing the car controllers to execute respective parts of assignment evaluation processing for assigning the new hall call to any of the cars; evaluation result acquiring means for acquiring evaluation results obtained by the car controllers in accordance with the assignment request; and assignment evaluating means for making a comprehensive evaluation of the evaluation results acquired from the car controllers by the evaluation result acquiring means the evaluation results, limiting the virtual assignment patterns to likely ones, and evaluating the likely virtual assignment patterns to finally determine to which of the cars the new hall call is to be assigned, wherein the car controllers each comprises: assignment request receiving means for receiving the assignment request along with the assignment request call and the virtual calls; virtual assignment pattern making means for making a plurality of virtual assignment

patterns for an associated one of the cars based on the assignment request call and the virtual calls received by the assignment request receiving means; operation prediction evaluating means for evaluating operation predictions of the virtual assignment patterns made by the virtual assignment pattern making means to obtain evaluation values of the virtual assignment patterns; and evaluation result transmitting means for transmitting as evaluation results of the associated car, the evaluation values of the virtual assignment patterns obtained by the operation prediction evaluating means to the group management controller.

There is also disclosed an elevator elevator-group management system which is provided with a group management controller and a plurality of car controllers, and controls a plurality of cars with the car controllers under a control of the group management controller, includes assignment request issuing means for issuing an assignment request to the car controllers when a new hall call is made, and causing the car controllers to execute respective parts of assignment evaluation processing for assigning the new hall call to any of the cars, evaluation result acquiring means for acquiring evaluation results obtained by the car controllers in accordance with the assignment request, and assignment evaluating means for making a comprehensive evaluation of the evaluation results acquired from the car controllers by the evaluation result acquiring means to finally determine to which of the cars the new hall call is to be assigned.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a view showing virtual assignment patterns of an RTS;

FIG. 2 is a view showing a processing procedure

in the case of applying an algorithm A to RTS;

FIG. 3 is a view showing virtual assignment patterns in the case of applying the algorithm A to RTS;

FIG. 4 is a view showing a procedure of a centralized control of RTS;

FIG. 5 is a view showing how processing according to the algorithm A applied to RTS is distributed to control boards for cars;

FIG. 6 is a view showing a procedure of a distributed control of RTS;

WHAT IS CLAIMED IS:

1. An elevator-group management system which is provided with a group management controller and a plurality of car controllers, and controls a plurality of cars with the car controllers under a control of the group management controller, the group management controller comprising:

assignment request issuing means for issuing an assignment request to the car controllers when a new hall call is made assigning an assignment request call and virtual calls to each of the car controllers when the assignment request is issued, the assignment request call corresponding to the new hall call, the virtual calls being assumed to be made, and causing the car controllers to execute respective parts of assignment evaluation processing for assigning the new hall call to any of the cars;

evaluation result acquiring means for acquiring evaluation results obtained by the car controllers in accordance with the assignment request; and

assignment evaluating means for making a comprehensive evaluation of the evaluation results acquired from the car controllers by the evaluation result acquiring means the evaluation results, limiting the virtual assignment patterns to likely ones, and evaluating the likely virtual assignment patterns to finally determine to which of the cars the new hall call is to be assigned, wherein the car controllers each comprises:

assignment request receiving means for receiving the assignment request along with the assignment request call and the virtual calls;

virtual assignment pattern making means for making a plurality of virtual assignment patterns for an associated one of the cars based on the assignment request call and the virtual calls received by the assignment request receiving means;

operation prediction evaluating means for evaluating operation predictions of the virtual

assignment patterns made by the virtual assignment pattern making means to obtain evaluation values of the virtual assignment patterns; and

evaluation result transmitting means for transmitting as evaluation results of the associated car, the evaluation values of the virtual assignment patterns obtained by the operation prediction evaluating means to the group management controller.

~~2. The elevator group management system of Claim 1, wherein the assignment request issuing means of the group management controller assigns an assignment request call and virtual calls to each of the car controllers when the assignment request is issued, the assignment request call corresponding to the new hall call, the virtual calls being assumed to be made.~~

~~3. The elevator group management system of Claim 2, wherein the car controllers each comprise:~~

~~assignment request receiving means for receiving the assignment request along with the assignment request call and the virtual calls;~~

~~virtual assignment pattern making means for making a plurality of virtual assignment patterns for an associated one of the cars based on the assignment~~

~~request call and the virtual calls received by the assignment request receiving means;~~

~~operation prediction evaluating means for evaluating operation predictions of the virtual assignment patterns made by the virtual assignment pattern making means to obtain evaluation values of the virtual assignment patterns; and~~

~~evaluation result transmitting means for transmitting as evaluation results of the associated car, the evaluation values of the virtual assignment patterns obtained by the operation prediction evaluating means to the group management controller.~~

~~4. The elevator group management system of Claim 3, wherein the assignment evaluating means of the group management controller combines the evaluation results acquired from the car controllers by the evaluation result acquiring means, limits the virtual assignment patterns to likely ones, and evaluates the likely virtual assignment patterns, to thereby finally determine to which of the cars the new hall call is to be assigned.~~