

Title (en)
Elevator group control system and control method thereof

Title (de)
System und Verfahren zur Aufzugsgruppensteuerung

Title (fr)
Système et méthode de commande d'un groupe d'ascenseurs

Publication
EP 1760025 A1 20070307 (EN)

Application
EP 06017909 A 20060828

Priority
JP 2005251023 A 20050831

Abstract (en)
In view of the limited effect of the elevator car (12A, 12B, 12C) interval control by hall call assignment alone, depending on generation of hall calls, an elevator group control system and a control method thereof are disclosed, in which the waiting time can be shortened more accurately in finely detailed fashion. A reference trajectory indicating a reference position of each elevator car (12A, 12B, 12C) within a predetermined future time is prepared for each elevator car (12A, 12B, 12C), and a forecasted trajectory corresponding to the reference trajectory is prepared by forecasting the position of each elevator car (12A, 12B, 12C). A hall call is assigned in such a manner that the forecasted trajectory approaches the reference trajectory. At the same time, the operation control factors other than assignment, including the car speed (car speed and acceleration) and the stop time (the door operation speed and the door opening time) of each elevator car (12A, 12B, 12C) are adjusted during the period lacking the assignment process.

IPC 8 full level
B66B 1/20 (2006.01)

CPC (source: EP)
B66B 1/2458 (2013.01); **B66B 2201/102** (2013.01); **B66B 2201/211** (2013.01); **B66B 2201/222** (2013.01); **B66B 2201/226** (2013.01); **B66B 2201/234** (2013.01)

Citation (search report)

- [X] GB 2264571 A 19930901 - HITACHI LTD [JP]
- [X] EP 1055633 A1 20001129 - TOSHIBA KK [JP]
- [X] US 4982817 A 19910108 - TSUJI SHINTARO [JP]
- [X] US 3722628 A 19730327 - YUMINAKA T, et al
- [X] US 2290714 A 19420721 - SEARLES WILLIAM L
- [XA] US 4337847 A 19820706 - SCHROEDER JORIS, et al
- [X] JP 2005104670 A 20050421 - MITSUBISHI ELECTRIC CORP
- [X] JP H0920485 A 19970121 - OTIS ELEVATOR CO
- [X] JP H06219655 A 19940809 - TOSHIBA CORP

Cited by
CN110950199A; CN113838563A

Designated contracting state (EPC)
DE FR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
EP 1760025 A1 20070307; **EP 1760025 B1 20100707**; CN 100586828 C 20100203; CN 1923658 A 20070307; DE 602006015265 D1 20100819; JP 2007062927 A 20070315; JP 4567553 B2 20101020; TW 200718633 A 20070516; TW I316506 B 20091101

DOCDB simple family (application)
EP 06017909 A 20060828; CN 200610126166 A 20060829; DE 602006015265 T 20060828; JP 2005251023 A 20050831; TW 95127963 A 20060731