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(54) **ROUTING OPTIMIZATION IN A MULTI-DECK ELEVATOR**

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See application file for complete search history.

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(57) **ABSTRACT**

A method for a passenger-allocation in a multi-deck elevator group where the decks of the elevator cars are stacked above each other and being mounted in a car frame to be moved synchronously in an elevator shaft utilizes an improved allocation strategy. The method is performed by a control unit to dispatch the elevator cars for serving any passenger call which can be entered as a landing call or a car call, wherein a call creates plural allocation proposals calculated by an optimization algorithm carried out by the control unit for dispatching an elevator to a passenger call. The allocation proposals are then processed in a routing algorithm defining one serving deck to be taken for the allocation of a specific call, which routing algorithm is restarted for any further incoming call independent of whether a further incoming call is creating new elevator allocation proposal(s) or when a reallocation timeout has passed. A computer program carrying out the method is further disclosed.

17 Claims, 1 Drawing Sheet