Claims

1. A display apparatus for an elevator system having at least one elevator shaft (1.1, 1.2) in which a plurality of elevator cabins (2.1-2.4) move, having
a designation manager which allocates a temporary designation ("A1", "A2", "A3") to an elevator cabin which is carrying out a transport job; and
at least one display (5.60, 5.70, 5.100) which is associated with an entry location (4.6, 4.7, 4.10) in order to output the assigned temporary designation,
wherein
the display (5.60, 5.70, 5.100) outputs the designations of a plurality of elevator cabins (2.1-2.4) at the same time, which elevator cabins move in the same elevator shaft (1.1).

2. The display apparatus as claimed in claim 1, wherein, the designation ("A1", "A2", "A3") which is output by the display is assigned to those elevator cabins (2.1-2.4) which will be the next to stop at the entry location (4.6, 4.7, 4.10) with which the display (5.60, 5.70, 5.100) is associated.

3. The display apparatus as claimed in claim 2, wherein the arrival sequence of the elevator cabins (2.1-2.4) to which a designation is assigned can be seen on the display (5.60, 5.70, 5.100) from the way in which this designation is output on the display.

4. The display apparatus as claimed in one of the preceding claims, wherein the position of the elevator cabins (2.1-2.4) to which a designation has been allocated can be seen on the display (5.60, 5.70, 5.100) from the way in which this designation is output.

5. The display apparatus as claimed in one of the preceding claims, wherein the apparatus comprises a plurality of displays (5.60, 5.70, 5.100) associated with different entry locations (4.6, 4.7, 4.10), each entry location having an associated designation manager which assigns an entry-location-specific designation to each elevator cabin (2.1-2.4), which designation is chosen by an elevator control system in order to carry out a transport job originating from the associated entry location.

6. The display apparatus as claimed in one of the preceding claims, wherein the designations each comprise a shaft-specific component ("A", "B", "C").

7. The display apparatus as claimed in one of the preceding claims, wherein the designations each comprise a cabin-specific component ("1", "2", "3").

8. The display apparatus as claimed in claim 7, characterized in that the designation managers comprise memories in which the cabin-specific components ("1", "2", "3") of the designations are stored, with the number of designations stored in each memory being less than the number of elevator cabins (2.1-2.4) used in the elevator system, and with the memories being designed such that only designations which have not been assigned at any given time can be taken by the designation manager for assignment.

9. A method for communication with an elevator system which comprises at least one elevator shaft (1.1, 1.2) in which a plurality of elevator cabins (2.1-2.4) move, with a display apparatus comprising a designation manager by means of which a temporary designation ("A1", "A2", "A3") is assigned to an elevator cabin which is carrying out a transport job, and this temporary designation is output by means of a display (5.60, 5.70, 5.100) which is associated with an entry location (4.6, 4.7, 4.10),
wherein
the designations of a plurality of elevator cabins (2.1-2.4), which move in the same elevator shaft (1.1), are output by the display (5.60, 5.70, 5.100) at the same time.

10. The method as claimed in claim 9, wherein the output designations ("A1", "A2", "A3") are assigned to those elevator cabins (2.1-2.4) which will in each case be the next to stop at the entry location (4.6, 4.7, 4.10) with which the display (5.60, 5.70, 5.100) is associated.

11. The method as claimed in claim 9 or 10, wherein the designations are output on the display (5.60, 5.70, 5.100) in such a way that the arrival sequence of the elevator cabins (2.1-2.4) to which a designation has been allocated can be seen by the users.

12. The method as claimed in one of claims 9 to 11, wherein the designations are output on the display (5.60, 5.70, 5.100) in such a way that the position of the elevator cabins (2.1-2.4) to which a designation has been allocated can be seen by the users.

13. The method as claimed in one of claims 9 to 12,

wherein transport jobs are entered by elevator users on destination selection stations associated with the floors, on a plurality of floors of the elevator system, which each have at least one associated entry location (4.6, 4.7, 4.10),
an elevator control system selects elevator cabins (2.1-2.4) to carry out the transport jobs originating from said entry locations,
each of the selected elevator cabins is assigned an entry-location-specific designation by the designation manager associated with said entry location, and
the designations of a plurality of elevator cabins which will be the next to stop at the said entry location are output on the display (5.60, 5.70, 5.100) associated with this entry location.

14. The method as claimed in one of claims 9 to 13, wherein the displays (5.60, 5.70, 5.100) output designations which comprise a shaft-specific component ("A", "B", "C") and a cabin-specific component ("1", "2", "3"), with the number of possible variants for the cabin-specific component ("1", "2", "3") being less than the number of elevator cabins which can be selected for carrying out a transport job from an entry location associated with this memory.

15. The method as claimed in one of the preceding claims 9 to 12, wherein the cabin-specific components ("1", "2", "3") are taken by the designation managers from a memory from which only currently unassigned designations can in each case.

CLAIMS:

1. A display apparatus for an elevator system having at least one elevator shaft in which a plurality of elevator cabins move, comprising:

a designation manager to assign a temporary designation to an elevator cabin carrying out a transport job; and

at least one display associated with an entry location to output the assigned temporary designation,

wherein the display is further to output designations of a plurality of elevator cabins moving in the at least one elevator shaft at the same time and to indicate an arrival sequence of the elevator cabins at the display, the arrival sequence associated with the assigned designation.

2. The display apparatus of claim 1, wherein, the plurality of elevator cabin designations output by the display are assigned to elevator cabins that will be next to stop at the entry location associated with the display.

3. The display apparatus of claim 1, wherein the display is further to show a position of each of the plurality of elevator cabins to which a designation has been assigned.

4. The display apparatus of claim 1, further comprising:

a plurality of displays, each display being associated with a respective entry location having an associated designation manager to assign an entry-location-specific designation to each elevator cabin,

wherein the entry-location-specific designation is chosen by an elevator control system to carry out a transport job originating from the associated entry location.

5. The display apparatus of claim 1, wherein the plurality of designations each comprise a shaft-specific component.

6. The display apparatus of claim 1, wherein the designations each comprise an elevator cabin-specific component.

7. The display apparatus of claim 6, wherein the designation managers comprise a memory in which the cabin-specific components of the designations are stored, the number of designations stored in each memory being less than a number of elevator cabins used in the elevator system, and being such that only designations which have not been assigned at any given time can be taken by the designation manager for assignment.

8. The display apparatus of claim 7, wherein the memory is a FIFO memory from which the designations to be assigned are read successively and to which assigned designations are

fed back again successively at the latest when the elevator cabins to which they have been assigned leave the entry location.

9. A method for communication with an elevator system which comprises at least one elevator shaft in which a plurality of elevator cabins move, with a display apparatus, the method comprising:

assigning by a designation manager a temporary designation to an elevator cabin carrying out a transport job;

outputting the temporary designation at a display associated with an entry location; and

outputting designations of a plurality of elevator cabins moving in the elevator shaft, wherein the designations are output by the display so as to indicate a sequence of arrival of the plurality of elevator cabins.

10. The method of claim 9, wherein the output designations are assigned to those elevator cabins which will in each case be the next to stop at the entry location with which the display is associated.

11. The method of claim 9, wherein the designations are output by the display so as to indicate a respective position of each of the plurality of elevator cabins.

12. The method of claim 9, further comprising:
receiving a transport job at a destination selection station associated with a floors serviced by the elevator system, the floor having at least one associated entry location;
selecting a particular elevator cabin for the received transport job;
assigning by the designation manager associated with the at least one entry location an entry-location-specific designation to the particular elevator cabin; and
displaying, at the display associated with the at least one entry location, designations of a plurality of elevator cabins next to stop at the particular entry location.

13. The method of claim 9, wherein the designation of the plurality of elevator cabins comprise a shaft-specific component and a cabin-specific component, the cabin-specific component having a range of values smaller than a number of elevator cabins that can be selected for carrying out a transport job from the entry location.

14. The method of claim 13, wherein the cabin-specific components are chosen by the designation manager from a memory storing currently unassigned designations.