Claims

1. An elevator operation method comprising:

receiving elevator call information for one or more elevator trips; and

allocating the one or more elevator trips for service among a first elevator car (130) and a second elevator car (132), the allocating being based on expected energy consumption for the first elevator car (130) and expected energy consumption for the second elevator car (132), the expected energy consumption for the first elevator car (130) being based on a weight of the first elevator car (130) or a passenger capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on a weight of the second elevator car (132) or a passenger capacity of the second elevator car (132).

2. The elevator operation method of claim 1, the expected energy consumption for the first elevator car (130) being based on the weight of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on the weight of the second elevator car (132), the first elevator car (130) being heavier than the second elevator car (132).

3. The elevator operation method of claim 1, the expected energy consumption for the first elevator car (130) being based on the passenger capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on the passenger capacity of the second elevator car (132), the first elevator car (130) having a larger passenger capacity than the second elevator car (132).

4. The elevator operation method of any preceding claim, further comprising:

determining the expected energy consumption for at least one of the one or more elevator trips with the first elevator car (130); and

determining the expected energy consumption for the at least one of the one or more elevator trips with the second elevator car (132).

5. The elevator operation method of claim 4, the determining the expected energy consumption for the at least one of the one or more elevator trips with the first elevator car (130) and the determining the expected energy consumption for the at least

one of the one or more elevator trips with the second elevator car (132) comprising using a model of operation of the first elevator car (130) and a model of operation of the second elevator car (132).

6. The elevator operation method of any preceding claim, the allocating being further based on an expected elevator traffic demand.

7. The elevator operation method of any preceding claim, the allocating being further based on a measured traffic demand.

8. The elevator operation method of any preceding claim, the allocating being further based on an elevator traffic schedule.

9. The elevator operation method of any preceding claim, the elevator call information comprising destination call information.

10. An elevator installation (110) comprising:
a first elevator car (130) disposed in a first elevator shaft (140);
a second elevator car (132) disposed in a second elevator shaft (142); and
an elevator control unit (210), the elevator control unit (210) being configured to,
receive elevator call information for one or more elevator trips, and
allocate the one or more elevator trips for service among the first elevator car (130) and the second elevator car (132), the allocating being based on expected energy consumption for the first elevator car (130) and expected energy consumption for the second elevator car (132) , the expected energy consumption for the first elevator car (130) being based a weight of the first elevator car (130) or a capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on a weight of the second elevator car (132) or a capacity of the second elevator car (132).

11. The elevator installation (110) of claim 10, the first elevator car (130) being heavier than the second elevator car (132).

12. The elevator installation (110) of claim 11, the first elevator car (130) comprising a first interior finishing (180) and the second elevator car (132) comprising a second interior finishing (182).

13. The elevator installation (110) of claim 10, the first elevator car (130) having a larger capacity than the second elevator car (132).

14. The elevator installation (110) of claim 10, the first elevator car (130) comprising a double-deck car and the second elevator car (132) comprising a single car.

15. One or more computer-readable storage media (520) having encoded thereon instructions (530) which, when executed by a processor (510), cause the processor (510) to perform a method, the method comprising:

receiving elevator call information for one or more elevator trips; and

allocating the one or more elevator trips for service among a first elevator car (130) and a second elevator car (132), the allocating being based on expected energy consumption for the first elevator car (130) and expected energy consumption for the second elevator car (132), the expected energy consumption for the first elevator car (130) being based on a weight of the first elevator car (130) or a passenger capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on a weight of the second elevator car (132) or a passenger capacity of the second elevator car (132).

Claims

1. An elevator operation method comprising:

receiving elevator call information for one or more elevator trips; and

allocating the one or more elevator trips for service among a first elevator car (130) and a second elevator car (132), the allocating being based on expected energy consumption for the first elevator car (130) and expected energy consumption for the second elevator car (132), the expected energy consumption for the first elevator car (130) being based on a passenger capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on a passenger capacity of the second elevator car (132), the first elevator car (130) having a larger passenger capacity than the second elevator car (132),

wherein the expected energy consumption for the at least one of the one or more elevator trips with the first elevator car (130) is being determined by using a model of operation of the first elevator car (130), and

wherein the expected energy consumption for the at least one of the one or more elevator trips with the second elevator car (132) is being determined using a model of operation of the second elevator car (132).

2. The elevator operation method of any preceding claim, the allocating being further based on an expected elevator traffic demand.

3. The elevator operation method of any preceding claim, the allocating being further based on a measured traffic demand.

4. The elevator operation method of any preceding claim, the allocating being further based on an elevator traffic schedule.

5. The elevator operation method of any preceding claim, the elevator call information comprising destination call information.

6. An elevator installation (110) comprising:

a first elevator car (130) disposed in a first elevator shaft (140);

a second elevator car (132) disposed in a second elevator shaft (142); and

an elevator control unit (210), the elevator control unit (210) being configured to,

receive elevator call information for one or more elevator trips, and

allocate the one or more elevator trips for service among the first elevator car (130) and the second elevator car (132), the allocating being based on expected energy consumption for the first elevator car (130) and expected energy consumption for the second elevator car (132) , the expected energy consumption for the first elevator car (130) being based on a capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on a capacity of the second elevator car (132), the first elevator car (130) having a larger passenger capacity than the second elevator car (132),

wherein the expected energy consumption for the at least one of the one or more elevator trips with the first elevator car (130) is being determined by using a model of operation of the first elevator car (130), and

wherein the expected energy consumption for the at least one of the one or more elevator trips with the second elevator car (132) is being determined by using a model of operation of the second elevator car (132).

7. The elevator installation (110) of claim 6, the first elevator car (130) being heavier than the second elevator car (132).

8. The elevator installation (110) of claim 7, the first elevator car (130) comprising a first interior finishing (180) and the second elevator car (132) comprising a second interior finishing (182).

9. The elevator installation (110) of claim 6, the first elevator car (130) comprising a double-deck car and the second elevator car (132) comprising a single car.

10. One or more computer-readable storage media (520) having encoded thereon instructions (530) which, when executed by a processor (510), cause the processor (510) to perform a method, the method comprising:

receiving elevator call information for one or more elevator trips; and

allocating the one or more elevator trips for service among a first elevator car (130) and a second elevator car (132), the allocating being based on expected energy consumption for the first elevator car (130) and expected energy consumption for the second elevator car (132), the expected energy consumption for the first elevator car (130) being based on a passenger capacity of the first elevator car (130), and the expected energy consumption for the second elevator car (132) being based on a passenger capacity of the second elevator car (132), the first elevator car (130) having a larger passenger capacity than the second elevator car (132),

wherein the expected energy consumption for the at least one of the one or more elevator trips with the first elevator car (130) is being determined by using a model of operation of the first elevator car (130), and

wherein the expected energy consumption for the at least one of the one or more elevator trips with the second elevator car (132) is being determined using a model of operation of the second elevator car (132).