Claims

Claim 1

A fare refund system comprising:

a standard movement pattern generation unit for collecting a movement log of a passenger utilizing a transport facility and generating a standard movement pattern of the passenger on the basis of a normal-time movement log of the transport facility in the collected movement log;

a transport failure information acquisition unit for acquiring information about a failure influenced area and a failure influenced time band associated with the development of a transport failure by the transport facility;

an influence presence/absence determination unit for determining the presence or absence of an influenced movement log in the collected movement log which is the movement log of the passenger in the transport failure area and the failure influenced time band;

a loss degree calculation unit for calculating the degree of loss for the passenger associated with the transport failure on the basis of a difference between the standard movement pattern and the influenced movement log when it is determined by the influence presence/absence

determination unit that there is the influenced movement log; and

a refund unit for paying back a refund fare corresponding to the calculated loss degree and associated with the development of the transport failure by the transport facility.

Claim 2

The fare refund system according to claim 1, wherein the standard movement pattern of the passenger is a path shown by a movement log that is the most frequently used in the movement logs that show paths through which the passenger moves from a predefined departure place to a predefined arrival place using the transport facility.

Claim 3

The fare refund system according to claim 2, wherein the standard movement pattern generation unit generates the movement log of the passenger on the basis of data specifying the passenger and the position information of the passenger.

Claim 4

The fare refund system according to claim 3, wherein the data specifying the passenger and the position information of the passenger is either data that is read out from the IC card of the passenger and specifies the passenger, and the position information of a readout

device that reads out the data specifying the passenger respectively; or data that specifies the passenger on the basis of video data of the passenger and the information of a position where the video data of the passenger is obtained respectively.

Claim 5

The fare refund system according to claim 2, wherein the refund unit delivers online refund fare guidance screen information about the refund fare of the passenger and screen information for explaining the calculation reason of the refund fare of the passenger to the passenger.

Claim 6

The fare refund system according to claim 2, wherein the refund unit delivers screen information for the distribution of the degree of loss for each case of a plurality of transport failures including the transport failure, and screen information, which is used for displaying the degrees of losses for passengers including the passenger associated with the transport failure for each transport section operated by the transport facility, to a proprietor of the transport facility.

Claim 7

A fare refund method used for a fare refund system for paying back a refund fare associated with the

development of a transport failure by a transport facility, the fare refund method comprising the steps of:

collecting a movement log of a passenger utilizing the transport facility and generating a standard movement pattern of the passenger on the basis of a normal-time movement log of the transport facility in the collected movement log;

acquiring information about a failure influenced area and a failure influenced time band associated with the development of the transport failure by the transport facility;

determining the presence or absence of an influenced movement log in the collected movement log which is the movement log of the passenger in the transport failure area and the failure influenced time band;

calculating the degree of loss for the passenger associated with the transport failure on the basis of a difference between the standard movement pattern and the influenced movement log when it is determined by the influence presence/absence determination unit that there is the influenced movement log; and

paying back a refund fare corresponding to the calculated loss degree and associated with the development of the transport failure by the transport facility.

Claim 8

The fare refund method according to claim 7, wherein the standard movement pattern of the passenger is a path shown by a movement log that is most frequently used in the movement logs that show paths through which the passenger moves from a predefined departure place to a predefined arrival place using the transport facility.

Claim 9

The fare refund method according to claim 8, the fare refund method further comprising a step of:

generating the movement log of the passenger on the basis of data specifying the passenger and the position information of the passenger.

Claim 10

The fare refund method according to claim 9, wherein the data specifying the passenger and the position information of the passenger is either data that is read out from the IC card of the passenger and specifies the passenger, and the position information of a readout device that reads out data specifying the passenger respectively; or data that specifies the passenger on the basis of video data of the passenger and the information of a position where the video data of the passenger is obtained respectively.

Claim 11

The fare refund method according to claim 8, the fare refund method further comprising a step of:

delivering online refund fare guidance screen information about the refund fare of the passenger and screen information for explaining the calculation reason of the refund fare of the passenger to the passenger.

Claim 12

The fare refund method according to claim 8, the fare refund method further comprising a step of:

delivering screen information for the distribution of the degree of loss for each case of a plurality of transport failures including the transport failure, and screen information, which is used for displaying the degrees of losses for passengers including the passenger associated with the transport failure for each transport section operated by the transport facility, to a proprietor of the transport facility.

Claims

Claim 1

A fare refund system comprising:

a standard movement pattern generation unit for collecting a movement log of a passenger utilizing a transport facility and generating a standard movement pattern of the passenger on the basis of a normal-time movement log of the passenger transported by the transport facility in the collected movement log;

a transport failure information acquisition unit for acquiring information about a failure influenced area and a failure influenced time band associated with the development of a transport failure by the transport facility;

an influence presence/absence determination unit for determining the presence or absence of an influenced movement log in the collected movement log which is the movement log of the passenger in the transport failure area and the failure influenced time band;

a loss degree calculation unit for calculating the degree of loss for the passenger associated with the transport failure on the basis of a difference between the standard movement pattern and the influenced movement log when it is determined by the influence presence/absence

determination unit that there is the influenced movement log; and

a refund unit for paying back a refund fare corresponding to the calculated loss degree and associated with the development of the transport failure by the transport facility,

wherein said standard movement pattern generation unit generates the standard movement pattern of each of the passenger based on the movement log that indicates paths through which the passenger moves from a predefined departure place to a predefined arrival place using the transport facility.

Claim 2

The fare refund system according to claim 1, wherein the standard movement pattern of the passenger is a path shown by a movement log that is the most frequently used in the movement logs that show paths through which the passenger moves from a predefined departure place to a predefined arrival place using the transport facility.

Claim 3

The fare refund system according to claim 2, wherein the standard movement pattern generation unit generates the movement log of the passenger on the basis of data specifying the passenger and the position information of the passenger.

Claim 4

The fare refund system according to claim 3, wherein the data specifying the passenger and the position information of the passenger is either data that is read out from the IC card of the passenger and specifies the passenger, and the position information of a readout device that reads out the data specifying the passenger respectively; or data that specifies the passenger on the basis of video data of the passenger and the information of a position where the video data of the passenger is obtained respectively.

Claim 5

The fare refund system according to claim 2, wherein the refund unit delivers online refund fare guidance screen information about the refund fare of the passenger and screen information for explaining the calculation reason of the refund fare of the passenger to the passenger.

Claim 6

The fare refund system according to claim 2, wherein the refund unit delivers screen information for the distribution of the degree of loss for each case of a plurality of transport failures including the transport failure, and screen information, which is used for displaying the degrees of losses for passengers including

the passenger associated with the transport failure for each transport section operated by the transport facility, to a proprietor of the transport facility.

Claim 7

A fare refund method used for a fare refund system for paying back a refund fare associated with the development of a transport failure by a transport facility, the fare refund method comprising the steps of:

collecting a movement log of a passenger utilizing the transport facility and generating a standard movement pattern of the passenger on the basis of a normal-time movement log of the passenger transported by the transport facility in the collected movement log;

acquiring information about a failure influenced area and a failure influenced time band associated with the development of the transport failure by the transport facility;

determining the presence or absence of an influenced movement log in the collected movement log which is the movement log of the passenger in the transport failure area and the failure influenced time band;

calculating the degree of loss for the passenger associated with the transport failure on the basis of a difference between the standard movement pattern and the

influenced movement log when it is determined by the influence presence/absence determination unit that there is the influenced movement log; and

paying back a refund fare corresponding to the calculated loss degree and associated with the development of the transport failure by the transport facility,

wherein said standard movement pattern generation unit generates the standard movement pattern of each of the passenger based on the movement log that indicates paths through which the passenger moves from a predefined departure place to a predefined arrival place using the transport facility.

Claim 8

The fare refund method according to claim 7, wherein the standard movement pattern of the passenger is a path shown by a movement log that is most frequently used in the movement logs that show paths through which the passenger moves from a predefined departure place to a predefined arrival place using the transport facility.

Claim 9

The fare refund method according to claim 8, the fare refund method further comprising a step of:

generating the movement log of the passenger on the basis of data specifying the passenger and the position information of the passenger.

Claim 10

The fare refund method according to claim 9, wherein the data specifying the passenger and the position information of the passenger is either data that is read out from the IC card of the passenger and specifies the passenger, and the position information of a readout device that reads out data specifying the passenger respectively; or data that specifies the passenger on the basis of video data of the passenger and the information of a position where the video data of the passenger is obtained respectively.

Claim 11

The fare refund method according to claim 8, the fare refund method further comprising a step of:

delivering online refund fare guidance screen information about the refund fare of the passenger and screen information for explaining the calculation reason of the refund fare of the passenger to the passenger.

Claim 12

The fare refund method according to claim 8, the fare refund method further comprising a step of:

delivering screen information for the distribution of the degree of loss for each case of a plurality of transport failures including the transport failure, and screen information, which is used for displaying the

degrees of losses for passengers including the passenger associated with the transport failure for each transport section operated by the transport facility, to a proprietor of the transport facility.