Claims

Claim 1

A baggage check-in machine, comprising:

a display section that displays an image which includes an operation target region and which is related to baggage check-in;

an image formation section that causes the image displayed on the display section to be formed as an aerial image in air around said baggage check-in machine;

an operation identification section that identifies an operation conducted by a user with respect to a part in the aerial image which corresponds to the operation target region;

a process performance section that carries out, in accordance with the operation which has been identified, a process related to the baggage check-in; and

a face detection section that detects a position of a face of the user,

the image formation section forming the aerial image toward the position which has been detected,

in a case where the position which has been detected falls within a predetermined region that includes a position at which the user faces and is in front of said baggage check-in machine, the operation identification section identifying the operation, and

in a case where the position which has been detected

falls outside the predetermined region, the operation identification section stopping identification of the operation.

Claim 2

A baggage check-in machine, comprising:

a display section that displays an image which includes an operation target region and which is related to baggage check-in;

an image formation section that causes the image displayed on the display section to be formed as an aerial image in air around said baggage check-in machine;

an operation identification section that identifies an operation conducted by a user with respect to a part in the aerial image which corresponds to the operation target region; and

a process performance section that carries out, in accordance with the operation which has been identified, a process related to the baggage check-in; and

a face detection section that detects a position of a face of the user,

the image formation section forming the aerial image toward the position which has been detected,

in a case where the position which has been detected falls within a predetermined region that includes a position at which the user faces and is in front of said baggage check-in

machine, an object detection section carrying out detection for detecting an object in a vicinity of a position at which the aerial image is formed; and

in a case where the position which has been detected falls outside the predetermined region, the object detection section stopping detection of the object.

Claim 3

The baggage check-in machine as set forth in claim 1 or 2, wherein:

the user is a person who deposits the baggage at a baggage placement area; and

the display section and the image formation section are disposed such that the aerial image is formed at a position which allows the user to view the aerial image and to conduct the operation.

Claim 4

The baggage check-in machine as set forth in any one of claims 1 through 3, further comprising:

a display control section that controls the display section and a display device communicatively connected to the baggage check-in machine to display the image; and

a mode switching section that switches between a mode in which the display control section controls the display

section to display the image and a mode in which the display control section controls the display device to display the image,

the operation identification section further identifying an operation conducted with respect to the operation target region in the image which is displayed on the display device.

Claim 5

The baggage check-in machine as set forth in any one of claims 1 through 3, further comprising a display control section that controls a display device communicatively connected to the baggage check-in machine to display a display-only image which does not include the operation target region.

Claim 6

The baggage check-in machine as set forth in any one of claims 1 through 5, wherein the aerial image is a stereoscopic image.

Claim 7

The baggage check-in machine as set forth in any one of claims 1 through 6, further comprising an image projection section that projects a projection image on a floor surface in front of said baggage check-in machine, the projection image

indicating a standing position for the user.

Claim 8

The baggage check-in machine as set forth in claim 7, further comprising:

a projection control section that determines, in accordance with the position which has been detected, a projection position of the projection image.

Claim 9

A baggage check-in machine, comprising:

a display section that displays an image which includes an operation target region and which is related to baggage check-in;

an image formation section that causes the image displayed on the display section to be formed as an aerial image in air around said baggage check-in machine;

an operation identification section that identifies an operation conducted by a user with respect to a part in the aerial image which corresponds to the operation target region;

a process performance section that carries out, in accordance with the operation which has been identified, a process related to the baggage check-in;

an image projection section that projects a projection image on a floor surface in front of said baggage check-in

machine, the projection image indicating a standing position for the user;

a face detection section that detects a position of a face of the user; and

a projection control section that determines, in accordance with the position which has been detected, a projection position of the projection image,

the projection control section causing the projection position to be farther away from said baggage check-in machine as a height of the position which has been detected from the floor surface increases.