CLAIMS:

1. An elevator door system comprising:

a camera (8) for taking a video of a predetermined range set in the vicinity of a landing entrance of a car (3) and;

a control unit (10) that generates a predetermined control signal based on video information from the camera (8) and transmits the predetermined control signal to a door drive unit (20) so as to control an opening/closing of the door,

wherein the control unit (10) detects a presence/absence of a moving object by analyzing the video information from the camera (8),

when the moving object (8) is detected, the control unit specifies a position and a velocity of the moving object and determines whether the moving object is able to get on the car based on an opening/closing state of the door (5) and the position and the velocity of the moving object, and

when it is determined that the moving object is able to get on the car (3), the control unit lowers the closing velocity of the door (5) relative to a current velocity, and

when it is determined that the moving object is unable to get on the car, the control unit executes a predetermined operation.

2. The elevator door system according to claim 1,

wherein, when the moving object is not detected, the control unit (10) starts the car (3) after making the car (3) wait for a predetermined time set shorter than a normal waiting time.

3. The elevator door system according to claim 1 or 2, wherein the predetermined operation is an operation of opening the door (5).

4. The elevator door system according to claim 1 or 2, wherein the predetermined operation is an operation of closing the door (5) and starting the car (3).

5. The elevator door system according to claim 1 or 2,

wherein, when the control unit determines that the moving object is able to get on the car, the control unit (10) causes the car (3) to close the door (5) step by step.

6. An elevator including the elevator door system according to any one of claims 1 to 5.

CLAIMS:

1. An elevator door system comprising:

a camera (8) for taking a video of a predetermined range set in the vicinity of a landing entrance of a car (3);

the camera (8) is provided on an upper side of the door (5) of the car (3) such that the camera (8) can look down to a floor of the landing entrance (9) and;

a control unit (10) that generates a predetermined control signal based on video information from the camera (8) and transmits the predetermined control signal to a door drive unit (20) so as to control an opening/closing of the door,

wherein the control unit (10) detects a presence/absence of a moving object by analyzing the video information from the camera (8),

when the moving object (8) is detected, the control unit specifies a position and a velocity of the moving object and determines whether the moving object is able to get on the car based on an opening/closing state of the door (5) and the position and the velocity of the moving object, and

when it is determined that the moving object is able to get on the car (3), the control unit lowers the closing velocity of the door (5) relative to a current velocity, and

when it is determined that the moving object is unable to get on the car, the control unit executes a predetermined operation.

2. The elevator door system according to claim 1,

wherein, when the moving object is not detected, the control unit (10) starts the car (3) after making the car (3) wait for a predetermined time set shorter than a normal waiting time.

3. The elevator door system according to claim 1 or 2, wherein the predetermined operation is an operation of opening the door (5).

4. The elevator door system according to claim 1 or 2, wherein the predetermined operation is an operation of closing the door (5) and starting the car (3).

5. The elevator door system according to claim 1 or 2,

wherein, when the control unit determines that the moving object is able to get on the car, the control unit (10) causes the car (3) to close the door (5) step by step.

6. An elevator including the elevator door system according to any one of claims 1 to 5.