

ABSTRACT

Provided is a passenger boarding bridge that makes it possible to move a cab to a target position with high precision. One example of the passenger boarding bridge according to the present invention is a passenger boarding bridge including components, such as: first and second cameras each configured to capture an image of an entrance of an aircraft; and a controller. The controller is configured to express a position of each part of the aircraft (3) and of the passenger boarding bridge (1) as position coordinates by using a three-dimensional orthogonal coordinate system in which a predetermined position is set as an origin. The controller causes the first and second cameras to capture images of the entrance, respectively, when the cab (6) is at a standby position, calculates position coordinates of a reference point on the entrance of the aircraft (3) based on the images of the entrance captured by the first and second cameras, respectively, and calculates target position coordinates of a reference point on a distal end part of the cab at a temporary stop position based on the calculated position coordinates of the reference point on the entrance. The controller further performs an inverse kinematics calculation to calculate target position coordinates of a center point of a travel device (10), a target length of a lifting/lowering device (8), and a target rotational angle of the cab (6) with respect to a tunnel unit (5) for the cab (6) to be at the temporary stop position. Based on these calculation results, the controller causes the cab (6) to move from the standby position to the temporary stop position.

Fig.1