CLAIMS

[Claim 1] A door device, comprising: a car door of a sliding type to open and close an entrance of a car; a hall door of a sliding type to open and close an entrance of an elevator hall; driving means to drive the car door; a door lock to lock the hall door at a closing state; and gripping means to, when the car reaches the elevator hall, let the car door engage with the hall door through an operation by the car door to transmit a driving force of the car door to the hall door and to activate the door lock in response to cancellation of the engagement, wherein when the car door and the hall door move in a ganged fashion in a door-closing direction, a leading edge on a doorstop side of the hall door precedes a leading edge on a doorstop side of the car door,

wherein the gripping means includes: a fixation vane located on the doorstop side of the car door, a moving vane fixed to a door pocket side of the car door via a linkwork while being kept in parallel with the fixation vane and a moving vane open/close mechanism to change a distance between the fixation vane and the moving vane, and the moving vane open/close mechanism controls an operation of the moving vane on a basis of electrical door positional information.

[Claim 2] The door device according to claim 1, wherein the door positional information includes an output signal from a close limit switch to detect a close limit position of the hall door.

[Claim 3] The door device according to claim 1, wherein the moving vane open/close mechanism includes an elastic body to always urge the moving vane in a direction away from the fixation vane and a power body to displace the moving vane to a side of the fixation vane while overcoming an urging force of the elastic body.

[Claim 4] An elevator device, comprising: a car and a balance weight moving up and down along a shaft provided in a building; a rope hanging the car and the balance weight and a sheave around which the rope is hung; a traction machine that drives the rope so that the car and the balance weight move up and down; a car door of a sliding type to open and close an entrance of the car; a hall door of a sliding type to open and close an entrance of an elevator hall; driving means to drive the car door; a door lock to lock the hall door at a closing state; and gripping means to, when the car reaches the elevator hall, let the car door engage with the hall door through an operation by the car door to transmit a driving force of the car door to the hall door and to activate the door lock in response to cancellation of the engagement, wherein when the car door and the hall door move in a ganged fashion in a door-closing direction, a leading edge on a doorstop side of the hall door precedes a leading edge on a doorstop side of the car door,

wherein the gripping means includes: a fixation vane located on the doorstop side of the car door, a moving vane fixed to a door pocket side of the car door via a linkwork while being kept in parallel with the fixation vane and a moving vane open/close mechanism to change a distance between the fixation vane and the moving vane, and the moving vane open/close mechanism controls an operation of the moving vane on a basis of electrical door positional information.

[Claim 5] The elevator device according to claim 4, wherein the door positional information includes an output signal from a close limit switch to detect a close limit position of the hall door.

[Claim 6] The elevator device according to claim 4, wherein the moving vane open/close mechanism includes an elastic body to always urge the moving vane in a direction away from the fixation vane and a power body to displace the moving vane to a side of the fixation vane while overcoming an urging force of the elastic body.

[AMENDED CLAIMS under Article 34]

[Claim 1] (Currently Amended) A door device, comprising: a car door of a sliding type to open and close an entrance of a car; a hall door of a sliding type to open and close an entrance of an elevator hall; driving means to drive the car door; a door lock to lock the hall door at a closing state; and gripping means to, when the car reaches the elevator hall, let the car door engage with the hall door through an operation by the car door to transmit a driving force of the car door to the hall door and to activate the door lock in response to cancellation of the engagement, wherein when the car door and the hall door move in a ganged fashion in a door-closing direction, a leading edge on a doorstop side of the hall door precedes a leading edge on a doorstop side of the car door,

wherein the gripping means includes: a fixation vane located on the doorstop side of the car door, a moving vane fixed to a door pocket side of the car door via a linkwork while being kept in parallel with the fixation vane and a moving vane open/close mechanism including an elastic body that urges the moving vane in a direction away from the fixation vane, a power body configured to displace the moving vane to the fixation vane side while overcoming the urging force of the elastic body, and a driving belt that transmits a driving force of the power body via said linkwork to the moving vane, so as to change a distance between the fixation vane and the moving vane, and the moving vane open/close mechanism controls an operation of the moving vane on a basis of electrical door positional information.

[Claim 2] (Original) The door device according to claim 1, wherein the door positional information includes an output signal from a close limit switch to detect a close limit position of the hall door.

[Claim 3] (Original) The door device according to claim 1, wherein the moving vane open/close mechanism includes an elastic body to always urge the moving vane in a direction away from the fixation vane and a power body to displace the moving vane to a side of the fixation vane while overcoming an urging force of the elastic body.

[Claim 4] (Currently Amended) An elevator device, comprising: a car and a balance weight moving up and down along a shaft provided in a building; a rope hanging the car and the balance weight and a sheave around which the rope is hung; a traction machine that drives the rope so that the car and the balance weight move up and down; a car door of a sliding type to open and close an entrance of the car; a hall door of a sliding type to open and close an entrance of an elevator hall; driving means to drive the car door; a door lock to lock the hall door at a closing state; and gripping means to, when the car reaches the elevator hall, let the car door engage with the hall door through an operation by the car door to transmit a driving force

of the car door to the hall door and to activate the door lock in response to cancellation of the engagement, wherein when the car door and the hall door move in a ganged fashion in a door-closing direction, a leading edge on a doorstop side of the hall door precedes a leading edge on a doorstop side of the car door,

wherein the gripping means includes: a fixation vane located on the doorstop side of the car door, a moving vane fixed to a door pocket side of the car door via a linkwork while being kept in parallel with the fixation vane and a moving vane open/close mechanism including an elastic body that urges the moving vane in a direction away from the fixation vane, a power body configured to displace the moving vane to the fixation vane side while overcoming the urging force of the elastic body, and a driving belt that transmits a driving force of the power body via said linkwork to the moving vane, so as to change a distance between the fixation vane and the moving vane, and the moving vane open/close mechanism controls an operation of the moving vane on a basis of electrical door positional information.

[Claim 5] (Original) The elevator device according to claim 4, wherein the door positional information includes an output signal from a close limit switch to detect a close limit position of the hall door.

[Claim 6] (Original) The elevator device according to claim 4, wherein the moving vane open/close mechanism includes an elastic body to always urge the moving vane in a direction away from the fixation vane and a power body to displace the moving vane to a side of the fixation vane while overcoming an urging force of the elastic body.

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[Claim 1] A door device, comprising: a car door of a sliding type to open and close an entrance of a car; a hall door of a sliding type to open and close an entrance of an elevator hall; driving means to drive the car door; a door lock to lock the hall door at a closing state; and gripping means to, when the car reaches the elevator hall, let the car door engage with the hall door through an operation by the car door to transmit a driving force of the car door to the hall door and to activate the door lock in response to cancellation of the engagement, wherein when the car door and the hall door move in a ganged fashion in a door-closing direction, a leading edge on a doorstop side of the hall door precedes a leading edge on a doorstop side of the car door,

wherein the gripping means includes: a fixation vane located on the doorstop side of the car door, a moving vane fixed to a door pocket side of the car door via a linkwork while being kept in parallel with the fixation vane and a moving vane open/close mechanism including an elastic body that urges the moving vane in a direction away from the fixation vane, a power body configured to displace the moving vane to the fixation vane side while overcoming the urging force of the elastic body, and a driving belt that transmits a driving force of the power body via said linkwork to the moving vane, so as to change a distance between the fixation vane and the moving vane, and the moving vane open/close mechanism controls an operation of the moving vane on a basis of electrical door positional information.

[Claim 2] The door device according to claim 1, wherein the door positional information includes an output signal from a close limit switch to detect a close limit position of the hall door.

[Claim 3] The door device according to claim 1, wherein the moving vane open/close mechanism includes an elastic body to always urge the moving vane in a direction away from the fixation vane and a power body to displace the moving vane to a side of the fixation vane while overcoming an urging force of the elastic body.

[Claim 4] An elevator device, comprising: a car and a balance weight moving up and down along a shaft provided in a building; a rope hanging the car and the balance weight and a sheave around which the rope is hung; a traction machine that drives the rope so that the car and the balance weight move up and down; a car door of a sliding type to open and close an entrance of the car; a hall door of a sliding type to open and close an entrance of an elevator hall; driving means to drive the car door; a door lock to lock the hall door at a closing state; and gripping means to, when the car reaches the elevator hall, let the car door engage with the hall door through an operation by the car door to transmit a driving force

of the car door to the hall door and to activate the door lock in response to cancellation of the engagement, wherein when the car door and the hall door move in a ganged fashion in a door-closing direction, a leading edge on a doorstop side of the hall door precedes a leading edge on a doorstop side of the car door,

wherein the gripping means includes: a fixation vane located on the doorstop side of the car door, a moving vane fixed to a door pocket side of the car door via a linkwork while being kept in parallel with the fixation vane and a moving vane open/close mechanism including an elastic body that urges the moving vane in a direction away from the fixation vane. a power body configured to displace the moving vane to the fixation vane side while overcoming the urging force of the elastic body, and a driving belt that transmits a driving force of the power body via said linkwork to the moving vane. so as to change a distance between the fixation vane and the moving vane, and the moving vane open/close mechanism controls an operation of the moving vane on a basis of electrical door positional information.

[Claim 5] The elevator device according to claim 4, wherein the door positional information includes an output signal from a close limit switch to detect a close limit position of the hall door.

[Claim 6] The elevator device according to claim 4, wherein the moving vane open/close mechanism includes an elastic body to always urge the moving vane in a direction away from the fixation vane and a power body to displace the moving vane to a side of the fixation vane while overcoming an urging force of the elastic body.