ELEVATOR BUTTON DEVICE AND ELEVATOR OPERATION PANEL

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is based upon and claims the benefit of priority from Japanese Patent Application No. 2013-156761, filed on July 29, 2013; the entire contents of which are incorporated herein by reference.

FIELD

Embodiments described herein relate generally to an elevator button device and an elevator operation panel.

BACKGROUND

In an elevator, an elevator car (a mobile compartment) moves in a hoistway and stops at any floor level. In such an elevator, elevator operation panels including various elevator button devices are provided inside the elevator car and at landings.

Such a conventional technique, however, has room for further improvement in preventing wrong input to a specific button, for example.

SUMMARY

According to a first aspect of the present invention, there is provided an elevator button device, comprising: a button top that is provided to an elevator; a button frame that surrounds circumference of the button top; and a button cover that is supported on an upper end portion in a vertical direction of the button frame in a vertically rotatable manner, about a rotation axis line extending along a horizontal direction, between a closed position in which the button cover covers a front surface of the button top and an open position in which the front surface of the button top is exposed.

According to a second aspect of the present invention, there is provided an elevator operation panel that is

provided in an elevator car or at a landing of an elevator and receives operation from a user, the elevator operation panel comprising: an elevator button device, the elevator button device including: a button top; a button frame that surrounds circumference of the button top; and a button cover that is supported on an upper end portion in a vertical direction of the button frame in a vertically rotatable manner, about a rotation axis line extending along a horizontal direction, between a closed position in which the button cover covers a front surface of the button top and an open position in which the front surface of the button top is exposed.

BRIEF DESCRIPTION OF THE DRAWINGS

A general architecture that implements the various features of the invention will now be described with reference to the drawings. The drawings and the associated descriptions are provided to illustrate embodiments of the invention and not to limit the scope of the invention.

FIG. 1 is a block diagram illustrating an exemplary overall structure of an elevator according to a first embodiment;

FIG. 2 is a front view illustrating an example of an elevator operation panel in the first embodiment;

FIG. 3 is a cross-sectional view along a vertical direction of an elevator button device in the first