

ABSTRACT OF THE DISCLOSURE

APPARATUS FOR CONTROLLING RESCUE OPERATIONS AND FOR IMPROVING POWER EFFICIENCY

An apparatus for controlling rescue operations and for improving power efficiency in which an ALP device is provided with an active power filter for supplying a compensation current to a control unit when the ALP device is in a stand by condition that a power failure does not occur. The apparatus includes a control unit for controlling an operation of an elevator cage by activating an induction motor with a three-phase AC voltage source; an ALP device for controlling an emergency mode by supplying the three-phase AC voltage converted from a DC voltage from a battery by a stand-by inverter when a power failure occurs, opening/closing contacts being opened in a normal power supply condition so as to make the ALP device not connected to the control unit and being closed in a power failure condition so as to make the ALP device connected to the control unit for supplying the power; a DC voltage detector for detecting the DC voltage supplied to the stand-by inverter; a real current detector for detecting the current supplied to the control unit in the normal power supply condition; a power source voltage detector for detecting a voltage of the power source supplied to the control unit; and an automatic rescue operation controller for controlling the ALP device to perform an automatic rescue operation in the power failure condition, and for acting as an active power compensation filter in the normal power supply condition.

Fig. 3