

- 9 -

a first sub-step which receives the digital data and compares whether or not a first digital data value outputted from the upper sensors is greater than a reference value;

a second sub-step which judges that the cage is positioned at a predetermined position upper than a normal position when said first digital data value is greater than said reference value, descends the cage, and repeatedly executes said first bus-step, and when the first digital data value is the same as or smaller than the reference value and compares whether or not a second digital data value outputted from the lower sensor is greater than the reference value;

a third sub-step which judges that the cage is positioned at a predetermined position lower than a normal position when said digital data value is greater than said reference value, ascends the cage, and repeatedly executes the first and second sub-steps, and when the second digital data value is the same as or smaller than the reference value, compares whether or not the first digital data value is greater than the reference value;

a fourth sub-step which repeatedly executes the first and third sub-steps when the first digital data value is not the same as the reference value, and when the first digital data value is the same as the reference value, compares whether or not the second digital data value is greater than the reference value; and

a fifth sub-step which repeatedly executes the first through fourth sub-steps when the second digital data value is not the same as the reference value, and when the second digital data value is the same as the reference value, judges that the cage is positioned at the normal position and stops the cage.

5. The method of claim 1, wherein said digital data outputted by the third step is obtained by the second step in parallel form.