

ABSTRACT OF THE DISCLOSURE

ELEVATOR WITH ELECTRONIC SAFETY SYSTEM

There is disclosed an elevator with an electronic safety system which dispenses with dedicated hardware, which is simple and has high availability, and in which software processing load is reduced. The elevator with an electronic safety system includes a rotary encoder that outputs pulse signals corresponding with movement of a car as encoder signals and an electronic safety controller having a first CPU and a second CPU to which the encoder signals are input respectively. The first and second CPUs compute speed and position data of the car and their computation results are compared with each other and, accordingly, the electronic safety controller decides whether abnormality occurs. Car speed and position data computed in multiple cycles are transferred between the first and second CPUs by serial communication and compared. If such data is beyond an allowable error range set beforehand, the electronic safety controller decides that abnormality occurs.

20 Fig.1