



ABSTRACT OF THE DISCLOSURE

In order to control the induction motor of the elevator with the best efficiency and comfortably without any vibration, a torque control system for negatively feeding back an estimated motor torque obtained from an electric current flowing in the induction motor corresponding to a torque reference provided by a deviation between a speed reference and a real speed is constituted, and a torque current and an exciting current are respectively controlled based on a ratio of a torque current component and an exciting current component providing the maximum efficiency of the induction motor corresponding to an output from said torque control system. Furthermore, a vibration suppressing means is provided. Thereby, in a drive system such as an elevator in which a load torque added to the motor changes constantaneously, a big energy saving effect is expected. Furthermore, as an instantaneous torque of the motor is generated regardless of load condition so that the speed of the electric motor follows a speed reference, a riding comfortableness of the elevator is improved too.