

ABSTRACT**ELEVATOR SPEED CONTROL CIRCUIT****Problems**

To control elevator vibration while controlling the speed of a super-fast elevator that has a resonating frequency.

Means to solve

In an elevator speed control circuit that has a speed amp (3) that calculates the deviation between speed instruction ω^* and motor speed ω_M by PI, there is provided a car speed feedback circuit that amplifies the difference between speed instruction ω^* and car speed ω_{car} with amp (12), extracts car vibration characteristics by passing them through band-pass filter (14), and changes these vibration components to the optical phase using phase [correction] filter (16) and feeds them back. In addition, there is provided load torque observer (21) that estimates load torque from signals from circuits ((2)-(19)) and from motor speed ω_M to improve speed feedback characteristics and the effectiveness of external disturbance suppression in elevator speed control.

Selected Figure

Figure 3