

ABSTRACT

In a track type transportation system, there is provided an automatic steering mechanism with which a vehicle can be moved forward and backward, and which can carry out fine control so as to allow the positions of the centers of axles of the front and rear wheels to substantially follow up one and the same locus. Before starting, a pattern steering angle table on which pattern steering angles for the front and rear wheels at respective change points of the track are listed is prepared in view of a track condition, a running condition and a vehicle condition from a departure point to a destination point, the vehicle 12 is steered in accordance with a pattern steering angle read from the table, a track widthwise position of the vehicle 12 on running is detected so as to calculate correcting steering angles  $\Delta X_a$ ,  $\Delta X_b$  by which the track widthwise position of the vehicle coincides with a desired position, and the correcting steering angles are added to pattern steering angles  $X_{a0}$ ,  $X_{b0}$  so as to obtain desired steering angles by which the front wheels 18, 22 are steered. The pattern steering angle, the corrected steering angle and the desired steering angle are calculated for each of the front and rear wheels, independent from each other.