

Title (en)
SELF-STEERING FLATCAR AND RAILROAD VEHICLE USING HAVING THIS SELF-STEERING FLATCAR APPLIED THERETO

Title (de)
SELBSTLENKUNGSFLACHWAGEN UND SCHIENENFAHRZEUG, AN DEM DIESER SELBSTLENKUNGSFLACHWAGEN ANGEBRACHT IST

Title (fr)
ESSIEU A AUTOGUIDAGE ET WAGON L'UTILISANT

Publication
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Application
EP 04747484 A 20040714

Priority
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Abstract (en)
There is provided a self-steering truck in which travel stability and turning performance are improved, and a railroad vehicle to which the self-steering truck is applied. An active steering damper 10 is extended or shrunk as a whole by driving a DC motor 13 so as to rotate a ball screw 15 and allow a nut 16 into which the ball screw is engaged to spiral back and forth, and thereby wheel axles 2 are steered through a steering link 6. This steering is performed by the active function of the active steering damper 10. The active function can solve the response delay of the self-steering which occurs while moving from a straight line to a steady curve through a transition curve. The active steering damper 10 also has a passive function. The passive function serves as a rigid body with respect to vibration at a frequency of hunting which occurs at the time of moving along a straight line, and exerts a buffering function as a non-rigid body with respect to vibration at another frequency. With this, high-speed travel in a straight line and moving performance along a steady curve can be improved.

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IPC 8 full level
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Cited by
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