

Title (en)

LIGHT TRAMWAY DRIVE UNIT WITH DRIVING OR TRAILING STEERING TRUCKS HAVING A SINGLE WHEEL, AND WITH A LOW FLOOR PASSING TROUGHOUT THE CAR FOR SINGLE-STEP BOARDING

Publication

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Application

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Priority

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Abstract (en)

[origin: EP0288589A1] The single wheel running gear incorporated into the coach body (1) dispenses with the system hitherto used in rail vehicle construction of autonomous track-guide running gear elements and bracket-guide carrier elements with their critical areas of rotation and the costly primary and secondary suspension devices. The abandonment of wheelset axles, independent bogie or running-gear frames permits extremely light constructions of the overall vehicle owing to the transfer of track-holding functions to the coach body in conjunction with the steered single wheel running gears and their associated spring elements. By arranging the wheels (3), supported on the inside in a wheel guide beam (6) and steerable at a tangent to the track curve radius, in lateral wheel boxes (2), it is possible to lower the floor of the coach below the wheel centre plane. Rail vehicles can thereby be built with continuous low floors (4) and single access steps (5) running in the longitudinal direction of the coach. The design principle adopted here leads to a significant reduction in the unladen weight of the coach, thereby reducing the drive energy input. In conjunction with the tangential steering of the wheels, this wheel guiding and track holding fixed by way of the coach body construction with a limited flexible gauge tolerance improves the running characteristics of the coach and greatly reduces the generation of running noise particularly on small track curves. The rolling resistances are hereby minimised and wheel and rail wear significantly reduced. <IMAGE>

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