

Title (en)
CROSSWIND STABILISATION METHOD AND ASSOCIATED RAIL VEHICLE

Title (de)
SEITENWINDSTABILISIERUNGSVERFAHREN UND ZUGEHÖRIGES SCHIENENFAHRZEUG

Title (fr)
PROCÉDÉ DE STABILISATION PAR VENT LATÉRAL ET VÉHICULE FERROVIAIRE ASSOCIÉ

Publication
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Application
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Priority
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Abstract (en)
[origin: EP2871110A1] A rail vehicle comprises a vehicle body resting on two longitudinally spaced running gears (14, 16), each of the running gears (14, 16) comprising a running gear frame (14.1, 16.1), a primary suspension (14.2, 16.2) between the running gear frame (14.1, 16.1) and a set of wheels (14.3, 16.3), and a secondary suspension comprising at least one lateral actuator (14.4, 14.41, 16.4) between the running gear frame (14.1, 16.1) and the vehicle body (12). A method for controlling the suspension of the rail vehicle comprises: processing signals from sensors (14.21, 16.21) directly or indirectly measuring a wheel unloading condition to detect crosswind and a windward side; and controlling the at least one lateral actuator (14.4, 14.41, 16.4) of at least one of the running gears (14, 16) to move the vehicle body (12) according to a stability-oriented control strategy towards the windward side in response to the detected crosswind.

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