

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
EP 2871110 A1 20150513 (EN)

Application
EP 13192003 A 20131107

Priority
EP 13192003 A 20131107

Abstract (en)
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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• [X] US 3695186 A 19721003 - HERRING JAMES M JR
• [A] EP 0736437 A2 19961009 - FIAT FERROVIARIA SPA [IT]

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