

Title (en)
DIAGNOSIS AND STATE MONITORING OF JUNCTIONS, CROSSINGS OR CROSSROADS AND RAIL JOINTS BY MEANS OF A RAIL VEHICLE

Title (de)
DIAGNOSE UND ZUSTANDSMONITORING VON WEICHEN, KREUZUNGEN ODER KREUZUNGSWEICHEN SOWIE SCHIENENSTÖSSEN DURCH EIN SCHIENENFAHRZEUG

Title (fr)
DIAGNOSTIC ET SURVEILLANCE D'ETATS D'AIGUILLAGES, DE CROISEMENTS OU DE TRAVERSEES-JONCTIONS ET DE JOINTS DE RAIL, EFFECTUES PAR UN VEHICULE FERROVIAIRE

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Abstract (en)
[origin: WO2006032307A1] The invention relates to a method and to a device for the diagnosis and state monitoring of a wear and functional state of a junction and/or a crossing and/or a crossroads and/or rail joints and/or track inhomogeneities of a rail traffic path which is made of several tracks. According to the invention, swing acceleration in at least one direction is measured and stored when overtaking a rail vehicle on a junction, crossings or crossroads, in addition to rail joints or track inhomogeneities on at least one component of the rail vehicle, the swing acceleration being produced on the component of the rail vehicle when overtaking the rail vehicle at the junction, crossing or crossroads, rail joints, track inhomogeneities. The inventive method also measures and stores the speed of the rail vehicles and determines and stores the direction of travel, determines and stores the place of the junction, crossing or crossroads, rail joints, track inhomogeneities, carries out a control as to whether characteristic, predetermined threshold values of the measured swing accelerations have been exceeded. If the predetermined threshold value of the swing accelerations are exceeded, a subsequent, further measurement of the state of the components of the junction, crossing or crossroads, rail joints and track inhomogeneities takes place.

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CPC (source: EP US)
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