

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

Publication
EP 1791748 A1 20070606 (DE)

Application
EP 05738201 A 20050504

Priority
• EP 2005004837 W 20050504
• DE 102004045457 A 20040920

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.

IPC 8 full level
B61K 9/08 (2006.01); **B61L 23/04** (2006.01)

CPC (source: EP US)
B61K 9/08 (2013.01 - EP US); **B61L 23/045** (2013.01 - EP US); **B61L 2205/04** (2013.01 - EP US)

Citation (search report)
See references of WO 2006032307A1

Cited by
CN108248634A; EP2820405B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006032307 A1 20060330; AT E409631 T1 20081015; AU 2005287677 A1 20060330; AU 2005287677 B2 20100304; CA 2580573 A1 20060330; CA 2580573 C 20101012; DE 102004045457 A1 20060406; DE 102004045457 B4 20090423; DE 502005005563 D1 20081113; DK 1791748 T3 20081201; EP 1791748 A1 20070606; EP 1791748 B1 20081001; ES 2310350 T3 20090101; IL 181917 A0 20070704; IL 181917 A 20100630; JP 2008513633 A 20080501; JP 4707715 B2 20110622; PL 1791748 T3 20090430; RU 2007114889 A 20081027; RU 2349480 C2 20090320; SI 1791748 T1 20090430; US 2007299630 A1 20071227; US 7539596 B2 20090526

DOCDB simple family (application)
EP 2005004837 W 20050504; AT 05738201 T 20050504; AU 2005287677 A 20050504; CA 2580573 A 20050504; DE 102004045457 A 20040920; DE 502005005563 T 20050504; DK 05738201 T 20050504; EP 05738201 A 20050504; ES 05738201 T 20050504; IL 18191707 A 20070314; JP 2007531608 A 20050504; PL 05738201 T 20050504; RU 2007114889 A 20050504; SI 200530538 T 20050504; US 66320405 A 20050504