

Title (en)

METHOD FOR ONBOARD DIAGNOSIS OF WHEELSET GUIDING ELEMENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ONBOARD DIAGNOSE VON RADSATZFÜHRUNGSELEMENTEN

Title (fr)

PROCEDE ET DISPOSITIF DE DIAGNOSTIC A BORD D'ELEMENTS DE GUIDAGE DES ESSIEUX

Publication

EP 1523436 B1 20051214 (DE)

Application

EP 03712065 A 20030320

Priority

- DE 10233527 A 20020723
- EP 0302937 W 20030320

Abstract (en)

[origin: WO2004009420A1] The invention relates to a method for monitoring and diagnosing the condition of wheelset guiding devices on railway vehicles and a device for carrying out said method. It is generally very difficult to determine whether wheelset guide bushes made of elastomeric materials are sufficiently sturdy for operation or what the (remaining) service life thereof is because there are hardly any reliable calculation methods to do so. Furthermore, monitoring by controlling the dimensions thereof is almost impossible in the mounted state thereof because said wheelset guide bushes are difficult to access due to the assembly layout thereof within the bogie. According to the inventive method, the condition of the wheelset guide bush particularly the play thereof is monitored by evaluating an acceleration signal that is measured in real time in the area of at least one wheelset bearing, whereupon a displacement signal is estimated from said acceleration signal by means of double integration after separating the mean value. The range of said displacement signal is then subjected to a monitoring process.

IPC 1-7

B61F 5/30

IPC 8 full level

B61F 5/30 (2006.01)

CPC (source: EP)

B61F 5/305 (2013.01)

Cited by

US8649921B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004009420 A1 20040129; AT E312742 T1 20051215; AU 2003216862 A1 20040209; DE 10233527 A1 20040212; DE 10233527 B4 20040722; DE 50301945 D1 20060119; EP 1523436 A1 20050420; EP 1523436 B1 20051214; ES 2252663 T3 20060516

DOCDB simple family (application)

EP 0302937 W 20030320; AT 03712065 T 20030320; AU 2003216862 A 20030320; DE 10233527 A 20020723; DE 50301945 T 20030320; EP 03712065 A 20030320; ES 03712065 T 20030320