

Title (en)

METHOD AND APPARATUS FOR DETECTING ROUNDNESS DEFECTS IN A RAILWAY VEHICLE WHEEL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR DETEKTION VON RUNDHEITSDEFEKTEN IN RÄDERN VON EISENBAHNFahrzeugen

Title (fr)

PROCEDE ET APPAREIL PERMETTANT DE DETECTER DES DEFAUTS DE RONDEUR SUR UNE ROUE DE VEHICULE SUR RAILS

Publication

EP 1292479 A1 20030319 (EN)

Application

EP 01943475 A 20010605

Priority

- EP 0106351 W 20010605
- IT TO20000535 A 20000606

Abstract (en)

[origin: WO0194175A1] A motion sensor (3) is associated with a wheel (1) of a railway vehicle for generating a signal (M) indicative of the motion of the wheel along a vertical axis (x). A rotation sensor (6) provides a signal (S) indicative of the rotational speed of the wheel (1). The motion (M) and rotational speed (S) signals are received by an electronic processing unit (E) which correlates these signals using the speed signal (S) to divide the vertical motion signal (M) in subsequent time portions or frames, each corresponding to a complete rotation of the wheel. A mean of the subsequent time portions of the motion signal stored over a period of time is calculated to identify actual or incipient roundness defects of the wheel.

IPC 1-7

B61K 9/12; **G01B 7/28**; **G01B 21/20**; **G01M 17/10**

IPC 8 full level

B61K 9/12 (2006.01); **G01B 7/28** (2006.01); **G01B 21/12** (2006.01); **G01M 17/10** (2006.01); **G01B 21/20** (2006.01)

CPC (source: EP US)

B61K 9/12 (2013.01 - EP US); **G01B 7/282** (2013.01 - EP US); **G01B 21/12** (2013.01 - EP US); **G01M 17/10** (2013.01 - EP US)

Cited by

US9728016B2

Designated contracting state (EPC)

AT BE CH CY DE ES FR GB LI SE

DOCDB simple family (publication)

WO 0194175 A1 20011213; CN 1446160 A 20031001; EP 1292479 A1 20030319; IT 1320400 B1 20031126; IT TO20000535 A0 20000606; IT TO20000535 A1 20011206; JP 2003535755 A 20031202; US 2003160133 A1 20030828

DOCDB simple family (application)

EP 0106351 W 20010605; CN 01813771 A 20010605; EP 01943475 A 20010605; IT TO20000535 A 20000606; JP 2002501708 A 20010605; US 29768303 A 20030422