

Title (en)

State monitoring apparatus and state monitoring method of railway car, and railway car

Title (de)

Zustandsüberwachungsvorrichtung und Zustandsüberwachungsverfahren für Eisenbahnwagen sowie Eisenbahnwagen

Title (fr)

Appareil de surveillance de l'état et procédé de surveillance de l'état de wagon de train et wagon de train

Publication

EP 2436574 A1 20120404 (EN)

Application

EP 11250239 A 20110302

Priority

JP 2010223884 A 20101001

Abstract (en)

The invention provides a state monitoring apparatus and a state monitoring method of a railway car, and a railway car capable of detecting or sensing a defect prior to the occurrence of a serious defect without having to set up thresholds corresponding to various traveling speed patterns. The railway car comprises a vibration detector for detecting a vibration of the railway car, and a defect detection system for detecting defect of the railway car using a signal output from the vibration detector, wherein the vibration detector includes a vibration detection means for detecting the vibration of the railway car from a vibration acceleration of the car body, and the defect detection system includes a filtering means for detecting two or more different frequency band components based on the car body vibration acceleration from the vibration detection means, an amplitude ratio computing means for computing an amplitude ratio of two or more car body vibration accelerations detected via the filtering means, and a defect determination processing means for determining defect based on the result of the amplitude ratio computing means.

IPC 8 full level

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CPC (source: EP)

B61F 9/005 (2013.01); **B61L 15/0081** (2013.01)

Citation (applicant)

WO 0009379 A1 20000224 - TOKYU CAR CORP [JP], et al

Citation (search report)

- [X] EP 2166365 A1 20100324 - BOMBARDIER TRANSP GMBH [DE]
- [X] WO 0194176 A1 20011213 - SKF IND SPA [IT], et al
- [XD] EP 1400427 A1 20040324 - TOKYU CAR CORP [JP]

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BA ME

DOCDB simple family (publication)

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