

Title (en)

Method and system for detecting defects and hazardous conditions in passing rail vehicles

Title (de)

Methode und System zur Erkennung von Defekten und gefährlichen Eigenschaften von passierenden Eisenbahnfahrzeugen

Title (fr)

Méthode et système pour la détection des défauts et des conditions périlleuses des véhicules ferroviaires passants

Publication

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Application

EP 04076047 A 20040401

Priority

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Abstract (en)

A method and a system for detecting and signalling defects and/or hazardous conditions, comprising, particularly, gauge profile hazards, shifted loads, overheating, failures and incipient failures in axles bearings, overheating of wheels and brakes, overheating of vehicle body parts and fire on board, for a consist (151) of at least one passing rail vehicles (152), the method performing for a passing rail vehicle (155) at least the operations of acquiring (154) from sensors and instruments (153) and electronically storing a set of data (156), of identifying (157) the construction model (158), of retrieving (159) vehicle-specific information and data (162) from a database (161), of computing (160) parameters (163) defining mathematical functions expressing the position and the orientation versus time of a principal constituent of the vehicle, of detecting (164) defects and/or hazardous conditions and of generating (166), upon detection of a defect and/or a hazardous condition (165), alarm signals (167). <IMAGE>

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Citation (search report)

- [A] GB 836721 A 19600609 - TRT TELECOM RADIO ELECTR
- [DA] US 5381700 A 19950117 - GROSSKOPF JR GEORGE [US]
- [DA] US 4932784 A 19900612 - DANNESKJOLD-SAMSOE ULRIK [DK]
- [DA] US 4441196 A 19840403 - SANVILLE W WOODWARD [US]
- [DA] US 5903355 A 19990511 - SCHWARZ FRANZ [DE]

Cited by

WO2013176945A1; CN116469017A; CN116612614A; CN114519280A; CN115115631A; EP2546120A1; CN112414318A; CN102548827A; CN107082065A; RU192859U1; CN106301473A; RU2674216C1; RU193429U1; CN107000771A; RU2675396C2; RU187631U1; RU2696412C2; CN113495009A; CN110531752A; CN113928370A; JP2022018114A; ITBA20130072A1; CN114264491A; CN117056686A; US2012274759A1; EP2998927A1; JPWO2017145246A1; CN108657223A; CN108845509A; CN113781797A; CN107547613A; RU2728202C1; CN113960066A; CN114331991A; CN115063415A; CN111223098A; US2020189630A1; US10836411B2; CN112925258A; US11380203B1; RU174431U1; RU203437U1; CN116071353A; CN117007193A; CN117726830A; DE102016115698A1; US11377130B2; JP2016113029A; CN106468914A; CN112950905A; US11472450B2; CN115862339A; WO2011035983A1; WO2015123669A1; WO2016098773A1; WO2011014505A1; CN104608796A; CN111259971A; US2021001904A1; CN112508053A; CN112710234A; CN114548201A; CN115035081A; WO2017127806A1; WO2018066270A1; WO2018031537A1; US8950711B2; US11124207B2; US11881112B1; US8927936B2; US10689016B2; JP2018059835A; CN109211526A; RU2735147C1; CN113240664A; CN114126947A; CN114777645A; CN114994061A; CN104321627A; EP2852827A4; JPWO2016076307A1; EP3291152A1; AU2016248928B2; RU195089U1; RU2713132C1; EP3663163A1; CN113498238A; CN114701543A; IT202000029978A1; CN116985865A; TWI559266B; US9728016B2; US10349491B2; US10728988B2; US11608097B2; US8913131B2; US9415784B2; US10379008B2; US10625760B2; DE102011054806B4; US9865103B2; US9875414B2; US10049298B2; US10906571B2; US9134185B2; US10054488B2; US10352831B2; DE202016105450U1; US9536311B2; WO2018037336A1; DE102020110024A1; US11673561B2; US8439315B2; US9073559B2; US9481385B2; US10322734B2; US10480474B2; US9518947B2; US10110795B2; US10124819B2; US11755965B2; US11875284B2; WO2013151990A1; WO2016058727A1; WO2018167624A1; US10908291B2; US10946878B1; US11169269B2; US11782160B2; US10006877B2; US10384697B2; US11713064B1; WO2023110165A1; US9873442B2; US10362293B2; US10730538B2; US11186301B1; US11196981B2; US11259007B2; US11399172B2; US8693725B2; US10807623B2; US10870441B2; US11305799B2; US11560165B2; US11919551B2

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