

Title (en)

SYSTEM FOR GENERATING ACTION RECOMMENDATIONS FOR THE OPERATOR OF A RAIL VEHICLE

Title (de)

VORRICHTUNG ZUM ERZEUGEN VON HANDLUNGSEMPFEHLUNGEN FÜR DEN FÜHRER EINES SCHIENENFAHRZEUGS

Title (fr)

DISPOSITIF GÉNÉRANT DES CONSEILS D'ACTIONS DESTINÉS AU CONDUCTEUR D'UN VÉHICULE FERROVIAIRE

Publication

**EP 2976246 B1 20191106 (DE)**

Application

**EP 14729241 A 20140521**

Priority

- DE 102013210063 A 20130529
- EP 2014060394 W 20140521

Abstract (en)

[origin: WO2014191269A2] The invention relates to a system for generating action recommendations for the operator of a rail vehicle (10). In order to provide a generic system that can be retrofitted quickly and easily to an existing rail vehicle, the system according to the invention comprises a device (24) that can be carried by the operator, said device having: at least one data interface unit (32) for receiving basic data; a storage unit (30) for storing at least one program module; a processing unit (28) provided for executing the program module in order to generate the action recommendations at least on the basis of the basic data; and an output unit (26) for outputting the action recommendations.

IPC 8 full level

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Citation (examination)

DE 102011013010 A1 20120906 - KNORR BREMSE SYSTEME [DE]

Citation (opposition)

Opponent : Knorr-Bremse Systeme für Schienenfahrzeuge GmbH,

- EP 0755840 A1 19970129 - NS RAILBEDRIJVEN BV [NL]
- DE 102011013010 A1 20120906 - KNORR BREMSE SYSTEME [DE]
- US 2010064242 A1 20100311 - TAYS DWIGHT [CA], et al
- US 2004093196 A1 20040513 - HAWTHORNE MICHAEL J [US], et al
- DE 102008048474 A1 20100408 - SIEMENS AG [DE]
- STEFFEN OETTICH: "Die flexible S-Bahn: Energiesparende und anschlussoptimierende Flexibilisierung der Fahrweisen und Fahrzeiten - Das neuartige Fahrerassistenzsystem ENAFlex-S \* Theorie \* Labortests \* Optimierung", BMBF-SCHLUSSBERICHT, 31 January 2005 (2005-01-31), XP055384531
- THOMAS ALBRECHT: "Ein Beitrag zur Nutzbarmachung Genetischer Algorithmen für die optimale Steuerung und Planung eines flexiblen Stadtschnellbahnbetriebes.", DISSERTATION TU DRESDEN, 2005, pages 1 - 225

Cited by

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DOCDB simple family (application)

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