

Title (en)
GUARDING A RAILROAD TRACK FOR WORKPLACE SECURITY

Title (de)
SICHERUNG DES ARBEITSBEREICHES FÜR ARBEITEN AM GLEIS

Title (fr)
ASSURER LA SÉCURITÉ POUR TRAVAUX PRÈS DE LA VOIE

Publication
EP 3663162 A1 20200610 (EN)

Application
EP 19213698 A 20191204

Priority
• NL 2022139 A 20181205
• NL 2023623 A 20190808

Abstract (en)
Guarding method for workplace safety at a railway track, within the guarding method, one starts with the already present train protection system based on vital relays, and at the beginning of the implementation of the method modifications are carried out inside the relay box / housing of this existing train protection system, by locating for the vital relay of type TPR, an own and individual monitoring sensor permanently inside the relay box / housing, in which the TPR relay is located, said permanent monitoring sensor detects and / or monitors the position "open" and "closed" of the TPR relay, the monitoring sensors being arranged to individually collect and transmit the data for each associated TPR relay and, via a data connection, the status of these positions, individualized to each associated TPR relay, is reported to an associated and remote central warning computer adapted to use the data from the monitoring sensor to conclude whether the temporary mobile alarm system set up at the track workers should be instructed to provide, e.g. acoustically, the guaranteed warning to the track workers.

IPC 8 full level
B61L 23/06 (2006.01)

CPC (source: EP)
B61L 1/02 (2013.01); **B61L 23/06** (2013.01)

Citation (applicant)
• EP 1308366 A1 20030507 - CIT ALCATEL [FR]
• EP 2990296 A1 20160302 - DUAL INVENTIVE HOLDING B V [NL]
• EP 3257718 A1 20171220 - VOLKERRAIL NEDERLAND BV [NL]
• EP 0847339 A1 19980617 - RAILPRO B V [NL]
• EP 2067650 A1 20090610 - VOLKERRAIL NEDERLAND BV [NL]
• NL 2013825 B1 20161010 - DUAL INVENTIVE HOLDING B V [NL]
• NL 1040280 C2 20150105 - DUAL INVENTIVE HOLDING B V
• NL 1036793 C2 20101004 - DUAL INVENTIVE B V [NL]
• NL 2017659 B1 20180430 - DUAL INVENTIVE HOLDING B V [NL]
• NL 2014693 A 20161026 - DUAL INVENTIVE HOLDING B V [NL]
• NL 2016440 A 20161010 - VOLKERRAIL NEDERLAND BV [NL]

Citation (search report)
• [A] EP 1308366 A1 20030507 - CIT ALCATEL [FR]
• [A] EP 2990296 A1 20160302 - DUAL INVENTIVE HOLDING B V [NL]
• [A] EP 3257718 A1 20171220 - VOLKERRAIL NEDERLAND BV [NL]
• [A] EP 3069953 A1 20160921 - VOLKERRAIL NEDERLAND BV [NL]
• [A] SCHMIDT K ET AL: "Stellwerksgebundenes Rottenwarnsystem der OEGB - von der Pilotanlage zur Serienreife", SIGNAL UND DRAHT: SIGNALLING & DATACOMMUNICATION, EURAILPRESS, DE, vol. 101, no. 1/2, 1 January 2009 (2009-01-01), pages 19 - 24, XP001518437, ISSN: 0037-4997
• [A] DURINA E ET AL: "AUTOMATISCHES ROTTENWARNSYSTEM FUER DIE NEUBAUSTRECKEN DER DEUTSCHEN BUNDESBahn", SIGNAL UND DRAHT: SIGNALLING & DATACOMMUNICATION, EURAILPRESS, DE, vol. 82, no. 1 / 02, 1 January 1990 (1990-01-01), pages 20 - 26, XP000244316, ISSN: 0037-4997

Cited by
US11539177B2; CN116795032A; CN112511630A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3663162 A1 20200610; NL 2024384 B1 20200831

DOCDB simple family (application)
EP 19213698 A 20191204; NL 2024384 A 20191204