

Title (en)

METHOD AND APPARATUS FOR DETERMINING THE OCCUPATION STATE OF THE CIRCUIT OF A DIRECT CURRENT TRACK CIRCUIT IN A RAILWAY LINE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BESTIMMUNG DES BELEGUNGSZUSTANDES EINES GLEICHSTROM-GLEISSTROMKREISES EINER EISENBAHNSTRECKE

Title (fr)

PROCEDE ET DISPOSITIF POUR POUR DETECTER L'OCCUPATION D'UN CIRCUIT DE VOIE A COURANT CONTINU POUR UNE LIGNE FERROVIAIRE

Publication

EP 2328790 B1 20170510 (EN)

Application

EP 09806113 A 20090825

Priority

- IB 2009006648 W 20090825
- IT MI20081551 A 20080828

Abstract (en)

[origin: WO2010035090A2] Apparatus for verifying the presence of a train on a direct current track circuit in a railway line provided with a plurality of direct current track circuits adjacent to each other, such circuit comprising a pair of tracks (R) made up of parallel metal sections (B) between which an electric voltage may be applied, each direct current track circuit is separated from the adjacent one by means of electrically insulating joints (G).

IPC 8 full level

B61L 1/20 (2006.01); **B61L 1/18** (2006.01)

CPC (source: EP)

B61L 1/185 (2013.01); **B61L 1/188** (2013.01); **B61L 1/20** (2013.01)

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2010035090 A2 20100401; **WO 2010035090 A3 20110120**; EP 2328790 A2 20110608; EP 2328790 B1 20170510;
HR P20170858 T1 20170908; HU E032318 T2 20170928; IT 1391431 B1 20111223; IT MI20081551 A1 20100228; PL 2328790 T3 20170929;
PT 2328790 T 20170629; SI 2328790 T1 20170831

DOCDB simple family (application)

IB 2009006648 W 20090825; EP 09806113 A 20090825; HR P20170858 T 20170606; HU E09806113 A 20090825; IT MI20081551 A 20080828;
PL 09806113 T 20090825; PT 09806113 T 20090825; SI 200931673 T 20090825