Title (en)

TRACK MEASUREMENT METHOD, AND HIGH-PRECISION MEASURING SYSTEM FOR SMALL RAILWAY CONSTRUCTION SITES

Title (de)

VERFAHREN ZUR GLEISVERMESSUNG UND HOCHGENAUES MESSSYSTEM FÜR KLEINE BAUSTELLEN IM GLEISBAU

Title (fr)

PROCÉDÉ DE MESURE DE LA VOIE ET SYSTÈME DE MESURE HAUTE PRÉCISION POUR PETITS CHANTIERS DE POSE DE VOIE

Publication

EP 2064390 B1 20170322 (DE)

Application

EP 07803147 A 20070903

Priority

- EP 2007059160 W 20070903
- DE 102006042496 A 20060907

Abstract (en)

[origin: WO2008028880A2] The application relates to a track measurement method as well as a high-precision measuring system for small railway construction sites. The aim of the invention is to develop a measuring unit for track construction purposes which determines and keeps a log of track geometry data, maintains the required accuracy, and has a very compact and lightweight design. The claimed measuring unit is composed of a tachymeter car, a target car, and a base station for determining positions with satellite assistance. In the disclosed track measurement method, the base station is set up by means of a known point of a reference network and starts sending the correction parameters. Two cars are placed in a railway section that is to be verified and lies in the vicinity of said known point. The stationary tachymeter car continuously measures its own position by means of satellite-assisted processes as well as the distance from and the angle relative to the reflector car with the help of a synchronized tachymeter. The movable reflector car detects the track geometry and combines said measured values with the positions determined from the satellite measurement and the measured values of the tachymeter.

IPC 8 full level

E01B 35/00 (2006.01)

CPC (source: EP)

E01B 35/00 (2013.01)

Citation (examination)

GB 2403861 A 20050112 - OMNICOM ENGINEERING LTD [GB]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008028880 A2 20080313; **WO 2008028880 A3 20080612**; DE 102006042496 A1 20080424; EP 2064390 A2 20090603; EP 2064390 B1 20170322

DOCDB simple family (application)

EP 2007059160 W 20070903; DE 102006042496 A 20060907; EP 07803147 A 20070903