

Title (en)

Train operation control system, train operation simulation device, and train operation simulation method

Title (de)

Zugbetriebssteuersystem, Zugbetriebssimulationsvorrichtung und Zugbetriebssimulationsverfahren

Title (fr)

Système de commande du fonctionnement d'un train, dispositif de simulation d'opération de train et procédé de simulation du fonctionnement d'un train

Publication

**EP 2821314 A3 20150708 (EN)**

Application

**EP 14172247 A 20140613**

Priority

JP 2013139382 A 20130703

Abstract (en)

[origin: EP2821314A2] A train operation simulator (200) avoids occurrence of deadlock while automatically setting train courses and sequence information by a step (510) of updating weather-disaster information (351) and human flow information (352), a step (520) of simulating a physical state, a step (530) of generating a train course and conducting a train course change when an interrupted part has occurred due to a disaster, a step (570) of controlling a signal on the train course, and a step (580) of conducting state rewinding when deadlock has occurred and giving a sequence restriction to prevent reoccurrence of deadlock.

IPC 8 full level

**B61L 27/00** (2006.01)

CPC (source: EP)

**B61L 27/16** (2022.01); **B61L 27/60** (2022.01); **B61L 27/12** (2022.01)

Citation (search report)

- [X] US 2013144466 A1 20130606 - COOPER JARED [US], et al
- [A] EP 2402229 A1 20120104 - UNIV STUTTGART [DE]
- [A] US 2013116916 A1 20130509 - KICKBUSCH JOEL [US]
- [A] JP 2002037076 A 20020206 - KAWASAKI HEAVY IND LTD
- [IP] EP 2735492 A2 20140528 - HITACHI LTD [JP]
- [A] NOEKEL K ET AL: "BETRIEBSFUEHRUNG VON NAHVERKEHRSSYSTEMEN MIT DEM SIMULATIONSWERKZEUG TRANSIT", SIGNAL + DRAHT, TELZLAFF VERLAG GMBH. DARMSTADT, DE, vol. 88, no. 3, 1 March 1996 (1996-03-01), pages 15 - 18, XP000723340, ISSN: 0037-4997

Cited by

CN109640249A; CN113495009A; EP4030365A4; CN110104034A; WO2017066365A3; WO2024051004A1

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 2821314 A2 20150107; EP 2821314 A3 20150708; JP 2015013487 A 20150122**

DOCDB simple family (application)

**EP 14172247 A 20140613; JP 2013139382 A 20130703**