

Title (en)  
OPERATION OF A RAIL VEHICLE COMPRISING AN IMAGE GENERATION SYSTEM

Title (de)  
BETRIEB EINES SCHIENENFAHRZEUGS MIT EINEM BILDERZEUGUNGSSYSTEM

Title (fr)  
FONCTIONNEMENT D'UN VÉHICULE FERROVIAIRE POURVU D'UN SYSTÈME DE GÉNÉRATION D'IMAGES

Publication  
**EP 3218244 A1 20170920 (DE)**

Application  
**EP 15797627 A 20151110**

Priority  
• DE 102014222900 A 20141110  
• EP 2015076211 W 20151110

Abstract (en)  
[origin: WO2016075138A1] The invention relates to a rail vehicle (1) comprising an image generation system for detecting an area outside the rail vehicle (1). The image generation system has four image generation devices (2, 3, 4, 5), which generate two-dimensional images of the area. A first (2) and a second (3) of the four image generation devices (2, 3, 4, 5) are arranged at a first distance from one another and form a first stereo pair (2, 3). The third (4) and the fourth (5) of the four image generation devices (2, 3, 4, 5) are arranged at a second distance from one another and form a second stereo pair (4, 5), wherein the first distance is greater than the second distance. To increase the reliability of the vehicle, particularly during driverless operation, the image generation system has an evaluation device which receives image data from the four image generation devices (2, 3, 4, 5). If evaluation of image data from a failed and/or faulty image generation device (2; 5) is not possible or erroneous, the evaluation device is designed to use the image data from three other (3, 4, 5; 2, 3, 4) of the four image generation devices (2, 3, 4, 5), which three contain a first stereo image pair and a second stereo image pair, wherein the first stereo image pair corresponds to the image data from two of the three other image generation devices (3, 4, 5; 2, 3, 4), which two are arranged at a third distance from one another, and the second stereo image pair corresponds to the image data from two of the three other image generation devices (2, 3, 4, 5), which two are arranged at a fourth distance from one another, and wherein the third distance and the fourth distance are different sizes.

IPC 8 full level  
**B61L 23/04** (2006.01); **B61L 27/04** (2006.01)

CPC (source: CN EP US)  
**B61L 15/0072** (2013.01 - US); **B61L 23/041** (2013.01 - CN EP US); **B61L 27/04** (2013.01 - CN EP US); **B61L 27/40** (2022.01 - US); **B61L 27/70** (2022.01 - US)

Citation (search report)  
See references of WO 2016075138A1

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)  
**DE 102014222900 A1 20160512**; CN 107107933 A 20170829; CN 107107933 B 20190326; EP 3218244 A1 20170920; EP 3218244 B1 20180912; EP 3431361 A2 20190123; EP 3431361 A3 20190612; ES 2700830 T3 20190219; PL 3218244 T3 20190131; US 10144441 B2 20181204; US 2018257684 A1 20180913; WO 2016075138 A1 20160519

DOCDB simple family (application)  
**DE 102014222900 A 20141110**; CN 201580072802 A 20151110; EP 15797627 A 20151110; EP 18186200 A 20151110; EP 2015076211 W 20151110; ES 15797627 T 20151110; PL 15797627 T 20151110; US 201515525751 A 20151110