

Title (en)  
Rail vehicle with self steering running gear

Title (de)  
Schienenfahrzeug mit selbstlenkendem Fahrgestell

Title (fr)  
Véhicule ferroviaire avec train roulant autodirecteur

Publication  
**EP 2551169 A1 20130130 (EN)**

Application  
**EP 11175869 A 20110728**

Priority  
EP 11175869 A 20110728

Abstract (en)  
The invention relates to a rail vehicle, in particular for high-speed travel, comprising a wagon body (103) supported on at least one running gear (102) said wagon body (103) having a nominal load and defining a longitudinal direction, a transverse direction and a height direction. The running gear (102) comprises a wheel unit (104) and a running gear frame (105) supported on said wheel unit (104) via at least one spring device (106, 107), the wheel unit (104) defining a wheel unit axis and comprising two wheel unit bearings (108) spaced in said transverse direction. Each wheel unit (104) bearing is connected to said running gear frame (105) via a lever (109) pivotably connected to said running gear frame (105) and said wheel unit bearing (108), said levers, under said nominal load of said wagon body (103), being arranged such that a rolling motion of said running gear frame (105) occurring about said longitudinal direction when traveling through a curved track section generates an alteration of an inclination of said lever (109) with respect to said longitudinal direction causing a steering motion of said wheel unit (104) about said height direction providing at least partially curve radial adjustment of said wheel unit (104). Each of said levers is formed as a wing element (109) pivotably connected to said running gear frame (105) and providing a receptacle receiving one of said wheel unit bearings (108).

IPC 8 full level  
**B61F 5/38** (2006.01); **B61F 5/44** (2006.01)

CPC (source: EP)  
**B61F 5/38** (2013.01); **B61F 5/44** (2013.01)

Citation (applicant)  
DE 10047737 A1 20020411 - BOMBARDIER TRANSP GMBH [DE]

Citation (search report)  
• [A] WO 0226542 A1 20020404 - DAIMLERCHRYSLER RAIL SYSTEMS [DE], et al  
• [A] US 5909711 A 19990608 - VOGEL HANS HEINER [CH], et al  
• [A] US 4742779 A 19880510 - BEVAND JACQUES [FR]  
• [A] EP 1767430 A1 20070328 - BOMBARDIER TRANSP GMBH [DE]  
• [A] US 4658734 A 19870421 - MROZ JOSEPH [CA]  
• [A] EP 0614793 A1 19940914 - SCHEFFEL HERBERT [ZA]  
• [A] US 2002098034 A1 20020725 - CONAWAY JERRY LEE [US], et al

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 2551169 A1 20130130; EP 2551169 B1 20140416; ES 2478279 T3 20140721**

DOCDB simple family (application)  
**EP 11175869 A 20110728; ES 11175869 T 20110728**