

Title (en)
VEHICLE FOR RUNNING ON RAIL

Title (de)
FAHRZEUG ZUM LAUF AUF SCHIENE

Title (fr)
VEHICULE SUR RAIL

Publication
EP 1642798 A4 20070718 (EN)

Application
EP 03777363 A 20031208

Priority
• JP 0315691 W 20031208
• JP 2003272571 A 20030709

Abstract (en)
[origin: EP1642798A1] A vehicle for running on rail is provided, which has the capability of achieving smooth running, while moderately gripping the rail. This vehicle has a base, a pair of first and second wheels held by the base to be rotatable on an upper surface of the rail and spaced from each other in an extending direction of the rail, a third wheel held by the base to be rotatable on a lower surface of the rail, and a motor for rotating the first wheel. The first wheel is positioned between the second and third wheels in the extending direction of the rail, and the second wheel is held by the base through a cushioning member. When the vehicle is tilted due to an elastic deformation of the cushioning member for the second wheel, gripping forces of the first and third wheels on the rail increase.

IPC 8 full level
B61B 13/00 (2006.01); **B61B 13/06** (2006.01); **B61C 13/04** (2006.01)

CPC (source: EP KR US)
B61B 5/00 (2013.01 - KR); **B61B 13/04** (2013.01 - KR); **B61C 13/04** (2013.01 - EP US); **B61J 1/12** (2013.01 - KR)

Citation (search report)
• [X] US 3152559 A 19641013 - HARSHBERGER RUSSELL P
• [X] EP 1172273 A1 20020116 - SENYO KOGYO CO LTD [JP]
• [X] DE 1926461 A1 19701203 - PROJECTS GENERAL
• [X] US 5657699 A 19970819 - BISHOP ARTHUR ERNEST [AU]
• [A] EP 0354461 A1 19900214 - YAMAHA MOTOR CO LTD [JP]
• See references of WO 2005005217A1

Cited by
US9988060B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1642798 A1 20060405; **EP 1642798 A4 20070718**; AU 2003289248 A1 20050128; CN 100391769 C 20080604; CN 1802280 A 20060712; HK 1090615 A1 20061229; JP 2005029074 A 20050203; JP 3733130 B2 20060111; KR 100739519 B1 20070713; KR 20060029685 A 20060406; TW 200502117 A 20050116; TW I247699 B 20060121; US 2006150859 A1 20060713; WO 2005005217 A1 20050120

DOCDB simple family (application)
EP 03777363 A 20031208; AU 2003289248 A 20031208; CN 200380110378 A 20031208; HK 06111156 A 20061011; JP 0315691 W 20031208; JP 2003272571 A 20030709; KR 20067000537 A 20060109; TW 92134660 A 20031209; US 56324403 A 20031208