

Title (en)
STEP APPARATUS FOR VEHICLE

Title (de)
SCHRITTVORRICHTUNG FÜR FAHRZEUGE

Title (fr)
DISPOSITIF DE SEUIL POUR VÉHICULE

Publication
EP 2617621 A4 20170719 (EN)

Application
EP 11825119 A 20110912

Priority
• JP 2010210268 A 20100918
• JP 2011070718 W 20110912

Abstract (en)
[origin: EP2617621A1] Provided is a vehicle step apparatus for which a space for accommodating the vehicle step apparatus when it is accommodated in a railway vehicle can be reduced. A pair of step links 11 are swingably supported by a step block 12 at supporting points. Ends of the pair of step links 11 on one side move only in a direction that is parallel to an opening width direction of a door due to a first guide portion 22, and the step block 12 moves only in a direction that is orthogonal to the opening width direction of the door due to a second guide portion 23. A pair of step plates 14, by which the other ends of the pair of step links 11 are supported, move between an accommodation position and a projection position. A sliding board 15 is arranged at a position of being offset with respect to the pair of step plates 14 in the up-and-down direction when at the accommodation position. A first actuator 16 drives the pair of step plates 14 so as to project outward from the railway vehicle 100 in the vehicle width direction.

IPC 8 full level
B61D 23/02 (2006.01)

CPC (source: EP)
B61D 23/025 (2013.01)

Citation (search report)
• [A] EP 1393977 A1 20040303 - OMNISTOR ACCESSORIES NV [BE]
• [A] US 6167816 B1 20010102 - LAVERY EVIN [IE], et al
• [A] DE 202007000912 U1 20070405 - KIRCHER WERNER [DE]
• [A] DE 202009005045 U1 20100909 - BODE GMBH & CO KG [DE]
• [A] DE 202008004592 U1 20090813 - BODE GMBH & CO KG [DE]
• See references of WO 2012036117A1

Cited by
DE102016125784A1; DE102016125784B4; WO2018134027A1

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

DOCDB simple family (publication)
EP 2617621 A1 20130724; EP 2617621 A4 20170719; EP 2617621 B1 20180815; JP 5456166 B2 20140326; JP WO2012036117 A1 20140203; TW 201221395 A 20120601; TW I414442 B 20131111; WO 2012036117 A1 20120322

DOCDB simple family (application)
EP 11825119 A 20110912; JP 2011070718 W 20110912; JP 2012533990 A 20110912; TW 100132190 A 20110907