

Title (en)

RAILWAY VEHICLE PROVIDED WITH COLLISION ENERGY ABSORPTION STRUCTURE

Title (de)

MIT AUFPRALLENERGIEABSORPTIONSSTRUKTUR AUSGERÜSTETES SCHIENENFAHRZEUG

Title (fr)

VÉHICULE FERROVIAIRE DOTÉ D'UNE STRUCTURE D'ABSORPTION DE L'ÉNERGIE DE COLLISION

Publication

EP 3181424 A1 20170621 (EN)

Application

EP 16202156 A 20161205

Priority

GB 201522424 A 20151218

Abstract (en)

The present invention aims at providing a railway vehicle provided with a collision energy absorption structure capable of relieving impact during collision without deteriorating safety of crew and the like. The invention provides a railway vehicle provided with a collision energy absorption structure configured to absorb collision energy, a body of the railway vehicle including an underframe constituting a floor surface, a lower beam fixed to an end beam disposed at an end portion in a longitudinal direction of the underframe, a first end floor placed on an upper portion of the end beam and the lower beam, a pair of gangway frame columns disposed on an upper surface of a front end portion at a center portion in a width direction of the first end floor and constituting a gangway frame, a corner post disposed on an upper surface of the front end portion at an end portion in the width direction of the first end floor, and a crew's room disposed rearward of the corner post, wherein the gangway frame columns have a rectangular cross-section with a longitudinal dimension greater than a width dimension, and the lower beam has a center portion in a longitudinal direction positioned below a rear end portion of the gangway frame columns fixed to the first end floor.

IPC 8 full level

B61D 15/06 (2006.01)

CPC (source: EP)

B61D 15/06 (2013.01)

Citation (search report)

- [Y] EP 1223095 A1 20020717 - MITSUBISHI HEAVY IND LTD [JP]
- [Y] WO 2012136500 A1 20121011 - SIEMENS AG OESTERREICH [AT], et al
- [A] EP 2412599 A1 20120201 - WEST JAPAN RAILWAY COMPANY [JP], et al
- [A] US 1056905 A 19130325 - JOHNSON BOONE V H [US]

Cited by

CN109177994A

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 3181424 A1 20170621; EP 3181424 B1 20181205; GB 201522424 D0 20160203; JP 2017109731 A 20170622; JP 6251365 B2 20171220

DOCDB simple family (application)

EP 16202156 A 20161205; GB 201522424 A 20151218; JP 2016234763 A 20161202