

Title (en)
Railway vehicle with energy absorbing structure

Title (de)
Schienenfahrzeug mit Energieverzehrseinrichtung

Title (fr)
Véhicule ferroviaire doté d'une structure absorbeuse d'énergie

Publication
EP 1854694 B1 20120523 (EN)

Application
EP 06256332 A 20061213

Priority
JP 2006131260 A 20060510

Abstract (en)
[origin: EP1854694A2] For a transportation machine such as a railway vehicle, a space for a driver is secured while collision energy is absorbed at a time of collision with a large obstacle, and entry of a flying object into a driving cab is prevented by a rigid structure at a time of collision with the flying object. Windows (40) are provided in a flying object barrier plate (50) provided at a tip end portion of a driving cab (25), and energy absorbing members (100) are penetrated through the windows to be disposed in a form extending outward of the flying object barrier plate from an inside of the driving cab. The energy absorbing members of a large absorbing capacity can be efficiently disposed by utilizing a space of the driving cab provided in a vehicle body. A beam member of a crushable zone (11a) including the flying object barrier plate is firmly placed and can be connected to a survival zone (10).

IPC 8 full level
B61D 15/06 (2006.01); **B61D 17/06** (2006.01); **B62D 21/15** (2006.01)

CPC (source: EP KR US)
B61D 15/06 (2013.01 - EP US); **B61D 17/06** (2013.01 - EP US); **B61F 19/04** (2013.01 - KR)

Cited by
CN103661437A; CN109094602A; EP3181425A1; EP2641803A4; AT514375A1; AU2014277110B2; RU2657600C2; AT16474U1; US9988061B2; WO2014195177A1

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

DOCDB simple family (publication)
EP 1854694 A2 20071114; EP 1854694 A3 20080312; EP 1854694 B1 20120523; CN 100457520 C 20090204; CN 101070073 A 20071114; JP 2007302081 A 20071122; JP 4712604 B2 20110629; KR 100836089 B1 20080609; KR 20070109782 A 20071115; US 2007283843 A1 20071213

DOCDB simple family (application)
EP 06256332 A 20061213; CN 200610163734 A 20061204; JP 2006131260 A 20060510; KR 20060123640 A 20061207; US 63849506 A 20061214