

Title (en)

Railway vehicle with energy absorbing structure

Title (de)

Schienenfahrzeug mit Energieverzehreinrichtung

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

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**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