

Title (en)
Railway car

Title (de)
Eisenbahnwaggon

Title (fr)
Wagon de train

Publication
EP 2476599 A1 20120718 (EN)

Application
EP 11250201 A 20110222

Priority
JP 2011004524 A 20110113

Abstract (en)
The invention provides a railway car having a rooftop equipment for performing air conditioning or ventilation of the air within a cabin, capable of preventing noise caused by vibration via air of the rooftop equipment during high speed driving from being transmitted into the cabin. In a railway car, an opening 41 on a roof structure 40 having a roof top equipment mounted thereon and one or more openings 47a formed on a ceiling 47 of a cabin are connected via a ventilation duct 43 that enables air within the cabin to flow into the rooftop equipment. The ceiling 47 is arranged immediately below the opening 41 of the roof structure 40, so that the opening 41 of the roof structure 40 is not visible from the cabin through the openings 47a on the ceiling 47. Noise 310 emitted from the rooftop equipment toward the cabin is insulated via the ceiling 47, and the noise can be reflected and deadened while traveling through the ventilation duct 43.

IPC 8 full level
B61D 17/12 (2006.01); **B61D 27/00** (2006.01)

CPC (source: EP)
B61D 17/12 (2013.01); **B61D 27/0018** (2013.01); **B61D 27/0072** (2013.01)

Citation (applicant)
• JP 2002347617 A 20021204 - HITACHI LTD
• JP 2007253693 A 20071004 - MITSUBISHI ELECTRIC CORP

Citation (search report)
• [X] JP 2007253693 A 20071004 - MITSUBISHI ELECTRIC CORP
• [I] US 5518448 A 19960521 - MADOGLIO LINO [IT], et al
• [A] DE 3224895 A1 19840105 - WEBASTO WERK BAIER KG W [DE]

Cited by
RU2610753C1; CZ306749B6; EP3225495A4; CN113928358A; EP3002173A1; DE102014218442A1; US10155427B2; CN111361582A; EP3744606A1; FR3096641A1

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 2476599 A1 20120718; EP 2476599 B1 20130612; JP 2012144167 A 20120802; JP 5643660 B2 20141217

DOCDB simple family (application)
EP 11250201 A 20110222; JP 2011004524 A 20110113