

Title (en)
Car structure

Title (de)
Fahrzeugstruktur

Title (fr)
Structure de voiture

Publication
EP 1944213 B1 20110406 (EN)

Application
EP 07250666 A 20070216

Priority
JP 2007002628 A 20070110

Abstract (en)
[origin: EP1944213A1] A car structure is provided which has the required strength against vertical load and vibration while avoiding increase in weight of the structure. At an entrance (6) of the railroad car structure (20) in which a side structure (2) is formed by a hollow member, the side structure (2) and a frame (7) are coupled via an L-shaped fitting (10). The L-shaped fitting (10) consists of a first joint part (10a) which is in the form of a plate and couples a vehicle outer face plate (8) and a vehicle inner face plate (9) and a second joint part (10b) which is in the form of a plate and butt welds a part of the first joint part (10a) near the vehicle outer face plate (8) and the frame (7). Plate thickness of the second joint plate (10b) is larger than plate thickness of the vehicle outer face plate (8). As a result, the required strength against vertical load can be ensured without increasing the plate thickness of the vehicle outer face plate (8), in other words, with little increase in weight of the structure.

IPC 8 full level
B61D 17/10 (2006.01); **B61D 17/08** (2006.01)

CPC (source: EP KR US)
B61D 17/00 (2013.01 - KR); **B61D 17/04** (2013.01 - KR); **B61D 17/041** (2013.01 - EP US); **B61D 17/06** (2013.01 - KR);
B61D 17/08 (2013.01 - EP KR US)

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 1944213 A1 20080716; EP 1944213 B1 20110406; AT E504481 T1 20110415; CN 101219668 A 20080716; CN 101219668 B 20100707;
DE 602007013682 D1 20110519; JP 2008168732 A 20080724; JP 4979390 B2 20120718; KR 100985165 B1 20101005;
KR 20080065884 A 20080715; US 2008163783 A1 20080710

DOCDB simple family (application)
EP 07250666 A 20070216; AT 07250666 T 20070216; CN 200710005280 A 20070214; DE 602007013682 T 20070216;
JP 2007002628 A 20070110; KR 20070015256 A 20070214; US 67768707 A 20070222