

Title (en)

Composite self-supporting housing for a railway car

Title (de)

Selbsttragendes Verbundstoffgehäuse für einen Eisenbahnwagen

Title (fr)

Boîtier autoportant composite pour wagon de chemin de fer

Publication

EP 2641804 A1 20130925 (EN)

Application

EP 12161100 A 20120323

Priority

EP 12161100 A 20120323

Abstract (en)

A railway car(10) comprises a car body (12), a component (16, 22) fixed to a roof (20) or under the floor (24) of the car body (10) and a housing (18, 26) for enclosing the component (16, 22). The housing (18, 22) comprises at least one transverse panel (28, 30, 32, 24) facing the car body (12) and at least one side flap panel (36, 38, 40, 42) movable between a closed position in which the side flap panel (36, 38, 40, 42) closes a volume for the component (16, 22) defined between the transverse panel (28, 30, 32, 34) and the car body (12) and an open position. The housing (18, 26) is provided with securing means (50, 52) for securing the side flap panel (36, 38, 40, 42) in the closed position. In order to reduce the weight of the housing, the side flap panel (36, 38, 40, 42) and the transverse panel (28, 30, 32, 34) are made of lightweight material. To achieve further reduction of the weight, the structure (28, 30, 32, 34) is preferably not self-supported in the open position. The securing means (50, 52) are provided between the transverse panel (28, 30, 32, 34) and the side flap panel (36, 38, 40, 42) in the closed position such that the transverse panel (28, 30, 32, 34), the side flap panel (36, 38, 40, 42) in the closed position and the securing means form a unitary and interacting self-supporting and load-bearing structure

IPC 8 full level

B61D 17/10 (2006.01)

CPC (source: EP KR)

B61C 17/00 (2013.01 - EP); **B61D 17/02** (2013.01 - KR); **B61D 49/00** (2013.01 - KR); **B61F 1/00** (2013.01 - EP); **G12B 9/02** (2013.01 - KR)

Citation (applicant)

- EP 1377488 A1 20040107 - BOMBARDIER TRANSP GMBH [DE]
- US 4825774 A 19890502 - TANI HISASHI [JP], et al

Citation (search report)

[A] DE 102009006637 A1 20100819 - SIEMENS AG [DE]

Cited by

FR3092555A1; DE102014113829A1; EP3326882A1; DE102016122809A1; DE102016204879A1; EP3197741B1

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 2641804 A1 20130925; **EP 2641804 B1 20160511**; BR 102013006910 A2 20150728; CN 103318202 A 20130925; JP 2013199270 A 20131003; KR 20130108148 A 20131002

DOCDB simple family (application)

EP 12161100 A 20120323; BR 102013006910 A 20130325; CN 201310087091 A 20130319; JP 2013059924 A 20130322; KR 20130029896 A 20130320