

Title (en)

Low floor street car

Title (de)

Niederflur-Stadtbahnwagen

Title (fr)

Voiture de tramway à plancher surbaissé

Publication

EP 0533028 B2 20040121 (DE)

Application

EP 92115323 A 19920908

Priority

DE 4130609 A 19910914

Abstract (en)

[origin: CA2078079A1] The invention relates to a drop-frame metropolitan railway carriage, consisting of passenger cells and of chassis parts which receive a running gear and which are connected to one another on the end face via joint parts, chassis parts which receive the driver's cab being arranged at the ends of the drop-frame metropolitan railway carriage. The object of the invention was to find for a drop-frame metropolitan railway carriage, whilst ensuring the best possible utilisation of the enveloping space and best possible utilisation of the available base area, a concept which makes it possible to design a vehicle meeting the requirements of a modern metropolitan railway carriage, and at the same time with the most advantageous utilisation of the necessary production devices, a minimum of different constructional parts and a simple assembly. This object is achieved in that the passenger cell, chassis part, joint part and driver's cab are designed as modules (chassis module 1, joint module 2, passenger module 3 and head module 4) which each in themselves always have the same design and are interchangeable independently of their arrangement in the drop-frame metropolitan railway carriage. Figure 1

IPC 1-7

B61D 17/04; **B61D 13/00**

IPC 8 full level

B61C 17/04 (2006.01); **B61C 13/00** (2006.01); **B61D 13/00** (2006.01); **B61D 17/04** (2006.01); **B61G 5/02** (2006.01)

CPC (source: EP US)

B61D 13/00 (2013.01 - EP US); **B61D 17/045** (2013.01 - EP US)

Citation (opposition)

Opponent :

- US 4644872 A 19870224 - VIANELLO GIORGIO [IT], et al
- DE 2711646 A1 19770929 - GANZ MAVAG MOZDONY VAGON
- Typenplan der Wiener Stadtwerke-Verkehrsbetriebe, Abt. WK, dtdo, Wien 12.05.1961, betreffend den Gelenktriebwagen Bauart D1, 2 Blatt

Cited by

DE102018130813A1; FR2757126A1; DE4424308A1; CN102795230A; FR2742405A1; US6138783A; EP4155158A1; EP1967436A1; FR2913391A1; DE4428955A1; EP0616936A1; FR2912364A1; EP1955917A1; US7814841B2; WO9721585A1; WO2020114835A1

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DOCDB simple family (publication)

EP 0533028 A1 19930324; **EP 0533028 B1 19951108**; **EP 0533028 B2 20040121**; AT E129969 T1 19951115; AU 2136692 A 19930318; CA 2078079 A1 19930315; CZ 271292 A3 19930317; CZ 281355 B6 19960911; DE 4130609 A1 19930318; DE 59204250 D1 19951214; DK 0533028 T3 19960318; DK 0533028 T4 20040601; ES 2081537 T3 19960316; ES 2081537 T5 20041101; FI 924068 A0 19920911; FI 924068 A 19930315; HU 9202912 D0 19921228; HU T62235 A 19930428; JP H05319262 A 19931203; NO 923529 D0 19920911; NO 923529 L 19930315; PL 295909 A1 19930531; SK 271292 A3 19950105; SK 280157 B6 19990910; US 5261330 A 19931116

DOCDB simple family (application)

EP 92115323 A 19920908; AT 92115323 T 19920908; AU 2136692 A 19920827; CA 2078079 A 19920911; CS 271292 A 19920831; DE 4130609 A 19910914; DE 59204250 T 19920908; DK 92115323 T 19920908; ES 92115323 T 19920908; FI 924068 A 19920911; HU 9202912 A 19920911; JP 24459392 A 19920914; NO 923529 A 19920911; PL 29590992 A 19920911; SK 271292 A 19920831; US 94450792 A 19920914