

A1

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



162162

(43) International Publication Date
1 August 2002 (01.08.2002)

PCT

(10) International Publication Number
WO 02/058982 A1

(51) International Patent Classification⁷: **B61D 17/04**

WERNE, Dirk [DE/BE]; Lourdeslaan 110, B-2650 Edegem (BE).

(21) International Application Number: PCT/SE02/00117

(74) Agent: **CARLSSON, Sara**; Bombardier Transportation Sweden AB, S-721 73 Västerås (SE).

(22) International Filing Date: 23 January 2002 (23.01.2002)

(25) Filing Language: English

(81) Designated States (*national*): AE, AG, AL, AM, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), DE (utility model), DK (utility model), DM, DZ, EC, EE (utility model), ES, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK (utility model), SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(26) Publication Language: English

(30) Priority Data:
0100231-0 26 January 2001 (26.01.2001) SE

(71) Applicant (*for all designated States except US*): **BOMBARDIER TRANSPORTATION GMBH** [DE/DE]; Saatwinkler Damm 43, 13627 Berlin (DE).

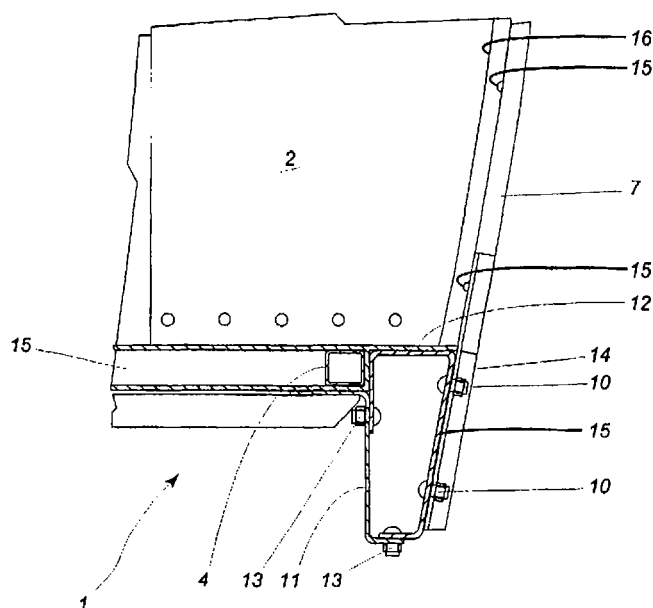
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SVENDING, Björn** [SE/SE]; Dunövägen 26B, S-394 77 Kalmar (SE). **VON**

[Continued on next page]

(54) Title: STRUCTURAL DAMPING OF A RAIL VEHICLE CARBODY



G00002

WO 02/058982 A1

(57) Abstract: In a carbody of a rail vehicle comprising at least two structural members (1, 2, 3, 6, 7, 8) joined together by fastening means (10) at opposing surfaces of the structural members (1, 2, 3, 6, 7, 8). The opposing surfaces of the structural members (1, 2, 3, 6, 7, 8) are pressed together by the fastening means (10) for transmitting forces from one structural member to the other structural member by friction. The opposing surfaces have an area of direct contact between the structural members in the vicinity of the fastening means (10) and a vibration damping means (15) is disposed between the opposing surfaces in a distance (d) from the area of direct contact. The joints of the structural members exhibit vibration damping characteristics and a high strength at a long life time.

(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB,
GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
TG)

Declaration under Rule 4.17:

— as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW; ARIPO patent

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.