

(43) International Publication Date  
30 June 2011 (30.06.2011)(10) International Publication Number  
**WO 2011/076433 A2**(51) International Patent Classification:  
**B60L 5/00** (2006.01)(21) International Application Number:  
PCT/EP2010/007985(22) International Filing Date:  
21 December 2010 (21.12.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0922543.4 23 December 2009 (23.12.2009) GB(71) Applicant (for all designated States except US): **BOMBARDIER TRANSPORTATION GMBH** [DE/DE];  
Schöneberger Ufer 1, 10785 Berlin (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **VOLLENWYDER, Kurt** [CA/CA]; 170 Chelsea Road, Kingston, Ontario K7M 3Y8 (CA). **DICKSON, Timothy** [CA/CA]; 228 Barleson Avenue, Kingston, Ontario K7M 4H1 (CA). **WORONOWICZ, Konrad** [CA/CA]; 350 Wellington Street, Kingston, Ontario K7K 7J7 (CA).(74) Agent: **BRUNOTTE, Joachim**; Patentanwälte Bressel und Partner, Park Kolonnaden am Potsdamer Platz, Potsdamer Platz 10, 10785 Berlin (DE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

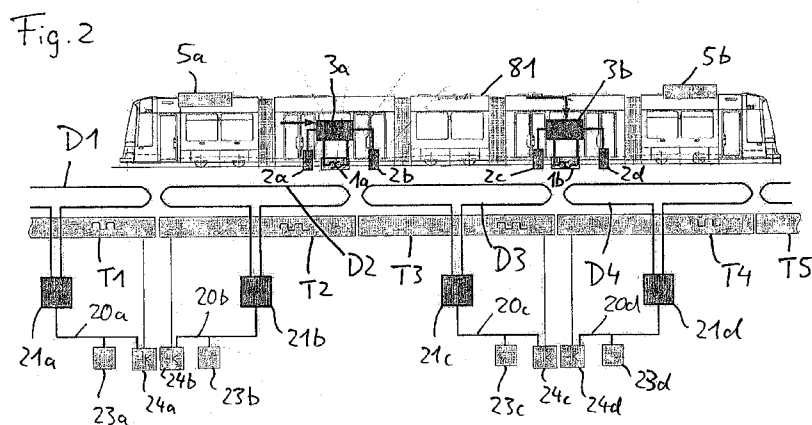
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR TRANSFERRING ELECTRIC ENERGY TO A VEHICLE



(57) **Abstract:** The invention relates to a system for transferring electric energy to a vehicle (81), in particular to a track bound vehicle such as a light rail vehicle, wherein - the system comprises an electric conductor arrangement for producing an alternating electromagnetic field and for thereby transferring electromagnetic energy to the vehicle (81), - the conductor arrangement comprises at least one and preferably a plurality of consecutive segments (T1, T2, T3, T4, T5), wherein each segment (T1, T2, T3, T4, T5) extends along a different section of the path of travel of the vehicle (81), - each segment (T1, T2, T3, T4, T5) can be switched on and off separately of any other segment, - the vehicle (81) comprises at least one receiver (1) for receiving the electromagnetic energy, - the vehicle (81) comprises at least one signal transmitter (2) adapted to repeatedly or continuously emit an enable signal towards the track, - a signal receptor (D1, D2, D3, D4) is assigned to each segment (T1, T2, T3, T4, T5), wherein the signal receptor (D1, D2, D3, D4) enables the segment to produce the alternating electromagnetic field while the signal receptor (D1, D2, D3, D4) receives the enable signal, wherein a segment control (3) is adapted to stop the operation of the segment when the enable signal is no longer received by the signal receptor (D1, D2, D3, D4) of the segment, - the vehicle (81) comprises a transmitter control arrangement adapted to stop transmitting the enable signal if the receiver and/or if any device combined with the receiver is not to be operated.



---

**Published:**

— *without international search report and to be republished  
upon receipt of that report (Rule 48.2(g))*