



(51) International Patent Classification:

B60L 5/00 (2006.01) **B60M 1/10** (2006.01)
B60M 7/00 (2006.01) **H01F 38/14** (2006.01)

(21) International Application Number:

PCT/EP2012/072275

(22) International Filing Date:

9 November 2012 (09.11.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1119540.1 10 November 2011 (10.11.2011) GB

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(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, BN, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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))

Published:

— with international search report (Art. 21(3))

[Continued on next page]

(54) Title: SYSTEM FOR INDUCTIVELY TRANSFERRING ELECTRIC ENERGY TO A VEHICLE USING CONSECUTIVE SEGMENTS

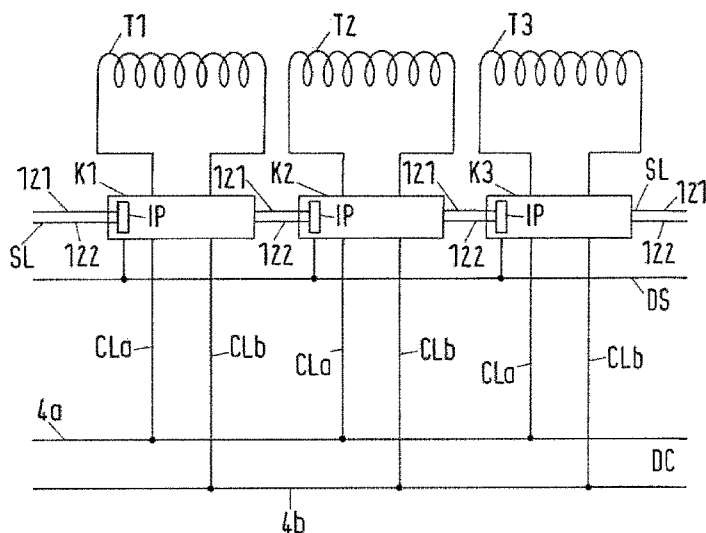


Fig.12

(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 or to a road automobile, wherein - the system comprises an electric conductor arrangement for producing an alternating electromagnetic field and for thereby transferring the energy to the vehicle (81), - the conductor arrangement comprises a plurality of consecutive segments (T1, T2, T3), wherein the segments (T1, T2, T3) extend along the path of travel of the vehicle (81), each segment (T1, T2, T3) comprising at least one alternating current line for carrying an alternating current in order to produce the alternating electromagnetic field, - the system comprises a current supply (4) for supplying electric energy to the segments (T1, T2, T3), - the segments are electrically connected in parallel to each other to the current supply (4), - for a sequence of consecutive segments, a converter (K) is assigned and connected to each segment, wherein the assigned converter (K) is connected to the current supply (4) and is adapted to convert a current carried by the current supply (4; 108) to an alternating current carried by the at least one alternating current line of the segment, so that there is a sequence of assigned converters (K) for the corresponding sequence of consecutive segments (T1, T2, T3), - each

of the converters (K) of the sequence of assigned converters (K) is connected to a synchronization link (SL) for synchronizing operation of the sequence of assigned converters (K), - the system is adapted to synchronize the sequence of assigned converters (K) in a manner so that the electromagnetic field produced by the sequence of consecutive segments is continuous at the interface or interfaces between the consecutive segments.



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) **Date of publication of the international search report:**
29 August 2013