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1119540.1 10 November 2011 (10.11.2011) GB(71) Applicant: **BOMBARDIER TRANSPORTATION GMBH** [DE/DE]; Schöneberger Ufer 1, 10785 Berlin (DE).(72) Inventors: **WORONOWICZ, Konrad**; 5029 Fox Run Place, Kingston, Ontario K7P 0E4 (CA). **CZAINSKI, Robert**; Waldsassener Str. 65, 12279 Berlin (DE). **ANDERS, Dominik**; Lindenhofstraße 96, 68163 Mannheim (DE). **NIKLES, Thomas**; Mörikestr. 10, 68259 Mannheim (DE). **SÖHNGEN, Matthias**; Im Langen Winkel 68, 67065 Ludwigshafen (DE).(74) Agent: **PATENTANWÄLTE BRESSEL UND PARTNER**; Potsdamer Platz 10, 10785 Berlin (DE).

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

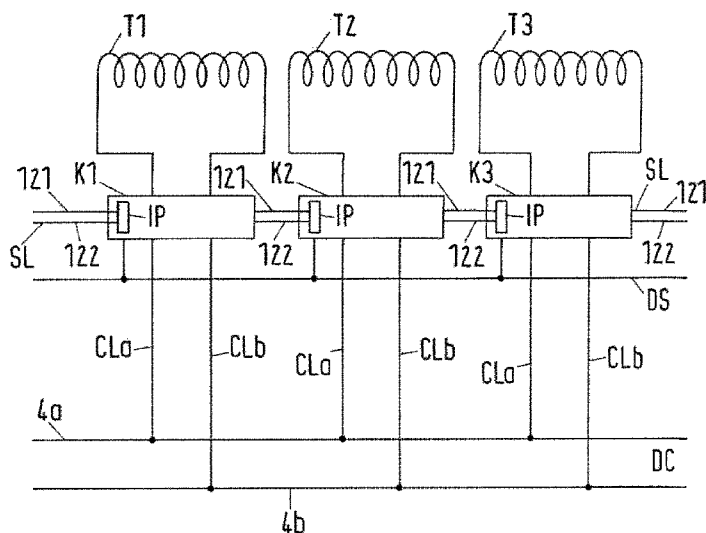


Fig.12

(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.



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