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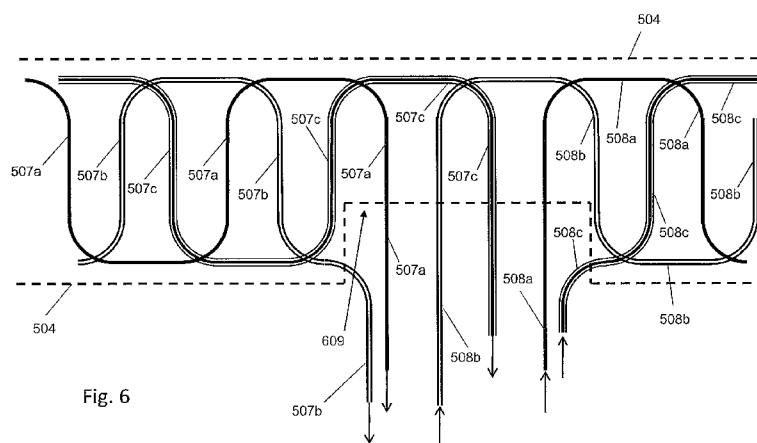
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(54) Title: INDUCTIVELY TRANSFERRING ELECTRIC ENERGY TO A VEHICLE USING CONSECUTIVE SEGMENTS WHICH ARE OPERATED AT THE SAME TIME



(57) **Abstract:** The invention relates to a system for transferring electric energy to a vehicle, 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, - the conductor arrangement comprises a plurality of consecutive segments (507, 508), wherein the segments extend in the direction of travel of the vehicle, which is defined by the track or path of travel, - each segment is combined with an assigned controller adapted to control the operation of the segment independently of the other segments, - the controllers of at least two consecutive segments (507, 508), which follow each other in the direction of travel of the vehicle, or which follow each other opposite to the direction of travel, are connected to each other and/or to a central controlling device so that the at least two consecutive segments (507, 508) can be operated at the same time, - each segment comprises at least three alternating current lines (507a, 507b, 507c; 508a, 508b, 508c) for carrying phases of a multi-phase alternating current in order to produce the alternating electromagnetic field, - the consecutive segments (507, 508) are electrically connected in parallel to each other to a current supply, - the alternating current lines (507a, 507b, 507c; 508a, 508b, 508c) of each segment comprise a plurality of sections which extend transversely to the direction of travel of the

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vehicle, - the transversely extending sections of the at least three alternating current lines (507a, 07b, 507c; 508a, 508b, 508c) of each segment form, if viewed in the direction of travel, a repeating sequence of phases (a, b, c) of the alternating current, while the segment is operated under control of the assigned controller, wherein each complete repetition of the sequence of phases comprises one transversely extending section of each phase and the order of the phases is the same in each complete repetition, - the controllers of the at least two consecutive segments (507, 508) and/or the central controlling device are/is adapted to operate the at least two consecutive segments (507, 08), so that the repeating sequence of phases (a, b, c) continues from one segment (507) to the consecutive segment (508), wherein the order of the phases is the same in the at least two consecutive segments (507, 508) and in each transition zone of two of the at least two consecutive segments (507, 508).