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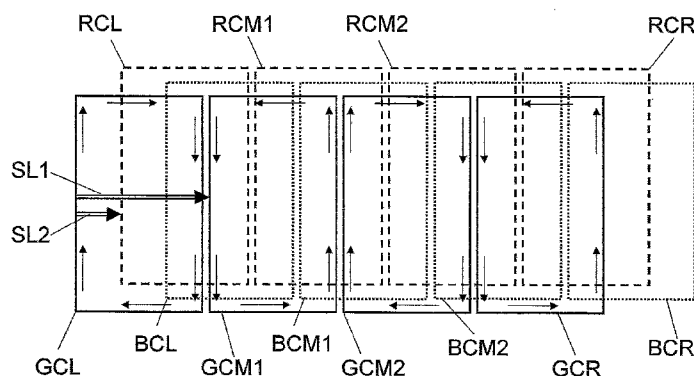
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(54) Title: PROVIDING A VEHICLE WITH ELECTRIC ENERGY USING A RECEIVING DEVICE ADAPTED TO RECEIVE AN ALTERNATING ELECTROMAGNETIC FIELD

Fig. 1



(57) **Abstract:** The invention relates to an arrangement for providing a vehicle (81) with electric energy, wherein the arrangement comprises a receiving device (85) adapted to receive an alternating electromagnetic field and to produce an alternating electric current by magnetic induction, wherein the receiving device (85) comprises a plurality of phase lines, each phase line being adapted to carry a different one of a plurality of phase currents of the alternating electric current, wherein each phase line forms at least two coils (C), each coil (C) consists of at least one turn of the phase line, if any one of the coils (C) consists of one turn, the turn is turning around a central axis of the coil, if any one of the coils (C) consists of more than one turn, the turns are consecutive sections of the phase line turning around a central axis of the coil (C), the at least two coils (C) of each phase line are located next to each other so as to form a sequence (G, R, B) of coils (GCL, GCM1, GCM2, GCR; RCL, RCM1, RCM2, RCR; BCL, BCM1, BCM2, BCR) which covers an effective area in a plane that extends perpendicularly to the central axes of the coils (C), so that there are a first (GCL; RCL; BCL) and a second (GCR; RCR; BCR) end coil at the opposite ends of the sequence and optionally, in the case of three or more coils, at least one middle coil in between the end coils of the sequence, for at least one of the phase lines (9, 10, 11), the number of turns per coil of the sequence (G, R, B) of coils (GCL, GCM1, GCM2, GCR; RCL, RCM1, RCM2, RCR; BCL, BCM1, BCM2, BCR) differs.



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