Claims

1. An arrangement for providing vehicles with energy by magnetic induction, wherein the arrangement comprises:
   - a primary side electric conductor arrangement (26) adapted to generate an electromagnetic field while an alternating electric current flows through the conductor arrangement (26) and
   - a field shaping layer (1a - 1d; 1e - 1f) comprising magnetizable material adapted to shape magnetic field lines of the electromagnetic field,

   wherein
   the field shaping layer (1a - 1d; 1e - 1f) comprises a plurality of elements (1) made of the magnetizable material, wherein neighbouring elements (1a, 1b; 1a, 1c) are positioned at a distance to each other,
   characterized in that
   the arrangement comprises the field shaping layer (1a - 1d; 1e - 1f) constituted as a composite layer comprising a plurality of the elements (1) made of the magnetizable material and comprising a continuous supporting layer (23), wherein neighbouring elements (1a, 1b; 1a, 1c) are positioned at a distance to each other and wherein the plurality of the elements (1) are fixed to the continuous supporting layer (23),
   the continuous supporting layer (23) is made of an electrically conducting material and
   the primary side electric conductor arrangement (26) is located at a distance to the plurality of elements (1),
   wherein the composite layer comprising the continuous supporting layer (23) and the plurality of the elements (1) has been unwound from a form of a coil or has been unfolded from a state in which sections of the composite layer are folded on top of each other.

2. The arrangement of claim 1, wherein the distance between two neighbouring elements (1) is smaller than the extension of the neighbouring elements (1) in the direction across the distance.

3. The arrangement of claim 1 or 2, wherein the ratio of the area within the field shaping layer (1a - 1d; 1e - 1f) occupied by the elements (1) made of magnetizable material on one hand to the total area of the field shaping layer (1a - 1d; 1e - 1f), including regions

within the field shaping layer (1a - 1d; 1e - 1f) free of magnetizable material, on the other hand is at least 70 % and is not greater than 97%.

4. The arrangement of one of claims 1 to 3, wherein the elements (1) are in the shape of tiles.

5. The arrangement of one of claims 1 to 4, wherein the elements (1) are evenly distributed over the extension of the field shaping layer (1a - 1d; 1e - 1f) in a longitudinal direction of the layer and/or in a lateral direction of the layer.

6. A method of generating an arrangement for providing vehicles with energy by magnetic induction, wherein:
   - a primary side electric conductor arrangement (26), adapted to generate an electromagnetic field while an alternating electric current flows through the conductor arrangement (26), is provided and
   - a field shaping layer (1a - 1d; 1e - 1f), comprising magnetizable material adapted to shape magnetic field lines of the electromagnetic field, is arranged in the ambience of the conductor arrangement (26),

   wherein
   the field shaping layer (1a - 1d; 1e - 1f) is arranged using a plurality of elements (1) made of the magnetizable material, wherein neighbouring elements (1) are positioned at a distance to each other,
   characterized in that
   the field shaping layer is constituted as a composite layer comprising a plurality of the elements (1) made of the magnetizable material and comprising a continuous supporting layer (23), wherein neighbouring elements (1a, 1b; 1a, 1c) are positioned at a distance to each other and wherein the plurality of the elements (1) are fixed to the continuous supporting layer (23),
   the continuous supporting layer (23) is made of an electrically conducting material and
   the primary side electric conductor arrangement (26) is located at a distance to the plurality of elements (1),
   wherein the composite layer comprising the continuous supporting layer (23) and the elements (1), the composite layer being wound in the form of a coil or being folded in sections on top of each other, is provided to and placed at a part of a target area on site and is unwound or unfolded so that it occupies the target area.

7. The method of claim 6, wherein the ratio of the area within the field shaping layer (1a - 1d; 1e - 1f) occupied by the elements (1) made of magnetizable material on one hand to the total area of the field shaping layer (1a - 1d; 1e - 1f), including regions within the field shaping layer (1a - 1d; 1e - 1f) free of magnetizable material, is at least 70% and is not greater than 97%.

8. The method of claim 6 or 7, wherein neighbouring elements (1) are positioned at a distance to each other which is smaller than the extension of the neighbouring elements (1) in the direction across the distance.

9. The method of one of claims 6 to 8, wherein the elements (1) are evenly distributed over the extension of the field shaping layer (1a - 1d; 1e - 1f) in a longitudinal direction of the layer and/or in a lateral direction of the layer.

~~10. The method of one of claims 6 to 9, wherein the composite layer comprising the continuous supporting layer (23) and the elements (1), the composite layer being wound in the form of a coil or being folded in sections on top of each other, is provided to and placed at a part of a target area on site and is unwound or unfolded so that it occupies the target area.~~