FERRITE CORE STRUCTURE FOR A POWER SUPPLY DEVICE OF AN ELECTRIC VEHICLE AND POWER SUPPLY ROAD STRUCTURE USING SAME

ABSTRACT

The present invention relates to a ferrite core structure for a power supply device of an electric vehicle which changes the structure of a ferrite core module according to a related art to improve output and limits a reduction in strength due to warpage in a traveling direction of the vehicle to prevent cracks generated in a surface of an intermediate portion of a power supply road from occurring. For this, the ferrite core structure for a power supply device of the electric vehicle includes: a plurality of horizontal core parts arranged spaced apart from each other to prevent a magnetic flux from leaking into the ground; a plurality of first vertical core parts extending upward from both ends of the horizontal core parts to prevent the magnetic flux from leaking into an outer surface; a second vertical core part having at least two rows extending upward from an intermediate portion of each of the horizontal core parts, the second vertical core part being arranged in a direction parallel to the first vertical core parts; and a first support part connecting the plurality of first vertical core parts to each other to support the first vertical core parts.

FIGURE 3