CLAIMS

1. A ferrite core structure for a power supply device of an electric vehicle, the ferrite core structure comprising:

a plurality of horizontal core portions arranged to be spaced apart from each other to prevent a flux leakage into the ground;

a plurality of first vertical core portions formed to extend from both end portions of the horizontal core portions in a direction of an upper side of the horizontal core portions to prevent the flux leakage into an outer side surface;

at least two columns of second vertical core portions formed to extend from a central portion of the horizontal core portions in a direction of the upper side of the horizontal core portions and arranged to be parallel to the first vertical core portions; and

a first supporting portion to connect the plurality of first vertical core portions to each other to support the first vertical core portions~~,~~

~~wherein the second vertical core portions disperse a deflection load applied to both side surfaces of the second vertical core portions to prevent a formation of cracks on a surface of an intermediate portion of a power supply road~~.

2. The ferrite core structure of claim 1, wherein the horizontal core portions, the first vertical core portions, and the second vertical core portions include a ferrite material.

3. The ferrite core structure of claim 1, wherein the at least two columns of the second vertical core portions are disposed to be spaced apart from each other.

4. The ferrite core structure of claim 1, further comprising:

a second supporting portion to connect the plurality of horizontal core portions to each other to support the horizontal core portions.

5. A power supply road comprising:

a ferrite core structure for a power supply device of an electric vehicle of one of claims 1 to 4; and