

**METHOD AND DEVICE FOR DESIGNING A CURRENT SUPPLY AND
COLLECTION DEVICE FOR A TRANSPORTATION SYSTEM USING AN
ELECTRIC VEHICLE**

5

ABSTRACT

Provided is a method for designing a current supply device for wirelessly supplying power to a vehicle having a current collection device. In the design method, the gap between two adjacent magnetic poles of the current supply device is received as input and then the gap between the current supply device and the current collection device is determined based on the gap between the two magnetic poles. Next, the magnitude of the power to be supplied to the current supply device is determined based on the value required with respect to the magnitude of the magnetic field and the gap between the current supply device and the current collection device. According to the design method, current supply devices can easily be designed since various functional requirements are decoupled from each other.

15

Figure 4