Abstract

In this paper a Microstrip patch fractal antenna in a Sierpinski carpet is proposed for the Wireless Power Transmission (WPT) System. The design and simulation results of 2.45 GHz Microstrip patch fractal antenna are presented. The antenna is designed based on the transmission line model with the input impedance of 50Ω. The simulation results are well matched with the calculated values and show that the size of the antenna can be reduced to 31.26% from the conventional patch antenna. The simulation of the proposed antenna is done by Zeland Inc's IE3D software.

Reference


Index Terms

Power Engineering Transmission Systems

Key words

Microwave Power Transmission (MPT)

Sierpinski fractal
Microstrip patch fractal antenna

Rectenna

Solar Power Satellites (SPS)

Wireless Power Transmission (WPT)