Abstract Details

Title: A Review on Fractal Antenna

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Abstract: Now days, there is highly demand of antenna with these characteristics (1) Compact size (2) Low profile and (3) Multiband or broad band. As well as it have to maintain antenna parameters (i.e. Gain, Efficiency, Return loss, Directivity etc.). With advancement in communication technology over the past decade, there is an increasing demand for miniaturization, cost effective, multiband and wideband antennas. Fractal antenna designs can support in meeting these requirements. Though these antennas provide several advantages but at the same time miniaturization and performance of the fractal antennas can be further enhanced using reconfiguration concept. Fractal antenna theory is built, as is the case with conventional antenna theory, on classic electromagnetic theory. Fractal antenna theory uses a modern (fractal) geometry that is a natural extension of Euclidian geometry. Fractal antenna have valuable application in cellular telephony and in microwave engineering .But as size of antenna decreases bandwidth support also decreases. New fractal geometry for microstrip antennas is presented in this paper. In this paper fractal antenna is designed using triangular Koch curve and Sierpinski gasket fractal geometries. In this work two designs of fractal antennas have been studied.

Keywords: Fractral antenna, Sierpinski Gasket, iteration factor, Koch curve.