

## Single Feed Circularly Polarized Poly Fractal Antenna for Wireless Applications

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**Abstract :** A circularly polarized fractal boundary microstrip antenna is presented. The sides of a square patch along x-axis, y-axis are replaced with Minkowski and Koch curves correspondingly. By using the fractal curves as edges, asymmetry in the structure is created to excite two orthogonal modes for circular polarization (CP) operation. The indentation factors of the fractal curves are optimized for pure CP. The simulated results of the novel poly fractal antenna are demonstrated.

**Keywords :** fractal, circular polarization, Minkowski, Koch

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