

## Design and Analysis of a New Dual-Band Microstrip Fractal Antenna

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**Abstract :** This paper presents a novel design of a microstrip fractal antenna based on the use of Sierpinski triangle shape, it's designed and simulated by using FR4 substrate in the operating frequency bands (GPS, WiMAX), the design is a fractal antenna with a modified ground structure. The proposed antenna is simulated and validated by using CST Microwave Studio Software, the simulated results presents good performances in term of radiation pattern and matching input impedance.

**Keywords :** dual-band antenna, fractal antenna, GPS band, modified ground structure, sierpinski triangle, WiMAX band

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