Abstract

This paper investigates a compact tri-band patch antenna fed by a coplanar waveguide (CPW) line for the applications of WiFi, WiMAX and HiperLAN. The dimensions of the proposed antenna are optimized using genetic algorithms (GAs). The antenna is designed to function at three different resonant frequencies which are 2.46 GHz, 3.56 GHz and 5.5 GHz. Numerical results for the return loss, radiation pattern and gain of the antenna are presented. The antenna structure was fabricated, and the measured results have a good agreement with the full-wave simulated ones