Abstract

A compact microstrip patch antenna with wide operational bandwidth is presented. The proposed design consists of rectangular patch antenna in ring shaped with U-slots cut in ground. Antenna is fed by microstrip line. The performance of rectangular patch antenna has been discussed and analyzed by modification of the width and length of patch dimensions as given in the previous work [1]. The design proposed that antenna is having good bandwidth, gain and return loss in frequency band between 3.5-5 GHz. At resonant frequency 2 GHz antenna has bandwidth of 10% and return loss up to -44 dB which are good as compare to reference results. Proposed antenna has been analyzed using IE3D and simulated results are
presented in terms of bandwidth, gain and return loss at different frequencies.

References

- Nagarajan V., Chita R. Jothi "Double L-Slot Microstrip Patch Antenna for Wimax and WLAN applications" Department of Electronics and Communication Engineering, Adhiparasakhi Engineering College, Chennai, India.

Index Terms

Computer Science

Antennas
Keywords
Microstrip Line  Dgs U-shape  Ring Patch Antenna  Slots Cutting.