Abstract

A modified design of an ultra-wide band antenna (UWB) using stepped feed, partial slotted ground, two level stairs with notches in patch and ground plane is simulated with band rejection feature. The enhanced frequency range (3.2 to 14.0 GHz) is covered by the proposed antenna with the overall dimensions of 25.0 (L) x 20.0 (W) x 1.60 (H) mm3. The voltage standing wave ratio (VSWR) is less than 2.0 for entire operating frequency range. The
design of stair and slotted UWB antenna using stepped-feed with Modified Slotted Ground Plane

proposed antenna operating on 5. 2/5. 8 GHz wireless local area network (WLAN), 3. 5/5. 5 GHz WiMAX, X-band and partial range (12. 0 to 14. 0 GHz) of Ku-band finds its applications to secure military communication, radar, medical applications and home appliances.

References

- Jianli Pan (A survey paper written under guidance of Prof. Raj Jain) medical application of ultra —wideband (UWB)

Index Terms

Computer Science Wireless Networks
Keywords
Ultra-wide Band    Voltage Standing Wave Ratio    Wireless Local Area Network    Wimax.