

DESIGN AND COMPARISON OF SLOTTED PATCH ANTENNA WITH EBG STRUCTURE

D.Vidhya

Student, II year ME (CS),

Electronics and Communication Engineering

Sri Venkateswara College of Engineering Pennalur, Sriperumbudur, India

Dr.P.Jothilakshmi

Professor

Electronics and Communication Engineering

Sri Venkateswara College of Engineering

Pennalur,Sriperumbudur, India

This paper focuses the microstrip slotted patch antenna with EBG structure at a frequency of 2.4GHz is design for ISM band.The proposed antenna structure is design with a ground plane and has a dimension of 30.5mm x 46mm x 1.57mm. The simulation software used for this design is ADS.The performance of the designed antenna is analyzed and then compared with slotted patch antenna without EBG structure. The results reveals that the slotted patch antenna with EBG structure produces a return loss which is suitable for wireless application such as WLAN and Wi-Fi outdoors. The designed antenna can be printed with FR4 substrate on a print circuit board (PCB).