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<p>(51) International classification :H01Q0021060000, H01Q0001380000, H01Q0021000000, H01Q0001500000, H01Q0013020000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant :</p> <p>1)Dr. Amar Sharma Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering , SET, IFTM University, Moradabad, Uttar Pradesh, Pin Code : 244102 -----</p> <p>2)Dr. Puneet Khanna 3)Mr. Sanjeev Kumar Singh 4)Mr. Ravindra Pratap Singh 5)Dr. Rupali Agarwal</p> <p>(72)Name of Inventor :</p> <p>1)Dr. Amar Sharma Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering , SET, IFTM University, Moradabad, Uttar Pradesh, Pin Code : 244102 -----</p> <p>2)Dr. Puneet Khanna Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>3)Mr. Sanjeev Kumar Singh Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering , IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>4)Mr. Ravindra Pratap Singh Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, B.T. Kumaon Institute of Technology, Dwarahat, Almora, Uttarakhand, Pin Code: 263653 -----</p> <p>5)Dr. Rupali Agarwal</p>
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(57) Abstract :

The present invention relates to rectangular microstrip array antenna (100). The present invention is a modified 1×2 rectangular microstrip array antenna (100). The wideband rectangular microstrip array antenna (100) comprises an array antenna unit and a power feed unit. The array antenna unit (100) is fed by the corporate feed network which is simple and cost-effective. The resonance frequency of the antenna is 9.2 GHz and is designed using FR4 Epoxy substrate with Dielectric constant 4.4 and height =1.66. The bandwidth of the array antenna unit (100) is improved by incorporating slots in the radiating patches. The analysis of modified 1×2 rectangular microstrip array antenna (100) is presented in terms of return loss, VSWR, and radiation pattern. The design of a modified 1×2 rectangular microstrip array antenna (100) is suitable for X-band applications such as satellite communication, radar, and modern communication system.

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