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(54) Title of the invention : A SUNDRY-BAND ANNULAR RING-SHAPED MICROSTRIP PATCH ANTENNA WITH A DEFECTED GROUND STRUCTURE

<p>(51) International classification :H01Q0009040000, H01Q0001380000, H01Q0001500000, H01Q0001480000, H01Q0021080000</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)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>2)Dr. Puneet Khanna</p> <p>3)Mrs. Shilpi Pal</p> <p>4)Ms. Rachna Arya</p> <p>5)Mr. Lalit Garia</p> <p>6)Dr. Neelu Trivedi</p> <p>7)Dr. Amar Sharma</p> <p>Name of Applicant : NA</p> <p>Address of Applicant : NA</p> <p>(72)Name of Inventor :</p> <p>1)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>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)Mrs. Shilpi Pal Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>4)Ms. Rachna Arya Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, B.T Kumaon Institute of Technology, Dwarahat, Uttarakhand, Pin Code: 263653 -----</p> <p>5)Mr. Lalit Garia Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, B.T Kumaon Institute of Technology, Dwarahat, Uttarakhand, Pin Code: 263653 -----</p> <p>6)Dr. Neelu Trivedi Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p> <p>7)Dr. Amar Sharma Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, IFTM University, Moradabad, Uttar Pradesh, Pin Code: 244102 -----</p>
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(57) Abstract :

The present invention relates a sundry-band annular ring-shaped microstrip patch antenna (100) with a defected ground structure. The sundry-band annular ring-shaped microstrip patch antenna (100) comprises a dielectric substrate, a radiation patch and a ground plate. The radiation patch has an annular radiating patch. The annular radiating patch is operationally connected with the dielectric substrate. The ground plate has defected ground structure. The ground plate is operationally connected with the dielectric substrate and annular radiating patch. The defected ground structure plate and annular radiating patch are connected to a microstrip feed line. The defected ground structure plate is a positioned beneath a microstrip feed line or antenna (100) and aligned for proper coupling to the microstrip feed line or antenna (100). The present invention provide a sundry-band annular ring shaped microstrip patch antenna (100) with defected ground structure has an efficiency of 88% and omnidirectional radiation patterns over the entire frequency band.

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