

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202141007311 A

(19) INDIA

(22) Date of filing of Application :22/02/2021

(43) Publication Date : 26/02/2021

(54) Title of the invention : A MULTIPLE-INPUT MULTIPLE-OUTPUT (MIMO) ULTRA-WIDEBAND MIMO (UWB) ANTENNA

<p>(51) International classification</p> <p>(31) Priority Document No</p> <p>(32) Priority Date</p> <p>(33) Name of priority country</p> <p>(86) International Application No</p> <p>Filing Date</p> <p>(87) International Publication No</p> <p>(61) Patent of Addition to Application</p> <p>Number</p> <p>Filing Date</p> <p>(62) Divisional to Application Number</p> <p>Filing Date</p>	<p>(71)Name of Applicant :</p> <p>1)Dr. K. Vasu Babu Address of Applicant :Vasireddy Venkatadri Institute of Technology/ ECE & Associate Professor Nambur (V), Peda Kakani(Md) Guntur (Dt) Andhra Pradesh-522508 Andhra Pradesh India</p> <p>2)G. Naveen Kumar</p> <p>3)T. Vijaya Kumar</p> <p>4)V. Poorna Chandra Reddy</p> <p>5)R. Tejaswani</p> <p>6)K. Prasanthi</p> <p>7)K. Ramesh Babu</p> <p>8)Mande Srinivasa Rao</p> <p>9)N. Sowjanya</p> <p>10)B. Durga Prasad</p> <p>(72)Name of Inventor :</p> <p>1)Dr. K. Vasu Babu</p> <p>2)G. Naveen Kumar</p> <p>3)T. Vijaya Kumar</p> <p>4)V. Poorna Chandra Reddy</p> <p>5)R. Tejaswani</p> <p>6)K. Prasanthi</p> <p>7)K. Ramesh Babu</p> <p>8)Mande Srinivasa Rao</p> <p>9)N. Sowjanya</p> <p>10)B. Durga Prasad</p>
--	---

(57) Abstract :

The present invention discloses Multiple-Input Multiple-Output (MIMO) Ultra-Wideband MIMO (UWB) antenna. The present invention provides an opportunistic control of UWB MIMO design for wireless applications to reduce the mutual coupling. The present invention is comprised of, but not limited to, a half circular split ring resonator (SRR) in a circular patch, a rectangular shape stub is further provided to the circular patch, a defect in a Ground Structure is also provided the ground plane to obtain the higher impedance bandwidth. In addition, to strip both sides $\sim C^{TM}$ shaped rectangular stubs are provided to obtain a UWB region.

No. of Pages : 29 No. of Claims : 7