

**SSN COLLEGE OF ENGINEERING**  
**DEPARTMENT OF ECE - PATENTS**

Sr. No	Name of the Patent	Patent Filed Date	Name of the Faculty Inventors	Patent reference number	Status
					Published/Granted with Date
1	Fractal Inspired Loop Elements Based 2.5-D Miniaturized Frequency Selective Surface	24.05.2022	Dr. S Ramprabhu	202241029873	Filed
2	IoT based Multi-Purpose Smart Fabric Curtain	12.02.2022	Dr. Edna Elizabeth.N,	202241007546	Filed
3	Finger Kinetic Cap for Parkinson's Disease Diagnosis	17.09.2021	Dr. Esther Florence S,	202141040125	Published
4	Frequency Agile Beam Scanning Reflectarray Antenna (RA) with an Integrated Electronic Control Board	16.09.2021	M Gulam Nabi Alsath, S Kirubaveni,)	202141041836	FER Replied
5	Novel Optically Transparent UWB MIMO Antenna System: A method and device thereof	15.03.2021	M Gulam Nabi Alsath, S Kirubaveni S. Radha	202141010975	FER Replied

6	Quad Band RF shield using a mechanically configurable venetian blind structure	15.03.2021	Dr. Esther Florence S,	202141010951	Published
7	Dual polarized MIMO UWB system: a method and device thereof	17.11.2020	Gulam Nabi Alsath M,	US17/099,841	Granted - US11342678B1 dated 24/05/2022
8	A System, Device and Method for Plant Disease Detection and Alert.	13.11.2020	Dr. S. Radha, Dr. R. Hemalatha,	202041047647	Published
9	Multifunctional sensors for the detection of toxic gases and pipeline leakages in the sewage system	13.11.2020	Dr. S. Radha, Dr. S. Kirubaveni,	202041047648	Published
10	One Stretch Micromachining of Microfluidic Chip with Microchannels and Micro-holes using Ultrashort Laser	13.11.2020	Dr. S. Radha, Dr. B. S. Sreeja,	202041047649	FER Replied
11	Optically Transparent Multiband Antenna: A Method & Device Thereof	13.11.2020	Gulam Nabi Alsath.M,	202041009264	Granted on 02/11/2020. Patent No.:350627

12	Beam Steerable Antenna: A method and device thereof	30.12.2019	M. Gulam Nabi Alsath	201941054575	Granted on 05.11.2021. Patent No: 381305
13	Directional UWB Antenna: A method and device thereof	27.12.2019	Gulam Nabi Alsath,	201941054091	Published
14	Flexible Wearable Sensor for Wireless Screening of Obstructive Sleep Apnea	26.11.2019	Dr Esther Florence S	201941048258	Filed
15	Ultra-Wideband (UWB) Reconfigurable Filtering Antenna: A Method & Device Thereof	20.08.2019	Dr Gulam Nabi Alsath, Dr Kirubaveni, B.	201941033454	Published
16	Speech-input speech-output communication aid for speakers with cerebral palsy	02.08.2019	Dr. P. Vijayalakshmi,	201941031287	FER received

17	Multiband Reconfigurable Microwave Filtenna	24.02.2018	M Gulam Nabi Alsath,	US 10333225/2019	Granted on 25.06.2019
18	Multiband Pattern Reconfigurable Antenna: A Method and Device Thereof	05.08.2019	M Gulam Nabi Alsath,	201941031648	Published
19	Multiband Folded Antenna for Tablet Computers	15.10.2018	M Gulam Nabi Alsath,	201841039028A	Published
20	Hidden Markov model-based sign language to speech conversion system in Tamil	11.10.2018	Dr. P. Vijayalakshmi	201841038594	FER received

21	A method of fabricating micro features in NbN superconductor using ns-pulsed laser	12.09.2018	Dr.B.S.Sreeja , Dr.S.Radha,	201841030305/CHE/2018.	Published
22	Quantifying Cholesterol Level in Human Serum using Laser Induced Breakdown Spectroscopy	21.09.2018	Dr.S.Radha, Dr.B.S.Sreeja	201841030310/CHE/2018	Published
23	Early Warning Asthma Trigger Detection System	10.07.2018	Dr.A.Jawahar ,	TN-PIC/2018/PA039	Filed
24	Tunable Band Notched Filtenna	15.06.2018	M Gulam Nabi Alsath, Ramprabhu S,	201841021702	Published
25	Microstrip Antenna Based Flexible Sensor for Fracture	11.06.2018	Dr Esther Florence S	201841021701	Filed

26	Multiband MIMO antenna for tablet application	11.01.2018	Ramprabhu S,	201841001232	Published
27	A Design To Achieve Multiband Operation In Miniaturized Antennas And The Device Thereof	21.08.2017	M Gulam Nabi Alsath, Ramprabhu S,	201741029510	Published

28	A Method To Achieve Compound Reconfiguration In Microstrip Filters And The Device Thereof	21.08.2017	M Gulam Nabi Alsath,	201741029509	Published
29	Planar Microwave Sensor For Fracture Detection In Human Bones	21.08.2017	Esther Florence S,	201741029503	Filed
30	Compound Reconfigurable Antenna Array	09.08.2017	M Gulam Nabi Alsath,	201741028261	Published
31	A bio organic nanocomposite membrane for heavy metal adsorption and preparation method there of	13.04.2017	Dr.B.S.Sreeja , Dr.S.Radha,	201741013238	Published

32	Polarization Independent Reconfigurable 3-D Frequency Selective Surface and method thereof	22.09.2016	Dr. S. Ramprabhu	201641032341	Filed
33	Novel 3T head actuation mechanism with low actuation voltage for bistable switching mechanism	07.04.2016	Dr.B.S.Sreeja , Dr.S.Radha,	201641012220	FER Replied
34	Compact Mushroom Shaped Multiband Antenna with slot loaded elliptical Microstrip and improved Performance	08.07.2016	Dr.B.S.Sreeja , Dr.S.Radha,	201641023407	Granted on 26-06-2020
35	Shared Aperture Multi-service Antenna for Automotives	9.12.2015	Dr.Gulam Nabi Alsath,	6413/CHE/2014	Published
36	Method And Apparatus For Non-Destructive Testing Of Composites Using Planar Sensor	6.10.2015	Esther Florence S	5338/CHE/2015 A	Filed
37	A Method and device for a passive Reconfigurable Frequency Selective Surface	19.10.2015	Dr. S. Ramprabhu	5621/CHE/2015	Filed

38	A Device and Method to Fabricate Ultra-wideband Microstrip Grid Array Antenna (GAA)	6.10.2015	Dr.Gulam Nabi Alsath, Dr.	5337/CHE/2015	Published
39	A UHF RFID Reader Antenna Integrated With Near Field And Farfield Operations	6.10.2015	Dr. Gulam Nabi Alsath	5336/CHE/2015	Granted. Patent No.: 322861: Date: 25.09.2019
40	A Method to Fully Integrate Multi-Layer Woven Electro-Textile Patch Antenna	19.10.2015	Dr Esther Florence S,	5620/CHE/2015	Granted on 25.06.2021. Patent No: 370289
41	Mutual coupling reduction in MIMO Antenna with serpentine type structure resonator	30.05.2014	Dr.Gulam Nabi Alsath,	2660/CHE/2014	Granted on 17.05.2021. Patent No: 366853
42	Dual band notched dielectric resonator reflect array for C/X band	4.04.2012	Dr.Gulam Nabi Alsath,	1374/CHE/2012	Granted on 12/03/2020. Patent No.: 334492