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<p>(51) International classification :G06Q0010060000, H04W0052020000, H04W0016140000, H04W0004800000, G06F0009500000</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 : 1)Dr. V. Violet Juli Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Periyar Maniammai Institute of Science & Technology, Vallam, Thanjavur-613403 ----- 2)Dr. M. Chennakesavulu 3)Dr. M. Arul Prakash 4)Ms.Anitha Mary M 5)Dr. G. Kharmega Sundararaj 6)Mr.Manjunathan Alagarsamy Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr. V. Violet Juli Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Periyar Maniammai Institute of Science & Technology, Vallam, Thanjavur-613403 ----- 2)Dr. M. Chennakesavulu Address of Applicant :Associate Professor, Department of Electronics and Communication Engineering, Rajeev Gandhi Memorial College of Engineering and Technology, Nerawada ‘X’ Roads, Nandyal-518501 ----- 3)Dr. M. Arul Prakash Address of Applicant :Associate Professor, Department of Mechanical Engineering, Sri Sairam Engineering College, West Tambaram, Chennai - 600044 ----- 4)Ms.Anitha Mary M Address of Applicant :Assistant Professor (SS), Department of Electronics and Communication Engineering, Rajalakshmi Engineering College, Rajalakshmi Nagar, Thandalam, Chennai-602105 ----- 5)Dr. G. Kharmega Sundararaj Address of Applicant :Associate Professor, Department of Computer Science and Engineering, Dr. T. Thimmaiah Institute of Technology, Kolar Gold Fields (KGF), Karnataka, India - 563120 ----- 6)Mr.Manjunathan Alagarsamy Address of Applicant :Assistant Professor, Department of Electronics and Communication Engineering, K.Ramakrishnan College of Technology, Trichy - 621112 -----</p>
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(57) Abstract :
[049] The proposed innovation, "B5G6G Terrestrial Wireless Communication Systems by Harmonizing Requirements with Environments," represents a groundbreaking advancement in wireless technology. This invention addresses the growing demands of wireless communication while prioritizing environmental sustainability and health considerations. It introduces novel power management techniques that enable dynamic sleep modes for base stations during periods of low network activity, reducing operational costs and carbon emissions. Additionally, the system minimizes electromagnetic radiation through innovative antenna designs, signal processing, and beamforming technologies, mitigating health risks and environmental impacts. Responsible infrastructure deployment is achieved through low-profile and environmentally integrated components, preserving natural aesthetics and ecosystems. The innovation facilitates efficient resource management, real-time environmental monitoring, and the development of smart and sustainable cities. Moreover, it connects remote and underserved communities, bridging digital divides and supporting environmental conservation efforts. This invention represents a transformative approach to wireless technology, fostering a harmonious coexistence between technology and nature while advancing ecological responsibility and sustainability. Accompanied Drawing [FIGS. 1-2]

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