(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :05/10/2025
(21) Application No.202511095615 A
(43) Publication Date : 05/12/2025

(54) Title of the invention : AN APPARATUS FOR REAL-TIME TEMPERATURE MONITORING IN COMMUNICATION SERVERS

(51) International classification	:G06Q0020400000, H04W0084180000, G05B0023020000, H04W0028100000, G05D0023190000
(31) Priority Document No	:NA
(32) Priority Date	:NA
(33) Name of priority country	:NA
(86) International Application No Filing Date	: :01/01/1900
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)**Name of Applicant :**
1)NOIDA INSTITUTE OF ENGINEERING & TECHNOLOGY
Address of Applicant :19, Knowledge Park-II, Institutional Area, Greater Noida – 201306, Uttar Pradesh, India. Uttar Pradesh India
(72)**Name of Inventor :**
1)Dr. DHANANJAY SINGH
2)NIDHI SHARMA

(57) Abstract :
The invention relates to an apparatus for real-time temperature monitoring in communication servers. The apparatus comprises temperature sensor nodes (101), a microcontroller-based processing unit (102), a communication interface (103), a predictive algorithm module (104), and a cooling system integration unit (105). The system continuously monitors server components, analyzes data using predictive algorithms, and dynamically manages cooling systems. The apparatus ensures high precision, energy efficiency, and improved reliability in communication servers by preventing overheating, supporting predictive maintenance, and enhancing operational lifespan of server components.

No. of Pages : 14 No. of Claims : 6