

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202511100954 A

(19) INDIA

(22) Date of filing of Application :18/10/2025

(43) Publication Date : 05/12/2025

(54) Title of the invention : AN IoT-BASED FRAMEWORK FOR REAL-TIME ENVIRONMENTAL WEATHER MONITORING

(51) International classification	:H04L0067100000, H04L0067120000, H04L0009400000, G06F0009451000, G08B0025100000	(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
(31) Priority Document No	:NA	(72) Name of Inventor :
(32) Priority Date	:NA	1)RAJEEV KUMAR
(33) Name of priority country	:NA	2)Dr. AMBA MISHRA
(86) International Application No	:	
Filing Date	:01/01/1900	
(87) International Publication No	: NA	
(61) Patent of Addition to Application Number	:NA	
Filing Date	:NA	
(62) Divisional to Application Number	:NA	
Filing Date	:NA	

(57) Abstract :

The invention discloses an IoT-based framework (100) for real-time environmental weather monitoring comprising distributed sensor nodes (101), wireless communication modules (102), cloud computing and storage (103), analytics engine (104), renewable energy modules (106), and user interfaces (105). The system captures multiple weather parameters, processes them in real time, and provides predictive alerts, ensuring localized and reliable environmental monitoring for agriculture, disaster management, and public use. The modular design ensures cost-effectiveness, scalability, and adaptability across diverse regions.

No. of Pages : 15 No. of Claims : 6