(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :16/10/2025
(21) Application No.202511100101 A
(43) Publication Date : 05/12/2025

(54) Title of the invention : A COMPUTER SYSTEM FOR REAL-TIME FLOOD RISK PREDICTION

(51) International classification	:G06Q0010063500, G06Q0050260000, G06F0016250000, G06F0011360000, G01N0033000000
(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)DEEPAK SHARMA
2)Dr. VINEET KUMAR

(57) Abstract :
The present invention discloses a computer system (100) for real-time flood risk prediction integrating environmental sensors (102), satellite data (104), AI/ML analytics (106), and hydrological model integration (108). The system provides real-time flood-risk mapping, alerts through user interface (110), and scalable cloud architecture (112). A predictive simulation unit (114) enables proactive disaster planning. Experimental validation confirms reliability in urban and rural deployments, ensuring timely alerts, improved accuracy, and enhanced community resilience against flood hazards.

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