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| <p>(51) International classification :G06Q50/02, G06N3/08, G06N20/00</p> <p>(86) International Application No :NA<br/>Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA<br/>Filing Date :NA</p> <p>(62) Divisional to Application Number :NA<br/>Filing Date :NA</p> | <p>(71)Name of Applicant :<br/><b>1)NOIDA INSTITUTE OF ENGINEERING &amp; TECHNOLOGY</b><br/>Address of Applicant :19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar -----</p> <p><b>Name of Applicant : NA</b><br/><b>Address of Applicant : NA</b></p> <p>(72)Name of Inventor :<br/><b>1)MR. MOHIT KUMAR</b><br/>Address of Applicant :NOIDA INSTITUTE OF ENGINEERING &amp; TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar -----</p> <p><b>2)MS. ANURADHA SINGH</b><br/>Address of Applicant :NOIDA INSTITUTE OF ENGINEERING &amp; TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar -----</p> <p><b>3)RISHABH</b><br/>Address of Applicant :NOIDA INSTITUTE OF ENGINEERING &amp; TECHNOLOGY, 19, KNOWLEDGE PARK-II, INSTITUTIONAL AREA, GREATER NOIDA-201306, GAUTAM BUDDHA NAGAR, UTTAR PRADESH, INDIA Gautam Buddha Nagar -----</p> |
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(57) Abstract :  
Disclosed herein is a farmsight AI: intelligent crop wellness monitoring system (100) comprises a data acquisition module (102) configured to collect multispectral and hyperspectral imagery and environmental sensor data from agricultural fields via one or more data collection devices. The system also includes a pre-processing module (104) configured to clean, normalize, and prepare the acquired data for analysis. The system also includes an artificial intelligence engine (106) comprising a convolutional neural network (CNN) trained to analyze pre-processed imagery to detect symptoms of crop diseases, nutrient deficiencies, and other plant health anomalies. The system also includes a real-time analytics and decision-making module (108) configured to generate actionable insights and recommendations based on the AI analysis. The system also includes a user interface module (110) accessible through smartphones or web applications, configured to display monitoring results, alerts, and recommendations to the end-user in real time.

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