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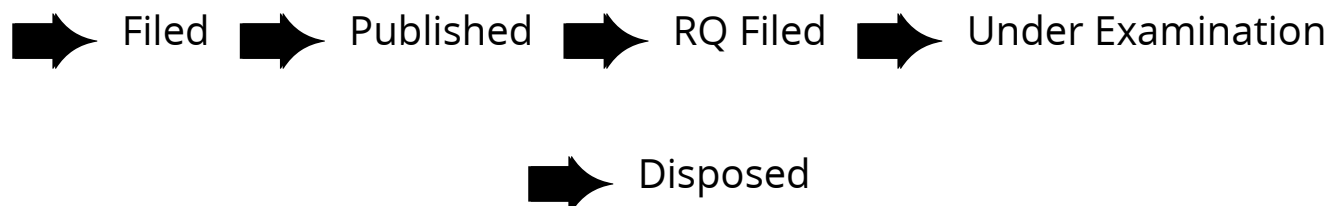
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Application Details	
APPLICATION NUMBER	202041004551
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	01/02/2020
APPLICANT NAME	1 . Dr. M Purushotham Reddy 2 . Dr. L Lakshmi 3 . Dr. K Srinivasa Reddy 4 . U Sivaji 5 . N Bhaswanth 6 . Dr. Ch Srinivasulu 7 . Dr. Ganti Naga Satish 8 . Dr. O. Obulesu
TITLE OF INVENTION	REAL TIME CROP MONITORING USING INTERNET OF THINGS (IOT) BASED PRECISION AGRICULTURE
FIELD OF INVENTION	COMMUNICATION
E-MAIL (As Per Record)	purushotham.mps@gmail.com
ADDITIONAL-EMAIL (As Per Record)	purushotham.mps@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	07/02/2020

Application Status

APPLICATION STATUS

Awaiting Request for Examination

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Patent Search

Invention Title	REAL TIME CROP MONITORING USING INTERNET OF THINGS (IOT) BASED PRECISION AGRICULTURE
Publication Number	06/2020
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Application Number	202041004551
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Field Of Invention	COMMUNICATION
Classification (IPC)	H04L0029080000,H04W0004380000,H04W0004200000,G06Q0050020000,A61B0005043200

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Abstract:

The present invention is related to a real time crop monitoring using internet of things (IoT) based precision agriculture. The objective of the present invention is to overcome the inadequacies of the prior art in remote monitoring the agriculture using sensor network. The system sends the real time agriculture monitoring data and alert message to mobile computing device.

Complete Specification

Claims:1. A system of precision agriculture for real time crop monitoring using internet of things (IoT) of a agriculture field , the system comprising:
A moisture sensing module, comprise plurality of moisture sensor network placed at the different location of field to sense the soil moisture of the agriculture field;
A temperature sensing module comprises plurality of temperature sensor to measure temperature of the agriculture field;
A wind speed measuring module, to measure the wind speed in the agriculture field;
A greenness sensing module, wherein the greenness sensing module comprises at least one visual-IR sensor, placed at a sufficient height to measure the Normalized Difference Vegetation Index (NDVI) value of the crop of the agriculture field;
A controlling unit, the controlling unit comprises,
A data storage unit, wherein the data storage unit has the data related to crop and past history of the particular crop,
A navigation system, &
A communication unit to connect to a network to get the information about the forecasting of weather , wherein the controlling unit wireless connect & processes the signal from the moisture sensing module, the temperature sensor, the wind speed measuring module, the greenness sensing module with the forecasting data , history of the crop, type of the crop and health of the crop, and communicate the processed signal to at least one mobile computing device to display the information on a display of the mobile computing device.

2. The system of precision agriculture for real time crop monitoring using internet of things (IoT) of the agriculture field as claimed in claim 1, the mobile computing device is a smart phone.

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Page last updated on: 26/06/2019

FORM 1
THE PATENTS ACT, 1970
(39 of 1970)
&
THE PATENTS RULES, 2003
APPLICATION FOR GRANT OF PATENT
[See sections 7,54 & 135 and rule 20(1)]

(FOR OFFICE USE ONLY)

Application No.:

Filing Date:

Amount of Fee Paid:

CBR No.:

Signature:

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3	Dr. K Srinivasa Reddy	India	Professor, Department of Information Technology, Institute of Aeronautical Engineering, Hyderabad-500043	India	Telangana
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8	Dr. O. Obulesu	India	Professor, Department of CSE, Malla Reddy Engineering College (Autonomous), Secunderabad-500100	India	Telangana

3. TITLE OF THE INVENTION: REAL TIME CROP MONITORING USING INTERNET OF THINGS (IOT) BASED PRECISION AGRICULTURE

4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / AUTHORISED PATENT AGENT IN INDIA:
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5. PRIORITY PARTICULARS OF THE APPLICATION(S) FILED IN CONVENTION COUNTRY:

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Title of the Invention
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6. PARTICULARS FOR FILING PATENT COOPERATION TREATY (PCT) NATIONAL PHASE APPLICATION:

International Application Number	International Filing Date as Allotted by the Receiving Office
PCT//	

7. PARTICULARS FOR FILING DIVISIONAL APPLICATION

Original (first) Application Number	Date of Filing of Original (first) Application
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8. PARTICULARS FOR FILING PATENT OF ADDITION:

Main Application / Patent Number:	Date of Filing of Main Application
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9. DECLARATIONS:**(i) Declaration by the inventor(s)**

I/We ,Dr. M Purushotham Reddy,Dr. L Lakshmi,Dr. K Srinivasa Reddy,U Sivaji,N Bhaswanth,Dr. Ch Srinivasulu,Dr. Ganti Naga Satish,Dr. O. Obulesu, is/are the true & first inventor(s) for this invention and declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: -----

(b) Signature(s) of the inventor(s):

(c) Name(s): Dr. M Purushotham Reddy,Dr. L Lakshmi,Dr. K Srinivasa Reddy,U Sivaji,N Bhaswanth,Dr. Ch Srinivasulu,Dr. Ganti Naga Satish,Dr. O. Obulesu

(ii) Declaration by the applicant(s) in the convention country

I/We, the applicant(s) in the convention country declare that the applicant(s) herein is/are my/our assignee or legal representative.

(a) Date: -----

(b) Signature(s) :

(c) Name(s) of the singnatory: Dr. M Purushotham Reddy,Dr. L Lakshmi,Dr. K Srinivasa Reddy,U Sivaji,N Bhaswanth,Dr. Ch Srinivasulu,Dr. Ganti Naga Satish,Dr. O. Obulesu

(iii) Declaration by the applicant(s)

- **The Complete specification relating to the invention is filed with this application.**
- **I am/We are, in the possession of the above mentioned invention.**
- **There is no lawful ground of objection to the grant of the Patent to me/us.**

10. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION:

Sr.	Document Description	FileName
1	REQUEST FOR EARLY PUBLICATION(FORM-9)	form 9.pdf
2	COMPLETE SPECIFICATION	FORM_2....pdf
3	DRAWINGS	Drawings.pdf
4	STATEMENT OF UNDERTAKING (FORM 3)	Form 3.pdf
5	DECLARATION OF INVENTORSHIP (FORM 5)	Form 5.pdf

I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters stated hereing are correct and I/We request that a patent may be granted to me/us for the said invention.

Dated this(Final Payment Date): -----

Signature:

Name: Balram Singh Yadav

To The Controller of Patents

The Patent office at CHENNAI

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