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Department of Industrial Policy & Promotion,
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Application Details	
APPLICATION NUMBER	202231020377
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	05/04/2022
APPLICANT NAME	1 . Mr.Shraban Kumar Apat 2 . Dr.Jyotirmaya Mishra 3 . Dr.K.Srujan Raju 4 . Dr.Neelamadhab Padhy
TITLE OF INVENTION	IOT ASSISTED SMART AGRICULTURE FOR PREDICTING SUITABLE CROPS
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	shraban.apat@giet.edu.in
ADDITIONAL-EMAIL (As Per Record)	shraban.apat@giet.edu.in
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	06/05/2022

Application Status	
APPLICATION STATUS	Awaiting Request for Examination


FORM 1 THE PATENTS ACT 1970 (39 of 1970) and THE PATENTS RULES, 2003 APPLICATION FOR GRANT OF PATENT (See section 7, 54 and 135 and sub-rule (1) of rule 20)				(FOR OFFICE USE ONLY)	
				Application No.	
				Filing date:	
				Amount of Fee paid:	
				CBR No:	
				Signature:	
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)					
2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]					
Ordinary (✓)		Convention ()		PCT-NP ()	
Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()	Divisional ()	Patent of Addition ()
3A. APPLICANT(S)					
Name in Full		Nationality	Country of Residence	Address of the Applicant	
1. Mr. Shrabhan Kumar Apat		Indian	India	Research Scholar, Dept- CSE, GIET University, Gunupur, Odisha-765022	
2. Dr. Jyotirmaya Mishra		Indian	India	Assoc. Professor, Dept-CSE, GIET University, Gunupur, Odisha-765022	
3. Dr. K. Srujan Raju		Indian	India	Assoc. Professor, Dept-CSE, CMR Technical campus, Hyderabad, Telangana-501401	
4. Dr. Neelamadhab Padhy		Indian	India	Assoc. Professor, Dept-CSE, GIET University, Gunupur, Odisha-765022	
3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]					
Natural Person (✓)		Other than Natural Person			
		Small Entity ()	Startup ()	Others ()	
4. INVENTOR(S) [Please tick (✓) at the appropriate category]					
Are all the inventor(s) same as the applicant(s) named above?		Yes (✓)		No ()	
If "No", furnish the details of the inventor(s)					

Name in Full	Nationality	Country of Residence	Address of the Inventor		
Same as Applicant					
5. TITLE OF THE INVENTION					
"IOT ASSISTED SMART AGRICULTURE FOR PREDICTING SUITABLE CROPS"					
6. AUTHORISED REGISTERED PATENT AGENT(S)			IN/PA No.		
			Name		
			Mobile No.		
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA			Name	Mr. Shraban Kumar Apat	
			Postal Address	Research Scholar, Dept-CSE, GIET University, Gunupur, Odisha-765022	
			Telephone No.		
			Mobile No.	9030859430	
			Fax No.		
			E-mail ID	shraban.apat@giet.edu	
8. IN CASE OF APPLICATION CLAIMING PRIORITY OF APPLICATION FILED IN-CONVENTION COUNTRY, PARTICULARS OF CONVENTION APPLICATION					
Country	Application Number	Filing date	Name of the applicant	Title of the invention	IPC (as classified in the convention country)
9. IN CASE OF PCT NATIONAL PHASE APPLICATION, PARTICULARS OF INTERNATIONAL APPLICATION FILED UNDER PATENT CO-OPERATION TREATY (PCT)					
International application number			International filing date		
10. IN CASE OF DIVISIONAL APPLICATION FILED UNDER SECTION 16, PARTICULARS OF ORIGINAL (FIRST) APPLICATION					
Original (first) application No.			Date of filing of original (first) application		
11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN APPLICATION OR PATENT					
Main application/patent No.			Date of filing of main application		
12. DECLARATIONS					
(i) Declaration by the inventor(s)					

(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).

I/We, the above named inventor(s) 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 02/04/2022

(b) Name	(c) Signature
1. Mr. Shraban Kumar Apat 2. Dr. Jyotirmaya Mishra 3. Dr. K. Srujan Raju 4. Dr. Neelamadhab Padhy	

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

~~(In case the applicant in India is different than the applicant in the convention country:~~ the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period)

~~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 signatory~~

(iii) Declaration by the applicant(s)

I/We the applicant(s) hereby declare(s) that: -

- I am/ We are in possession of the above-mentioned invention.
- The provisional/complete specification relating to the invention is filed with this application.
- ~~The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.~~
- There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- I am/we are the true & first inventor(s).
- ~~I am/we are the assignee or legal representative of true & first inventor(s).~~
- ~~The application or each of the applications, particulars of which are given in Paragraph 8, was the first application in convention country/countries in respect of my/our invention(s).~~

- ~~I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.~~
- ~~My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph 9.~~
- ~~The application is divided out of my /our application particulars of which is given in Paragraph 10 and pray that this application may be treated as deemed to have been filed on DD/MM/YYYY under section 16 of the Act.~~
- ~~The said invention is an improvement in or modification of the invention particulars of which are given in Paragraph 11.~~

13. FOLLOWING ARE THE ATTACHMENTS WITH THE APPLICATION

(a) Form 2

Item	Details	Fee	Remarks
Complete/ Provisional specification) #	No. of pages: 14		
No. of Claim(s)	No. of claims: 05 No. of pages: 01		
Abstract	No. of pages: 01		
No. of Drawing(s)	No. of drawings: 01 No. of pages: 01		

In case of a complete specification, if the applicant desires to adopt the drawings filed with his provisional specification as the drawings or part of the drawings for the complete specification under rule 13(4), the number of such pages filed with the provisional specification are required to be mentioned here.

(b) Complete specification (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).

(c) Sequence listing in electronic form

(d) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).

(e) Priority document(s) or a request to retrieve the priority document(s) from DAS (Digital Access Service) if the applicant had already requested the office of first filing to make the priority document(s) available to DAS.

(f) Translation of priority document/Specification/International Search Report/International Preliminary Report on Patentability.

(g) Statement and Undertaking on Form 3

(h) Declaration of Inventorship on Form 5

(i) Power of Authority

(j) Total fee ₹.....in Cash/ Banker's Cheque /Bank Draft bearing No.....

Date on Bank.

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

Dated this 02nd day of April, 2022

Signature:



Name: Mr. Shraban Kumar Apat et. al.

To,
The Controller of Patents
The Patent Office, at Kolkata

Note: -

- * Repeat boxes in case of more than one entry.
- * To be signed by the applicant(s) or by authorized registered patent agent otherwise where mentioned.
- * Tick (/) / cross (x) whichever is applicable / not applicable in declaration in paragraph-12.
- * Name of the inventor and applicant should be given in full, family name in the beginning.
- * Strike out the portion which is/are not applicable.
- * For fee: See First Schedule”;

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202231020377 A

(19) INDIA

(22) Date of filing of Application :05/04/2022

(43) Publication Date : 06/05/2022

(54) Title of the invention : IOT ASSISTED SMART AGRICULTURE FOR PREDICTING SUITABLE CROPS

(51) International classification :G06Q0050020000, G06N0020000000, A01B0079000000, A01G0009240000, A01G0025160000

(86) International Application No :NA
Filing Date :NA

(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

(71)Name of Applicant :

1)Mr.Shraban Kumar Apat

Address of Applicant :Research Scholar, Dept- CSE, GIET University, Gunupur, Odisha-765022.

2)Dr.Jyotirmaya Mishra

3)Dr.K.Srujan Raju

4)Dr.Neelamadhab Padhy

(72)Name of Inventor :

1)Mr.Shraban Kumar Apat

2)Dr.Jyotirmaya Mishra

3)Dr.K.Srujan Raju

4)Dr.Neelamadhab Padhy

(57) Abstract :

Agriculture is a major economic force in many countries. It is essential to maintain a healthy ecosystem. Agriculture provides a wide variety of items that people rely on in practically every area of their daily lives. Farmers must adapt to climatic change while also meeting increasing consumer demand for more food of better nutritional value. To increase the production and growth of crops, the farmer must be aware of the climatic circumstances, which will assist in selecting which crop to plant in response to those conditions and the decision of which crop to plant in general. Smart Farming, based on the Internet of Things, enhances the overall agricultural system by monitoring the field in real-time. It maintains a close eye on various elements such as humidity, temperature, soil, and so on and provides crystal-clear real-time observation. Machine learning in agriculture is being used to increase the production and quality of crops in the agricultural sector, which is a growing industry. The use of appropriate algorithms to sense data may aid in the suggestion of an optimal crop.

No. of Pages : 15 No. of Claims : 5