FORM 9

THE PATENTS ACT 1970 (39 OF 1970)

&

THE PATENT RULES, 2003 (See section 11A (2), rule 24 A)

I/We

NAME	NATIONALITY	
PODDAR		ADDRESS
INTERNATIONAL COLLEGE	INDIA	SECTOR-7, NEAR SHIPRA PATH MANSAROVAR, JAIPUR (RJ) – 30202

Hereby request for the early publication of my/our application No. **Dated September 6, 2023** under section 11A (2) of the Act.

Dated September 6, 2023

(Ashish Sharma) Authorized Agent for the Applicant

Indian Patent Agent Regn No. IN/PA-3021

To

THE CONTROLLER OF PATENTS
THE PATENT OFFICE AT NEW DELHI

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE JAIPUR

FORM 3

THE PATENTS ACT 1970 (39 OF 1970)

&

THE PATENT RULES, 2003 STATEMENT OF UNDERTAKING UNDER SECTION 8

(See section 8, rule12)

I/We,

(i) Applicant

NAME	NATIONALITY	ADDRESS
PODDAR	INDIA	SECTOR-7, NEAR SHIPRA PATH
INTERNATIONAL		MANSAROVAR, JAIPUR (RJ) – 302020
COLLEGE		302020

hereby declare:

(ii) that I/We who have made this application No. Dated September 6, 2023 alone for the same/substantially same invention, application(s) for Patent in other countries, the particulars of which are given below:

Name of Country	Application No.	Date of Application	Status of Application	Date of Publication	Date of Grant
NIL				- acroation	

(iii) that the rights in the application(s) has/have been assigned to: us that I/we undertake that up to the date of grant of the patent by the Controller, I/We will keep him informed in writing the details regarding corresponding applications for patents filed outside India within six months from the date of filing such application.

Dated this September 6, 2023

(Ashish Sharma)

Authorized Agent for the Applicant Indian Patent Agent Regn No. IN/PA-3021

To

THE CONTROLLER OF PATENTS

S.S.G. PAREEK P.G. COLLEGE JAIPUR

THE PATENT OFFICE AT NEW DELHI/MUMBAI/CHENNAI/KOLKATA

	FORM 1			(FOR OF	FICE U	SE ONL	Y)	
THE I	PATENTS AC	T 1970				22 0112	-)	
	(39 OF 1970)			Application	n No.:			
	&			Filing Dat	e:			
THE PA	ATENT RULE	ES, 2003		Amount o	f Fee Pa	aid:		
APPLICA	TION FOR C	GRANT OF		CBR No.				
	PATENT			Signature				
[See sectio	n 7,54 &135 &	& rule 20(1)						
1. APPLICAN	T'S REFERE	ENCE/						
IDENTIFICAT	TION NO.							
(AS ALLOTE)	D BY OFFIC	E)						
2. TYPE OF A	PPLICATIO	N					-	
Ordinary (√)		Convention	n ()			PCT-N	(P()	
Divisional ()	Patent of	Divisional	0	Datant of				Γ
	Addition ()	Divisional	U	Patent of	^	Divisio	nal ()	Patent of
3-A. APPLICA				Addition	0			Addition ()
Nan		Notionalit		2				
Ivan	IC.	Nationality		Country of		2	ADDRE	ESS
PODE	AD	INDIAN		Residence				
INTERNA		INDIAN		INDIA				SHIPRA PATH
COLL					MA	NSARO		AIPUR (RJ) –
3-B. CATEGO		ICANIT		j			30202	0
				1				
Natural Person	1 ()			Other tha	n Natu	ral Pers	on (√)	
				Small Ent	ity() Startup()		p ()	
				P-9903814 751			0.0	s()
				Education			Others	. ()
			÷	Education Institution			Others	
4. INVENTOR			÷				Others	
Are all the inve	entor(s) same)		ıs (√)	No (√)	Others	
Are all the inve	entor(s) same)		ıs (√)	No (√)	Others	
Are all the inve	entor(s) same	e?			ıs (√)	No (√)		
Are all the inve	entor(s) same) named abov	e?	ntry		ıs (√)			
Are all the inve	entor(s) same) named abov	e?	ntry	Institution	INCIP		ress	

	*		
	INDIAN	INDIA	PRINCIPAL, PODDAR INTERNATIONAL
PROF. PRAVEEN			COLLEGE, SEC. 7 NEAR SHIPRA PATH,
GOSWAMI			MANSAROVAR, JAIPUR-302020
DR. POONAM	INDIAN	INDIA	PROFESSOR, PODDAR INTERNATIONAL
DHAWAN			COLLEGE, SEC. 7 NEAR SHIPRA PATH,
			MANSAROVAR, JAIPUR-302020
DR. UTKARSH	INDIAN	INDIA	ASSOCIATE PROFESSOR, PODDAR
KAUSHIK			INTERNATIONAL COLLEGE, SEC. 7 NEAR
			SHIPRA PATH, MANSAROVAR, JAIPUR-
			302020
DR. VINOD	INDIAN	INDIA	ASSOCIATE PROFESSOR, PODDAR
KUMAR JAIN			INTERNATIONAL COLLEGE, SEC. 7 NEAR
	,		SHIPRA PATH, MANSAROVAR, JAIPUR-
9			302020
DR. DILIP	INDIAN	INDIA	DIRECTOR, VARDHMAN MAHAVEER
KUMAR			OPEN UNIVERSITY, RAWATBHATA ROAD
SHARMA			KOTA-324021
DR. MAHESH	INDIAN	INDIA	ASST. PROFESSOR, S.S.G. PAREEK
KUMAR			COLLEGE, KANTI CHAND ROAD, BANI
BHIMWAL			PARK, JAIPUR 302016
DR. RAJNEESH	INDIAN	INDIA	ASST. PROFESSOR, S.S.G. PAREEK
KUMAR MISHRA			COLLEGE, KANTI CHAND ROAD, BANI
1			PARK, JAIPUR 302016
DR. KIRTI	INDIAN	INDIA	ASST. PROFESSOR, LBS PG COLLEGE
MATHUR			JAIPUR, PD. DEVI SHANKAR MARG, TILAK
			NAGAR, JAIPUR-302004
MS. SHILPI	INDIAN	INDIA	
DAMOR	II (DIII)	INDIA	ASST. PROFESSOR, PODDAR
			INTERNATIONAL COLLEGE, SEC. 7 NEAR
			SHIPRA PATH, MANSAROVAR, JAIPUR-
	INDIAN	INDIA	302020
	INDIAIN	INDIA	ASST. PROFESSOR, PODDAR
MR. NEERAJ			INTERNATIONAL COLLEGE, SEC. 7 NEAR
KUMAR			SHIPRA PATH, MANSAROVAR, JAIPUR-
			CIPAL 302020

S.S.G. PAREEK P.G. COLLEGE JAIPUR

AGENT (S) N N 7. ADRESS FOR SERVICE OF APPLICANT A	N/PA No. Name Mobile No.	3021 ASHISH SHARMA
AGENT (S) N N 7. ADRESS FOR SERVICE OF APPLICANT A	Name Mobile No.	ASHISH SHARMA
7. ADRESS FOR SERVICE OF APPLICANT A	Mobile No.	
7. ADRESS FOR SERVICE OF APPLICANT A		
	~~~	9899801721
To the second se	ASHISH SHARMA,	
IN INDIA	P NATION;	
D	D-177, GF, Shyam Parl	k Ext.,
Sa	Sahibabad-201005 (Gh	aziabad), U.P.
M	Mobile No. 989980172	1,
E-	E-mail: ashish.iprindia(	@hotmail.com
8. PRIORITY PARTICULARS OF THE APPLICA	ATION (S) FILED IN	N CONVENTION
COUNTRY		
	me of Applicant	Title of Invention
NA NA NA	· NA	1
9. PARTICULARS OF FILING PATENT COOPER	RATION TREATY (	PCT) NATIONAL
PHASE APPLICATION	`	
International Application Number Intern	national filing date As	allotted By The
Annual Control of the	iving Office	,
NA NA		
10. PARTICULARS OF FILING DIVISIONAL AP	PPLICATION	
Original application No. Date	e of filing of original	application
NA NA		
11. PARTICULARS FOR FILING PATENT OF AI	DDITION	
Main application/ Patent No. Date	e of filing of main ap	plication
NA NA		4
12. DECLARATION	· · ·	
(i) Declaration by the Inventor(s)  S.S.G. PAREEK P. JAIPU	G. COLLEGE	
I/We, the above named inventor(s) is/are the true & firs		nvention and declare
that the applicant(s) herein is/are my/our assignee or leg		

(a) Date	(b) Signature	(c) Name
August 17, 2023	frankswami	PROF. PRAVEEN GOSWAMI
August 17, 2023	Saran	DR. POONAM DHAWAN
August 17, 2023	W	DR. UTKARSH KAUSHIK
August 17, 2023	wed	DR. VINOD KUMAR JAIN
August 17, 2023	A	DR. DILIP KUMAR SHARMA
August 17, 2023	O for solven	DR. MAHESH KUMAR BHIMWAL
August 17, 2023	Cogneesh	DR. RAJNEESH KUMAR MISHRA
August 17, 2023	Pm	DR. KIRTI MATHUR
August 17, 2023	áni y D	MS. SHILPI DAMOR
August 17, 2023	Key ka	MR. NEERAJ KUMAR

S.C.C PAREEK DAIL

## (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 assignee or legal representative.

(a) Date:

(b) Signature(s):

(c) Name(s) of the Signatory:

#### (iii) Declaration by the Applicant(s):

- ( $\sqrt{}$ ) I/we, the applicant(s) are in possession of the above-mentioned invention.
- $(\sqrt{\ })$  The 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.
- $(\sqrt{\ })$  There is no lawful ground of objection to the grant of the Patent to me/us.
- $(\sqrt{})$  I am/ we are the true and first inventor(s).
- $(\sqrt{})$  I am/ we are the assignee or legal representatives of true and 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 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 ATTACHMENTS WITH THE APPLICATION:

- (a) FORM 2- Complete Specifications, No. of Pages 14 No. of Claims 10 (in duplicate)
- (b) Statement and Undertaking on Form 3 (in duplicate)

(c) Declaration as to Inventorship on Form 5 (in duplicate)

S.S.G. PAREEK P.G. COLLEGE

(d) Official fee for application of the patent 1,600/-

JAIPUR

(e) Form 28 along with Proof of Educational Institutions

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 September 6, 2023

(Ashish Sharma)

Authorized Agent for the Applicant,

Indian Patent Agent Regn No. IN/PA-3021

TO,

THE CONTROLLER OF PATENTS

THE PATENT OFFICE, NEW DELHI/MUMBAI/ CHENNAI/KOLKATA

S.S.G. PAREEK P.G. COLLECT

#### FORM 2

#### THE PATENTS ACT 1970

(39 of 1970)

&

## THE PATENT RULES, 2003 COMPLETE SPECIFICATION

(See section 10 and rule 13)

# 1. TITLE OF THE INVENTION: - SYSTEM OF REMOTELY ACCESSING AND MONITORING OF AGRICULTURAL PARAMETER

#### 2. Applicant(s)

NAME	NATIONALITY	ADDRESS
Poddar International	INDIAN	Sector-7, Near Shipra Path, Mansarovar,
College		Jaipur (RJ) – 302020

#### 3. PREAMBLE OF THE DESCRIPTION

The following specification particularly describes the invention and the manner in which it is to be performed

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE JAIPUR Title of the Invention

SYSTEM OF REMOTELY ACCESSING AND MONITORING OF AGRICULTURAL

**PARAMETER** 

Background of the Invention

5 Remotely accessing and monitoring of agricultural parameters is the process of

collecting data on agricultural conditions, such as soil moisture, temperature, and

humidity, from a distance. This data can then be transmitted to a central location,

where it can be analyzed and used to make decisions about crop management.

A system of remotely accessing and monitoring of agricultural parameters is a system

that uses sensors and wireless technologies to collect data on agricultural conditions,

such as soil moisture, temperature, and humidity. This data can then be transmitted

to a central location, where it can be analyzed and used to make decisions about crop

management.

10

15

20

There are many different types of systems that can be used for remotely accessing

and monitoring of agricultural parameters. Some of the most common types include:

Wireless sensor networks (WSNs): WSNs are composed of a network of sensors that

are connected to each other wirelessly. The sensors can be used to collect data on a

variety of parameters, such as soil moisture, temperature, and humidity. The data

collected by the sensors is then transmitted to a central location, where it can be

analyzed and used to make decisions about crop management.

S.S.G. PAREEK P.G. COLLEGE JAIPUR

2

Remote sensing: Remote sensing is the use of sensors to collect data about an object or area from a distance. Remote sensing can be used to collect data on a variety of agricultural parameters, such as crop health, soil moisture, and vegetation cover. The data collected by remote sensing can be used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.

Satellite imagery: Satellite imagery is a type of remote sensing that uses satellites to collect data about an object or area from space. Satellite imagery can be used to collect data on a variety of agricultural parameters, such as crop health, soil moisture, and vegetation cover. The data collected by satellite imagery can be used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.

#### SUMMARY OF THE INVENTION

5

10

15

20

This summary is provided to introduce a selection of concepts, in a simplified format, that are further described in the detailed description of the invention.

This summary is neither intended to identify key or essential inventive concepts of the invention and nor is it intended for determining the scope of the invention.

To further clarify advantages and features of the present invention, a more particular description of the invention will be rendered by reference to specific embodiments thereof, which is illustrated in the appended drawings. It is appreciated that these drawings depict only typical embodiments of the invention and are therefore not to be considered limiting of its scope.

The use of systems for remotely accessing and monitoring of agricultural parameters can provide a number of benefits for farmers, including:

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE JAIPUR

- Improved crop yields: By collecting data on agricultural conditions and using this data to make informed decisions about crop management, farmers can improve their crop yields.
- · Reduced costs: By using systems for remotely accessing and monitoring of
- agricultural parameters, farmers can reduce their costs by reducing the amount of water, fertilizer, and pesticides they use.
  - Increased sustainability: By using systems for remotely accessing and monitoring of agricultural parameters, farmers can help to make their operations more sustainable by reducing their environmental impact.
- The use of systems for remotely accessing and monitoring of agricultural parameters is a growing trend in the agricultural industry. As the technology continues to develop, these systems are becoming more affordable and easier to use. This is making them a more attractive option for farmers who are looking to improve their crop yields, reduce their costs, and increase the sustainability of their operations.

#### 15 DETAILED DESCRIPTION OF THE INVENTION

20

The detailed description of various exemplary embodiments of the disclosure is described herein with reference to the accompanying drawings. It should be noted that the embodiments are described herein in such details as to clearly communicate the disclosure. However, the amount of details provided herein is not intended to limit the anticipated variations of embodiments; on the contrary, the intention is to cover all modifications, equivalents, and alternatives falling within the scope of the present disclosure as defined by the appended claims.

PRINCIPAL S.S.G. PAREEK P.G. COLLECT JAIPUR It is also to be understood that various arrangements may be devised that, although not explicitly described or shown herein, embody the principles of the present disclosure. Moreover, all statements herein reciting principles, aspects, and embodiments of the present disclosure, as well as specific examples, are intended to encompass equivalents thereof.

5

10

15

20

The terminology used herein is for the purpose of describing particular embodiments only and is not intended to be limiting of example embodiments. As used herein, the singular forms "a"," "an" and "the" are intended to include the plural forms as well, unless the context clearly indicates otherwise. It will be further understood that the terms "comprises," "comprising," "includes" and/or "including," when used herein, specify the presence of stated features, integers, steps, operations, elements and/or components, but do not preclude the presence or addition of one or more other features, integers, steps, operations, elements, components and/or groups thereof.

It should also be noted that in some alternative implementations, the functions/acts noted may occur out of the order noted in the figures. For example, two figures shown in succession may, in fact, be executed concurrently or may sometimes be executed in the reverse order, depending upon the functionality/acts involved.

In addition, the descriptions of "first", "second", "third", and the like in the present invention are used for the purpose of description only, and are not to be construed as indicating or implying their relative importance or implicitly indicating the number of technical features indicated. Thus, features defining "first" and "second" may include at least one of the features, either explicitly or implicitly.

Unless otherwise defined, all terms (including technical and scientific terms) used herein have the same meaning as commonly understood by one of ordinary skill in the

PRINCIPAL S.S.G. PAREEK P.G. COLLECS JAIPUR art to which example embodiments belong. It will be further understood that terms, e.g., those defined in commonly used dictionaries, should be interpreted as having a meaning that is consistent with their meaning in the context of the relevant art and will not be interpreted in an idealized or overly formal sense unless expressly so defined herein.

The working methodology of remotely accessing and monitoring of agricultural parameters can be divided into the following steps:

5

- Data collection: The first step is to collect data on the agricultural parameters that are being monitored. This data can be collected using a variety of sensors, such as soil
   moisture sensors, temperature sensors, and humidity sensors. The data can also be collected using remote sensing techniques, such as satellite imagery or aerial photography.
- Data transmission: The collected data must then be transmitted to a central location where it can be analyzed. The data can be transmitted wirelessly using a variety of technologies, such as LoRaWAN or Sigfox.
  - 3. Data analysis: The data that is transmitted to the central location is then analyzed to identify patterns and trends. This analysis can be used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.
- Decision making: The results of the data analysis are then used to make decisions
   about crop management. These decisions can help to improve crop yields, reduce costs, and increase sustainability.

The working methodology of remotely accessing and monitoring of agricultural parameters can be summarized as follows:

- 1. Collect data on agricultural parameters using sensors or remote sensing techniques.
- 2. Transmit the collected data to a central location.
- 3. Analyze the data to identify patterns and trends.
- 4. Use the results of the data analysis to make decisions about crop management.
- This methodology can be used to monitor a variety of agricultural parameters, such as soil moisture, temperature, humidity, crop health, and vegetation cover. The use of this methodology can help farmers to improve their crop yields, reduce their costs, and increase the sustainability of their operations.

Here are some of the challenges that can be encountered in remotely accessing and monitoring of agricultural parameters:

- Data quality: The quality of the data collected can be affected by a number of factors, such as the type of sensor used, the placement of the sensor, and the weather conditions.
- Data security: The data that is collected and transmitted must be secure to prevent
   unauthorized access.
  - Cost: The cost of implementing and operating a system for remotely accessing and monitoring of agricultural parameters can be high.
  - Technology adoption: Farmers may be reluctant to adopt new technologies, such as remote sensing and wireless sensor networks.
- The components of remotely accessing and monitoring of agricultural parameters include:

- Sensors (101): Sensors are devices that collect data on the agricultural parameters
  that are being monitored. Sensors can be used to measure a variety of parameters,
  such as soil moisture, temperature, humidity, crop health, and vegetation cover.
- Data transmission (102): The collected data must then be transmitted to a central
- location where it can be analyzed. The data can be transmitted wirelessly using a variety of technologies, such as LoRaWAN or Sigfox.
  - Data storage (103): The data that is transmitted to the central location must be stored securely. The data can be stored in a cloud-based database or on a local server.
- Data analysis (104): The data that is stored must be analyzed to identify patterns and
   trends. This analysis can be used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.
- Decision support system (105): A decision support system (DSS) is a software application that helps farmers to make decisions about crop management. The DSS can be used to analyze the data that has been collected and provide farmers with recommendations for crop management.
  - User interface (106): The user interface is the way that farmers interact with the system. The user interface should be easy to use and understand.

The components of remotely accessing and monitoring of agricultural parameters can be summarized as follows:

- 20. Sensors collect data on agricultural parameters.
  - Data transmission carries the data to a central location.
  - Data storage stores the data securely.

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE JAIPUR

- Data analysis identifies patterns and trends in the data.
- Decision support system helps farmers make decisions based on the data.
- User interface makes it easy for farmers to interact with the system.

The choice of components will depend on the specific needs of the farmer and the agricultural operation. For example, the type of sensors that are used will depend on the parameters that are being monitored. The data transmission technology that is used will depend on the size of the agricultural operation and the terrain. The data storage solution will depend on the amount of data that is being collected and the security requirements. The decision support system will depend on the specific needs of the farmer and the agricultural operation. The user interface will depend on the skills and experience of the farmers.

The use of systems for remotely accessing and monitoring of agricultural parameters is a growing trend in the agricultural industry. As the technology continues to develop, these systems are becoming more affordable and easier to use. This is making them a more attractive option for farmers who are looking to improve their crop yields, reduce their costs, and increase the sustainability of their operations.

#### **BEST METHOD OF WORKING**

5

10

15

20

Disclosed herein a system of remotely accessing and monitoring of agricultural parameter comprises Sensors (101), Data transmission module (102), Data storage unit (103), Data analysis module (104), Decision support system (105), and User interface (106), wherein Sensors are devices that collect data on the agricultural parameters that are being monitored; and Sensors are used to measure a variety of

S.S.G. PAREEK P.G. COLLEGE JAIPUR parameters, such as soil moisture, temperature, humidity, crop health, and vegetation cover; wherein the collected data is transmitted to a central location where it can be analysed; and the data is transmitted wirelessly using a variety of technologies, such as LoRaWAN or Sigfox.

In another embodiment, the data that is transmitted to the central location must be stored securely; and the data is stored in a cloud-based database or on a local server; wherein data is stored and analyzed to identify patterns and trends; and this analysis is used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.

In another embodiment, a decision support system (DSS) is a software application that helps farmers to make decisions about crop management; and the DSS is used to analyze the data that has been collected and provide farmers with recommendations for crop management.

In another embodiment, the user interface is the way that farmers interact with the system; and the user interface should be easy to use and understand; the data transmission technology depend on the size of the agricultural operation and the terrain.

15

20

In another embodiment, the data storage solution depends on the amount of data that is being collected and the security requirements; and the decision support system depends on the specific needs of the farmer and the agricultural operation.

These and other advantages of the present subject matter would be described in greater detail with reference to the following figures. It should be noted that the description merely illustrates the principles of the present subject matter. It will thus be appreciated that those skilled in the art will be able to devise various arrangements

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE JAIPUR that, although not explicitly described herein, embody the principles of the present subject matter and are included within its scope.

PRINCIPAL S.S.G. PAREEK P.G. COLLL JAIPUR

#### We Claim:

20

- 1. A system of remotely accessing and monitoring of agricultural parameter comprises Sensors (101), Data transmission module (102), Data storage unit (103), Data analysis module (104), Decision support system (105), and User interface (106).
- 2. The system as claimed in claim 1, wherein Sensors are devices that collect data on the agricultural parameters that are being monitored; and Sensors are used to measure a variety of parameters, such as soil moisture, temperature, humidity, crop health, and vegetation cover.
- 3. The system as claimed in claim 1, wherein the collected data is transmitted to a central location where it can be analysed; and the data is transmitted wirelessly using a variety of technologies, such as LoRaWAN or Sigfox.
  - 4. The system as claimed in claim 1, wherein the data that is transmitted to the central location must be stored securely; and the data is stored in a cloud-based database or on a local server.
- 5. The system as claimed in claim 1, wherein data is stored and analysed to identify patterns and trends; and this analysis is used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.
  - 6. The system as claimed in claim 1, wherein a decision support system (DSS) is a software application that helps farmers to make decisions about crop management; and the DSS is used to analyse the data that has been collected and provide farmers with recommendations for crop management.
  - 7. The system as claimed in claim 1, wherein the user interface is the way that farmers interact with the system; and the user interface should be easy to use and understand.



- 8. The system as claimed in claim 1, wherein the data transmission technology depend on the size of the agricultural operation and the terrain.
- 9. The system as claimed in claim 1, wherein the data storage solution depends on the amount of data that is being collected and the security requirements.
- 10. The system as claimed in claim 1, wherein the decision support system depends on the specific needs of the farmer and the agricultural operation.

Dated this September 06, 2023

fall

(Ashish Sharma) Authorized Agent for the Applicant Patent Agent Registration No. IN/PA-3021

> PRINCIPAL S.S.G PAREEK P.G. COULTER-JAIPUR

10

#### **ABSTARCT**

### SYSTEM OF REMOTELY ACCESSING AND MONITORING OF

#### AGRICULTURAL PARAMETER

5

10

15

Disclosed herein a system of remotely accessing and monitoring of agricultural parameter comprises Sensors (101), Data transmission module (102), Data storage unit (103), Data analysis module (104), Decision support system (105), and User interface (106), wherein Sensors are devices that collect data on the agricultural parameters that are being monitored; and Sensors are used to measure a variety of parameters, such as soil moisture, temperature, humidity, crop health, and vegetation cover; wherein the collected data is transmitted to a central location where it can be analysed; and the data is transmitted wirelessly using a variety of technologies, such as LoRaWAN or Sigfox. In another embodiment, the data that is transmitted to the central location must be stored securely; and the data is stored in a cloud-based database or on a local server; wherein data is stored and analysed to identify patterns and trends; and this analysis is used to make decisions about crop management, such as when to irrigate or when to apply fertilizer.

PRINCIPAL OS.G. PAREEK P.G. COLLEGE JAIPUR

#### FORM 5

#### THE PATENTS ACT 1970 (39 OF 1970)

&

#### THE PATENT RULES, 2003

#### DECLARATION AS TO INVENTORSHIP

[See section 10(6) and Rule 13(6)]

I/We,

NAME	NATIONALITY	ADDRESS
PODDAR INTERNATIONAL COLLEGE	INDIA	SECTOR-7, NEAR SHIPRA PATH MANSAROVAR, JAIPUR (RJ) – 302020

hereby declare that the true and first inventor(s) of the invention disclosed in the provisional/Complete specification filed in pursuance of my /our application numbered dated September 6, 2023 is/are

September 6, 2023	is/are	
2. INVENTORS (S)		
(a)NAME	(1) ) ] ] [ [ ] ] [ ] ]	
(a)NAME	(b)NATIONALITY	(c) ADDRESS
	INDIA	PRINCIPAL, PODDAR INTERNATIONAL
PROF. PRAVEEN	II (DIII)	COLLEGE SEC TNEAD SHIPD A DAME.
GOSWAMI		COLLEGE, SEC. 7 NEAR SHIPRA PATH,
DR. POONAM	INDIA	MANSAROVAR, JAIPUR-302020
DHAWAN	INDIA	PROFESSOR, PODDAR INTERNATIONAL
DINIWAN		COLLEGE, SEC. 7 NEAR SHIPRA PATH,
DR. UTKARSH	DIDY	MANSAROVAR, JAIPUR-302020
CONTRACTOR CARE DESCRIPTION OF CONTRACTOR OF	INDIA	ASSOCIATE PROFESSOR, PODDAR
KAUSHIK		INTERNATIONAL COLLEGE, SEC. 7 NEAR
7.		SHIPRA PATH, MANSAROVAR, JAIPUR-
		302020
DR. VINOD KUMAR	INDIA	ASSOCIATE PROFESSOR, PODDAR
JAIN		INTERNATIONAL COLLEGE, SEC. 7 NEAR
		SHIPRA PATH, MANSAROVAR, JAIPUR-
		302020
DR. DILIP KUMAR	INDIA	DIRECTOR, VARDHMAN MAHAVEER
SHARMA		OPEN UNIVERSITY, RAWATBHATA ROAD
		KOTA-324021
DR. MAHESH KUMAR	INDIA	ASST. PROFESSOR, S.S.G. PAREEK
BHIMWAL		COLLEGE, KANTI CHAND ROAD, BANI
		PARK, JAIPUR 302016
DR. RAJNEESH KUMAR	INDIA	ASST. PROFESSOR, S.S.G. PAREEK
MISHRA	11,2111	COLLEGE, KANTI CHAND ROAD, BANI
DR. KIRTI MATHUR	INDIA	PARK, JAIPUR 302016
(100 to 10 t	INDIA	ASST. PROFESSOR, LBS PG COLLEGE
		JAIPUR, PD. DEVI SHANKAR MARG, TILAK
MS. SHILPI DAMOR	INDIA	NAGAR, JAIPUR-302004
Mis. SHIBI I DAMOR	INDIA	ASST. PROFESSOR, PODDAR
<u>}</u>		INTERNATIONAL COLLEGE, SEC. 7 NEAR
		SHIPRA PATH, MANSAROVAR, JAIPUR-
		302020

S.S.G. PAREEK P.G. COLLEGE JAIPUR

#### **INDIA**

ASST. PROFESSOR, PODDAR INTERNATIONAL COLLEGE, SEC. 7 NEAR SHIPRA PATH, MANSAROVAR, JAIPUR-302020

#### MR. NEERAJ KUMAR

3. DECLARATION TO BE GIVEN WHEN THE APPLICATION IN INDIA IS FILED BY THE APPLICANT (S) IN THE CONVENTION COUNTRY

We ,the applicant(s) in the convention country hereby declare that our right to apply for a patent in India is by way of assignment from the true and first inventor(s)

Dated this September 6, 2023

(Ashish Sharma) Authorized Agent for the Applicant

Indian Patent Agent Regn No. IN/PA-3021

To,

THE CONTROLLER OF PATENTS,

THE PATENT OFFICE AT NEW DELHI/MUMBAI/CHENNAI/KOLKATA

PRINCIPAL O.S.G. PAREEK P.G. COLLEGE JAIPUR

### FORM 28

#### THE PATENTS ACT 1970

#### THE PATENTS RULES, 2003 TO BE SUBMITTED BY A SMALL ENTITY/STARTUP

[See Rules 2(fa), 2 (fb) and 7]

#### 1. APPLICANTS:

NAME	NATIONALITY	ADDRESS
PODDAR INTERNATIONAL	INDIA	SECTOR-7, NEAR SHIPRA PATH
COLLEGE		MANSAROVAR, JAIPUR (RJ) – 302020

(i) FOR CLAIMING THE STATUS OF A SMALL ENTITY	:
A. For an Indian Applicant: Evidence of registration under the Micro, Small and Medium Enterp Act, 2006 (27 of 2006)	Not Applicable
B. In case of foreign entity: Any other document.	Not Applicable
(ii) FOR CLAIMING THE STATUS OF A STARTUP:	
A. For an Indian Applicant: Any document as evidence of eligibility, as defined in rule 2(fb).	Not Applicable
B. In case of foreign entity: Any other document.	Not Applicable
(iii) For claiming the status of an educational institution	
A. For an Indian applicant: Any document as evidence of eligibility, as defined in rule 2(ca)	(√)-UGC Letter
B. In case of a foreign educational institution: Any other document.	Not Applicable
. The information provided herein is correct to the best of my/our l	nowledge and belief

Dated this September 6, 2023

(Ashish Sharma)

PRINCIPAL Authorized Agent for the Applicant Patent Agent Regn No. IN/PA-3021

To,

The Controller of Patents

The Patent Office at NEW DELHI/MUMBAI/CHENNAI/KOLKATA

#### FORM 9

## THE PATENTS ACT 1970 (39 OF 1970)

&

THE PATENT RULES, 2003 (See section 11A (2), rule 24 A)

I/We

NAME	NATIONALITY	ADDRESS			
PODDAR INTERNATIONAL COLLEGE	INDIA	SECTOR-7, NEAR SHIPRA PATH MANSAROVAR, JAIPUR (RJ) – 30202			

Hereby request for the early publication of my/our application No. **Dated September 6, 2023** under section 11A (2) of the Act.

Dated September 6, 2023

(Ashish Sharma)

Authorized Agent for the Applicant Indian Patent Agent Regn No. IN/PA-3021

То

THE CONTROLLER OF PATENTS
THE PATENT OFFICE AT NEW DELHI

CSG PAREEK P.G.



#### INDIA NON JUDICIAL

## **Government of National Capital Territory of Delhi**

₹50

50₹50₹50₹50

Certificate No.

Certificate Issued Date

Account Reference

Unique Doc. Reference

Purchased by

Description of Document

Property Description

Consideration Price (Rs.)

First Party

Second Party

Stamp Duty Paid By

Stamp Duty Amount(Rs.)

IN-DL18202129367069V

09-Jun-2023 04:38 PM

SELFPRINT (PU)/ dl-self/ NEHRU/ DL-DLH

SUBIN-DLDL-SELF06269330643211V

ASHISH SHARMA

Article 48(c) Power of attorney - GPA

48(C) - POWER OF ATTORNEY - GPA

(Zero)

IP NATION

**OTHERS** 

IP NATION

(Fifty only)

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE

SELF PRINTED CERTIFICATE TO BE VERIFIED BY THE RECIPIENT AT WWW.SHCILESTAMP.COM

IN-DL18202129367069V

Please write or type below this line



- Statingly Are it.

  1. The authenticity of this Stamp birtificate should be perfited at New shibastamp point or using e-Stamp Mobile. And of Stock Holding Any decrepancy in the details on this Controller and as evaluate on the nebalary Mobile App residens a breake.

  2. The onus of checking the legislature is on the uners of the Controller.

  3. In case of any discrepancy chaise inform the Controllers Authority.

#### Form 26 FORM OF AUTHORISATION THE PATENTS ACT, 1970

(39 of 1970) (See sections 127 and 132, rule 135)

I/We

Name	Nationality	Address
PODDAR INTERNATIONAL COLLEGE	INDIAN	SECTOR-7, NEAR SHIPRA PATH MANSAROVAR, JAIPUR (RJ) – 302020

Hereby authorize Registered Patent Agents/Attorneys Ashish Sharma, Dr. Satya Pal Arora, Brijesh Oberoi, P. R. Rajhans, Dr. Ravindra Chingale, Kuldeep Singh, Nidhi Sharma, Jyoti to act as our agents and authorize said persons on our behalf in connection with Indian Patent Application(s) and request that all notices, requisitions and communication relating thereto, may be sent to such agent (s) at

#### IP NATION D-177, Shyam Park Ext., Sahibabad-201005, Ghaziabad (U.P.), INDIA

We, hereby, revoke all previous authorization, if any made to any other persons, in respect of said matters or proceedings.

We, hereby confirm and ratify previous acts, if any done by said agent(s) in the above matter and proceedings.

Dated this August 17, 2023

For PODDAR INTERNATIONAL COLLEGE

To

The Controller of Patents

Indian Patent Office at New Delhi/Mumbai/Chennai/Kolkata

Director

FORM 1				(FOR OFFICE USE ONLY)				
THE PATENTS ACT 1970							,	
(39 OF 1970)				Application No.:				
&			Filing Dat	e:				
THE P.	ATENT RULE	ES, 20	003	Amount of	f Fee Pa	aid:		
APPLICA	TION FOR G	RAI	NT OF	CBR No.				
	<b>PATENT</b>			Signature				
[See sectio	n 7,54 &135 &	k rule	e 20(1)					
1. APPLICAN	T'S REFERE	NCE	E/					
IDENTIFICAT	TION NO.							
(AS ALLOTE)	D BY OFFICI	E)						
2. TYPE OF A	PPLICATIO	N						
Ordinary (√)		Con	nvention ()		PCT-NP()			
Divisional ()	Patent of	Div	risional ()	Patent of		Divisional () Paten		Patent of
	Addition ()			Addition ()		2 TYRIGHAN ()		Addition ()
3-A. APPLICA	NT(S)							Addition ()
Nan	ne	Na	tionality	Country of			ADDRE	393
				Residence		12211200		
PODDAR IND		IDIAN	INDIA SEC		TOR-7	NEAD	SHIDDA DATH	
INTERNA	ΓΙΟΝΑL			227-74		SECTOR-7, NEAR SHIPRA PA MANSAROVAR, JAIPUR (RA		
COLLEGE					302020		252 .50	
3-B. CATEGORY OF APPLICANT						30202	0	
Natural Person ()		Other the	m Nat-	l D	(a b			
O The second of				Other than Natural Person $()$				
				Small Entity ()			p()	
			0.000.00	Educational Others ( ) Institutions $()$				
4. INVENTOR	RS (S)							
Are all the inventor(s) same as Yes ()				1	No (√)			
the applicant(s) named above?					( )			
Name	Nationa	lity	Country	Λ ~	2 1	Add	ress	
			of			DAT		
Residence			SSG. PARÉEK P.G. COLLECT					
			Residence	SSG. PA	REEK P	G. COLL	ECT	

T

	INDIAN	INDIA	PRINCIPAL, PODDAR INTERNATIONAL
PROF. PRAVEEN			COLLEGE, SEC. 7 NEAR SHIPRA PATH,
GOSWAMI			
DR. POONAM	INDIAN	INDIA	MANSAROVAR, JAIPUR-302020
DHAWAN	попп	INDIA	PROFESSOR, PODDAR INTERNATIONAL
			COLLEGE, SEC. 7 NEAR SHIPRA PATH,
DR. UTKARSH	INDIAN	DIDIA	MANSAROVAR, JAIPUR-302020
KAUSHIK	INDIAN	INDIA	ASSOCIATE PROFESSOR, PODDAR
KAUSHIK			INTERNATIONAL COLLEGE, SEC. 7 NEAR
			SHIPRA PATH, MANSAROVAR, JAIPUR-
DD 110100			302020
DR. VINOD	INDIAN	INDIA	ASSOCIATE PROFESSOR, PODDAR
KUMAR JAIN			INTERNATIONAL COLLEGE, SEC. 7 NEAR
			SHIPRA PATH, MANSAROVAR, JAIPUR-
			302020
DR. DILIP	INDIAN	INDIA	DIRECTOR, VARDHMAN MAHAVEER
KUMAR			OPEN UNIVERSITY, RAWATBHATA ROAD
SHARMA			KOTA-324021
DR. MAHESH	INDIAN	INDIA	ASST. PROFESSOR, S.S.G. PAREEK
KUMAR			COLLEGE, KANTI CHAND ROAD, BANI
BHIMWAL			PARK, JAIPUR 302016
DR. RAJNEESH	INDIAN	INDIA	ASST. PROFESSOR, S.S.G. PAREEK
KUMAR MISHRA			COLLEGE, KANTI CHAND ROAD, BANI
			PARK, JAIPUR 302016
DR. KIRTI	INDIAN	INDIA	ASST. PROFESSOR, LBS PG COLLEGE
MATHUR			JAIPUR, PD. DEVI SHANKAR MARG, TILAK
			NAGAR, JAIPUR-302004
MS. SHILPI	INDIAN	INDIA	ASST. PROFESSOR, PODDAR
DAMOR			INTERNATIONAL COLLEGE, SEC. 7 NEAR
			SHIPRA PATH, MANSAROVAR, JAIPUR-
			302020
	INDIAN	INDIA	
	^	1	ASST. PROFESSOR, PODDAR
MR. NEERAJ			INTERNATIONAL COLLEGE, SEC. 7 NEAR
KUMAR		PRIN	K P.G. COLLEGE 302020
TOTAL CAN		S.S.G. PAREL	APUR 302020

5. TITLE OF THE INVEN	NTION: SYS	TE	M OF REMOTE	LY	ACCESSING AND	
MONITORING OF AGRICUL	TURAL PAR	AM	IETER			
6. AUTHORISED REGISTER	IN/PA No.		3021			
AGENT (S)			Name		ASHISH SHARMA	
			Mobile No.		9899801721	
7. ADRESS FOR SERVICE OF	A DDI ICANO	r		8/4	9899801721	
	ASHISH SHARMA,					
IN INDIA			IP NATION;	Doule	E	
			D-177, GF, Shyam Sahibabad-201005 (			
			Mobile No. 989980		a 0	
			E-mail: ashish.iprin		8	
8. PRIORITY PARTICULARS	S OF THE AP	PL				
COUNTRY			(0) 1122		CONVENTION	
Country Application No.	Filing Date	Name of Applicant		7	Title of Invention	
NA NA	NA	NA	A	NA		
9. PARTICULARS OF FILING	PATENT CO	001	PERATION TREAT	TV (I	PCT) NATIONAL	
PHASE APPLICATION				1 (1	CI) NATIONAL	
			nternational filing date As allotted By The			
			eceiving Office			
NA NA			A .			
10. PARTICULARS OF FILIN	G DIVISIONA	AL.	APPLICATION			
Original application No.			Date of filing of original application			
NA			NA			
11. PARTICULARS FOR FILE						
	NGPAIENT	OF	ADDITION			
Main application/ Patent No.			Date of filing of main	арр	lication	
		D		арр	lication	
Main application/ Patent No.		N	Date of filing of main			
Main application/ Patent No.		N	Date of filing of main			
Main application/ Patent No.  NA  12. DECLARATION	(S)	N	Date of filing of main	OLLE	:GE	

(a) Date	(b) Signature	(c) Name
August 17, 2023	frankswami	PROF. PRAVEEN GOSWAMI
August 17, 2023	Saran	DR. POONAM DHAWAN
August 17, 2023		DR. UTKARSH KAUSHIK
August 17, 2023	wed	DR. VINOD KUMAR JAIN
August 17, 2023	A	DR. DILIP KUMAR SHARMA
August 17, 2023	- Stransmin	DR. MAHESH KUMAR BHIMWAL
August 17, 2023	Cagneesh	DR. RAJNEESH KUMAR MISHRA
August 17, 2023	Pm	DR. KIRTI MATHUR
August 17, 2023	áni yeid	MS. SHILPI DAMOR
August 17, 2023	Pey for	MR. NEERAJ KUMAR

S.S.G. PAREEK P.G. COLLEGE JAIPUR

## (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 assignee or legal representative.

(a) Date:

(b) Signature(s):

(c) Name(s) of the Signatory:

### (iii) Declaration by the Applicant(s):

- ( $\sqrt{}$ ) I/we, the applicant(s) are in possession of the above-mentioned invention.
- $(\sqrt{\ })$  The 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.
- ( $\sqrt{}$ ) There is no lawful ground of objection to the grant of the Patent to me/us.
- $(\sqrt{})$  I am/ we are the true and first inventor(s).
- $(\sqrt{})$  I am/ we are the assignee or legal representatives of true and 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 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 ATTACHMENTS WITH THE APPLICATION:

- (a) FORM 2- Complete Specifications, No. of Pages 14 No. of Claims 10 (in duplicate)
- (b) Statement and Undertaking on Form 3 (in duplicate)
- (c) Declaration as to Inventorship on Form 5 (in duplicate)
- (d) Official fee for application of the patent 1,600/-
- (e) Form 28 along with Proof of Educational Institutions

I/We hereby declare that to the best of my /our knowledge, information and belief the fact and

S.S.G. PAREEK P.G. COLLEGE JAIPUR matters stated herein are correct and I/We request that a Patent may be granted to me/us for the said invention.

Dated this September 6, 2023

(Ashish Sharma)

Authorized Agent for the Applicant,

Indian Patent Agent Regn No. IN/PA-3021

TO,

THE CONTROLLER OF PATENTS

THE PATENT OFFICE, NEW DELHI/MUMBAI/ CHENNAI/KOLKATA

____

PRINCIPAL S.S.G. PAREEK P.G. COLLEGE JAIPUR

1) Cyber security Challenges &
Trendson Recent Technologies
(2) Rigidalized
Bioethics & Cenetic engineering
3 AI, & Youth employment
(9) Digital education vs/
Pradétional education
B Advancements en Biotechnology
6 Adolescent Challenges
(7) Ravic first and & CPR skilly
@ Burners Management / Entrepreneurlip.
@ Data science & Analytics
6 Data science & Analytics 6 Alobalization & it's effection
O Lanovation in Hedrere
Steatheave
(12) Repart of Lorial Medog on Political Movementy
(13) Evolution of Quantum Computing (19) The Puture of Renewable Thergy Storage
The result of remember Greege storage

PRINCIPAL S.G. PAREEK P.G. COLLEGE JAIPUR



# S.S.G. PAREEK P.G.COLLEGE



(Affiliated to the University of Rajasthan)

Est. - 1906