

Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

### (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

	Application Details
APPLICATION NUMBER	202241031341
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	01/06/2022
APPLICANT NAME	1 . DR.D.SURESH BABU 2 . DR. M.ARAVINDA 3 . DR.E.SRIRAM 4 . MR SURESH J 5 . BRAJESH KUMAR CHOUBEY 6 . DR. SHARIQ MOHAMMED 7 . MUGANDA MUNIR MANINI 8 . DR. THIMMAIAH BAYAVANDA CHINNAPPA 9 . K PREETHAM 10 . DR HARSHITHA YS 11 . DR. DEVESH PRATAP SINGH 12 . DR. BHARATH V G
TITLE OF INVENTION	DEEP REINFORCEMENT LEARNING METHOD FOR INDUSTRY RETURNS AND STOCK MARKET RETURNS
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	sgowthami12@gmail.com
ADDITIONAL-EMAIL (As Per Record)	sgowthami12@gmail.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	
PUBLICATION DATE (U/S 11A)	17/06/2022

**Application Status** 



Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

## (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

#### **Application Details**

APPLICATION NUMBER

202241036326

**APPLICATION TYPE** 

ORDINARY APPLICATION

DATE OF FILING

24/06/2022

**APPLICANT NAME** 

1. DR. D. SURESH BABU (Head and BoS Chairperson)

2. DR. K. NAGESWAR RAO (Lecturer)

3 . J.V.S ARUNDATHI (Lecturer)

4 . K. USHA PAVANI (Lecturer)

5 . BABULU (Lecturer)

6 . J. GULABSINGH (Lecturer)7 . V. PULLARAO (Lecturer)

8. V. SWAPNA (Lecturer)

TITLE OF INVENTION

METHOD AND SYSTEM FOR ANALYZING CLOUD ARCHITECTURE

USING MACHINE LEARNING MODELS

FIELD OF INVENTION

COMMUNICATION

E-MAIL (As Per Record)

ssapatents@gmail.com

ADDITIONAL-EMAIL (As Per Record)

sureshd123@gmail.com

E-MAIL (UPDATED Online)

PRIORITY DATE

REQUEST FOR EXAMINATION DATE

PUBLICATION DATE (U/S 11A)

01/07/2022

**Application Status** 



Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, Government of India

## (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

An	plicat	ion [	etails
$^{\prime}$	piicat	IOII L	Ctuns

APPLICATION NUMBER	202241038010		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	01/07/2022		
APPLICANT NAME	<ol> <li>DR. D. SURESH BABU (Head and BoS Chairperson)</li> <li>DR. K. NAGESWAR RAO (Lecturer)</li> <li>M. SRINIVASA RAO (Lecturer)</li> <li>J.V.S. ARUNDATHI (Lecturer)</li> <li>V. PULLARAO (Lecturer)</li> <li>K. USHAPAVANI (Lecturer)</li> <li>BABULU (Lecturer)</li> <li>D. PAVAN SRIVASTA (Student)</li> </ol>		
TITLE OF INVENTION	METHOD AND SYSTEM FOR DEPLOYING DEEP LEARNING TECHNIQUES FOR EFFICIENT BIG DATA ANALYTICS IN HEALTHCARE ENVIRONMENT		
FIELD OF INVENTION	COMPUTER SCIENCE		
E-MAIL (As Per Record)	ssapatents@gmail.com		
ADDITIONAL-EMAIL (As Per Record)	sureshd123@gmail.com		
E-MAIL (UPDATED Online)			
PRIORITY DATE			
REQUEST FOR EXAMINATION DATE			
PUBLICATION DATE (U/S 11A)	22/07/2022		

Application Status



Office of the Controller General of Patents, Designs & Trade Marks Department of Industrial Policy & Promotion, Ministry of Commerce & Industry, \*\*Government of India

# (http://ipindia.nic.in/index.htm)



(http://ipindia.nic.in/index.htm)

#### **Application Details**

APPLICATION NUMBER	202241038011		
APPLICATION TYPE	ORDINARY APPLICATION		
DATE OF FILING	01/07/2022		
APPLICANT NAME	<ol> <li>DR. KOLIPAKA SRINIVAS (Head and BoS Chairperson)</li> <li>KOLIPAKA AKSHAYA SREEJA (Student)</li> <li>D. PAVAN SRIVASTA (Student)</li> <li>DR. D SURESH BABU (Head &amp; BoS Chairperson)</li> </ol>		
TITLE OF INVENTION	METHOD FOR UTILIZING MACHINE LEARNING (ML) MODELS FOR AUTOMATICALLY CORRECTING ERRORS IN GLOBAL HISTORICAL DATA		
FIELD OF INVENTION	COMPUTER SCIENCE		
E-MAIL (As Per Record)	ssapatents@gmail.com		
ADDITIONAL-EMAIL (As Per Record)	drsrinu75@gmail.com		
E-MAIL (UPDATED Online)	•		
PRIORITY DATE			
REQUEST FOR EXAMINATION DATE	-		
PUBLICATION DATE (U/S 11A)	22/07/2022		

**Application Status** 

**APPLICATION STATUS** 

**Awaiting Request for Examination** 

View Documents

### 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	<b>OFFICE</b>	USE
	ONLY)	

Ap	plication
Nο	•

Filing Date: .....

Amount of Fee Paid: .....

**CBR No.: .....** 

Signature: .....

#### 1. APPLICANT(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Mrs. Deepti P Bhutada	India	Assistance Professor, BBA&BCA, MGV's Panchavati College of Management and Computer Science, Nashik, SPPU Pune, Maharashtra, India	India	Maharashtra
2	J V S ARUNDATHI	India	Faculty, Department of Computer Science SR&BGNR Government Art & Science Degree & PG College (Autonomous), Khammam, Telangana, India	India	Telangana
3	Balaji Ramkumar Rajagopal	India	Data Architect, Dept of Artificial intelligence and Analytics, IT industry, Chennai, Tamilnadu,, India	India	Tamil Nadu
4	Dr. SAGAR G	India	Faculty of Management	India	Karnataka

J/2U2 I,	15.15		PATEINT EFIIIIIG	
			Studies Department of Management, Bangalore University, Bangalore, Karnataka, India	
5	Dr. S SRIRANJANI MOKSHAGUNDAM	India	Faculty of Management, Department of Management, Sri Jagadguru Balagangadhara College of Management Studies (SJBCMS), Bangalore, Karnataka, India	ataka
6	Xavier Mr. Bibin	India	Assistant professor, Marian Institute of Management, Marian College, Kuttikkanam, Kerala, India	la
7	Archana Barthwal	India	Guest Faculty, CSE, Women Institute Of Technology, India Uttara Dehradun, Uttrakhand, India	akhand
8	Mr. Devpriya Dey	India	Assistant Professor, School of Management, Jain (Deemed- to-be University), Bangalore, Karnataka, India	ataka
9	Mr. Bhaskar Kapoor	India	Assistant Professor, Department of Information Technology, Maharaja Agrasen Institute of Technology,New Delhi, India	i
10	Dinesh Kumar	India	Ph.D. Research India Rajas	sthan

	_	
	Scholar,	
	Education, Raj	
	Rishi Bhartrihari	
	Matsya	
	University,	
	Alwar,	
	Rajasthan, India	

### 2. INVENTOR(S):

Sr.No.	Name	Nationality	Address	Country	State
1	Mrs. Deepti P Bhutada	India	Assistance Professor, BBA&BCA, MGV's Panchavati College of Management and Computer Science, Nashik, SPPU Pune, Maharashtra, India	India	Maharashtra
2	J V S ARUNDATHI	India	Faculty, Department of Computer Science SR&BGNR Government Art & Science Degree & PG College (Autonomous), Khammam, Telangana, India	India	Telangana
3	Balaji Ramkumar Rajagopal	India	Data Architect, Dept of Artificial intelligence and Analytics, IT industry, Chennai, Tamilnadu,, India	India	Tamil Nadu
4	Dr. SAGAR G	India	Faculty of Management Studies Department of Management, Bangalore University,	India	Karnataka

/2021,	10.10		PATENTERII	119	
			Bangalore, Karnataka, India		
5	Dr. S SRIRANJANI MOKSHAGUNDAM	India	Faculty of Management, Department of Management, Sri Jagadguru Balagangadhara College of Management Studies (SJBCMS), Bangalore, Karnataka, India	India	Karnataka
6	Xavier Mr. Bibin	India	Assistant professor, Marian Institute of Management, Marian College, Kuttikkanam, Kerala, India	India	Kerala
7	Archana Barthwal	India	Guest Faculty, CSE, Women Institute Of Technology, Dehradun, Uttrakhand, India	India	Uttarakhand
8	Mr. Devpriya Dey	India	Assistant Professor, School of Management, Jain (Deemedto-be University), Bangalore, Karnataka, India	India	Karnataka
9	Mr. Bhaskar Kapoor	India	Assistant Professor, Department of Information Technology	India	Delhi
10	Dinesh Kumar	India	· ·	India	Rajasthan

Alwar. Rajasthan, India

3. TITLE OF THE INVENTION: The Role of Artificial Intelligence on the Relationship between Job **Balance and Employee Productivity in IT industry** 

### 4. ADDRESS FOR CORRESPONDENCE OF APPLICANT / Telephone No.:

**AUTHORISED PATENT AGENT IN INDIA:** 

Assistance Professor, BBA&BCA, MGV's Panchavati College of Management and Computer Science, Nashik, SPPU Pune.

Maharashtra, India

Fax No.:

Mobile No: 9461191512

E-mail: soni.mukesh15@gmail.com

#### 5. PRIORITY PARTICULARS OF THE APPLICATION(S) FILED IN CONVENTION COUNTRY:

Sr.No.	Country	Application Number	Filing Date	Name of the Applicant	Tilte of the Invention
--------	---------	-----------------------	-------------	-----------------------	------------------------

#### 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

L	Original (first) Application Number	Date of Filing of Original (first) Application

#### 8. PARTICULARS FOR FILING PATENT OF ADDITION:

Main Application / Patent Number:	Date of Filing of Main Application
-----------------------------------	------------------------------------

#### 9. DECLARATIONS:

#### (i) Declaration by the inventor(s)

I/We ,Mrs. Deepti P Bhutada,J V S ARUNDATHI,Balaji Ramkumar Rajagopal,Dr. SAGAR G,Dr. S SRIRANJANI MOKSHAGUNDAM, Xavier Mr. Bibin, Archana Barthwal, Mr. Devpriya Dev, Mr. Bhaskar Kapoor, Dinesh Kumar, 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): Mrs. Deepti P Bhutada, J V S ARUNDATHI, Balaji Ramkumar Rajagopal, Dr. SAGAR G, Dr. S
SRIRANJANI MOKSHAGUNDAM, Xavier Mr. Bibin, Archana Barthwal, Mr. Devpriya Dey, Mr. Bhaskar
Kapoor, Dinesh Kumar

#### (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: Mrs. Deepti P Bhutada, J V S ARUNDATHI, Balaji Ramkumar Rajagopal, Dr. SAGAR G, Dr. S SRIRANJANI MOKSHAGUNDAM, Xavier Mr. Bibin, Archana Barthwal, Mr. Devpriya Dey, Mr. Bhaskar Kapoor, Dinesh Kumar

#### (iii) Declaration by the applicant(s)

- The Complete specification relationg 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
	eby declare that to the best of my/our knowledge, information and bare correct and I/We request that a patent may be granted to me/us the state of t	
Dated this	(Final Payment Date):	Signature:

(12) PATENT APPLICATION PUBLICATION

 $(51)\ International\ classification: G06Q0010060000,\ G06F0021600000,\ G06Q00101000000,\ H04M0001020000,\ H01T0023000000$ 

: NA

:NA

:NA

(19) INDIA

(22) Date of filing of Application: 18/10/2021

(21) Application No.202121047250 A

(43) Publication Date: 29/10/2021

### (54) Title of the invention : THE ROLE OF ARTIFICIAL INTELLIGENCE ON THE RELATIONSHIP BETWEEN JOB BALANCE AND EMPLOYEE PRODUCTIVITY IN IT INDUSTRY

(71)Name of Applicant:

1)Mrs. Deepti P Bhutada

Address of Applicant: Assistance Professor, BBA&BCA, MGV's Panchavati College of Management and Computer Science, Nashik, SPPU Pune, Maharashtra, India -----------

2)J V S ARUNDATHI

3)Balaji Ramkumar Rajagopal

4)Dr. SAGAR G

5)Dr. S SRIRANJANI MOKSHAGUNDAM

6)Xavier Mr. Bibin

7)Archana Barthwal

8)Mr. Devpriya Dey

9)Mr. Bhaskar Kapoor

10)Dinesh Kumar

Name of Applicant : NA

Address of Applicant : NA

(72)Name of Inventor:

1)Mrs. Deepti P Bhutada

2) I V S ARUNDATHI

3)Balaji Ramkumar Rajagopal

Address of Applicant :Data Architect, Dept of Artificial intelligence and Analytics, IT industry, Chennai, Tamilnadu,, India --------

4)Dr. SAGAR G

Address of Applicant :Faculty of Management Studies Department of Management, Bangalore University, Bangalore, Karnataka, India ------

5)Dr. S SRIRANJANI MOKSHAGUNDAM

Address of Applicant :Faculty of Management, Department of Management, Sri Jagadguru Balagangadhara College of Management Studies (SJBCMS), Bangalore, Karnataka, India -----

6)Xavier Mr. Bibin

Address of Applicant :Assistant professor, Marian Institute of Management, Marian College, Kuttikkanam, Kerala, India -------

7)Archana Barthwal

Address of Applicant :Guest Faculty, CSE, Women Institute Of Technology, Dehradun,

Uttrakhand, India -----

8)Mr. Devpriya Dey

Address of Applicant :Assistant Professor, School of Management, Jain (Deemed-to-be

University), Bangalore, Karnataka, India -----

9)Mr. Bhaskar Kapoor

Address of Applicant : Assistant Professor, Department of Information Technology, Maharaja

Agrasen Institute of Technology, New Delhi, India -----

10)Dinesh Kumar

Address of Applicant :Ph.D. Research Scholar, Education, Raj Rishi Bhartrihari Matsya

University, Alwar, Rajasthan, India -----

#### (57) Abstract

The role of artificial intelligence on the relationship between job balance and Employee Productivity in IT industry. The aim of present study is to test the relationship between work-life balance and job performance. Herein order to achieve the objectives, primary data were collected from 166 employees of selected private banks and the structured questionnaire was administered to collect the data and analyzed by using artificial intelligence and further the findings of the study revealed that work-life balance has positive and significant relationship with job performance in overall.

No. of Pages: 8 No. of Claims: 4

(86) International Application

(87) International Publication

(62) Divisional to Application

(61) Patent of Addition to

Filing Date

Application Number

Filing Date

Filing Date

Number

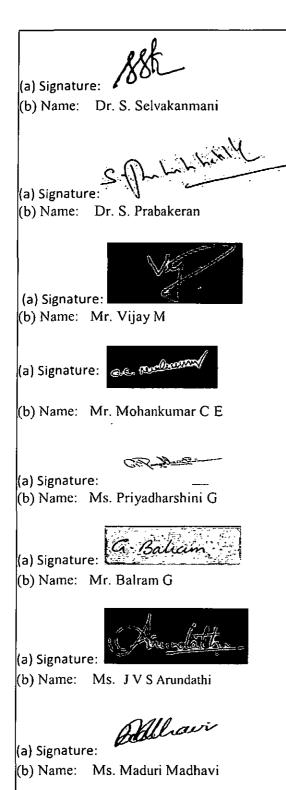
EDP IP OFF (COPP)
x49 11
x 49 //22

D) 100

	FORM 1				(	FOR OF	FICE USE ONLY)
	THE PATENTS ACT 1970 (39 of 1970)						
	and THE PATENTS RULES, 2003						
	APPLICATI	ON FOR GRANT	OF PATENT				
	(See section	7, 54 and 135 ar	nd sub-rule (1	) of rule 20)			
			et av 1 - et stjert ovg	Application	n No.		20224/000353
ı	الله ير		11.111	Filing date	:		04/01/2022
14				Amount of Fee		d:	1750/
		700273971		CBR No:			31911
	**	* ************************************	** ***********************************	Signature:			Marifiz
	1. APPLICA	NT'S REFERENCE	:/				
	IDENTIFICA	ATION NO. (AS A	LLOTTED BY	i			
	OFFICE)						
	2. TYPE OF	APPLICATION [F	Please tick ( 🗸	rat the app	ropriate	categor	
	Ordinary (		Convention		PCT-NI		
	Divisional	Patent of	Divisional	Patent of	Divisio		Patent of Addition ( )
	()	Addition ( )	()	Addition ( )		1	atent of Addition ( )
	3A. APPLIC		<u> </u>	radicionty	( )		
	Name in	Full	Nationality	Country of	Addres	s of the	Applicant
				Residence			
	-				Addres	Asso	ociate Professor & HOD,
	Dr. S. Selvakanmani		Indian	India			artment of Artificial
	ري . ي . اردا	Livakammam				1	ligence & Data Science,
_							ammal Institute of Technology, ammal Gardens, Panchetti,
E						[	mmal Gardens, Panchetti, nnai – Kolkatta Highway,
					,		nnai - 601204
/F					Mobile		7484799
533					E-mail i	d sska	anmani6@yahoo.com
03					Address	Assi	stant Professor, Department of
00			Indian	India		Netv	vorking and Communications,
<b>4</b>	Dr. S. Pra	abakeran				SRM	1 Institute of Science &
22,						1	nnology (SRMIST)
50;							ankulathur, Chengalpattu
0/2							rict - 603 203, Tamil Nadu,
02						India	3
2/.							
05							
1-2							
ar							
04-Jan-2022/700/202241000353/Fo	NT OF	FICE CH	ENNAI	07/0	1/20	922	12:15
<b>o</b> ' '''	· · · · · · ·						

			is a second	Mobile	9042394880
				E-mail id	prabakeran_84@yahoo.co.in
	Mr.Vijay M	Indian	India	Address	Assistant Professor, Department of ECE, Velammal Institute of Technology, Velammal Knowledge Park, Chennai – Kolkatta High Way, Panchetti, Thiruvallur District. Pincode – 601 204
				E-mail id	vijaymepcoece@gmail.com
	Mr. Mohankumar C E	Indian	India	Address	Assistant Professor, Department of ECE, GRT Institute Of Engineering and Technology, GRT Mahalakshmi Nagar, Chennai-Tirupathi Highway
					Tiruttani-631209
				Mobile	9445336089
				E-mail id	ceramsai@gmail.com
,	Ms. Priyadharshini G	Indian	India	Address	Lecturer, Department of Computer Engineering, Sri Ranganathar Institute Of Polytechnic College, Athipalayam, Coimbatore – 641110.
				Mobile	9750712877
_				E-mail id	priya92.cs@gmail.com
02241000353/Form	Mr. G.Balram	Indian	India	Address  Mobile  E-mail id	Assistant Professor, Department of Computer Science and Engineering, Anurag University, Venkatapur, Ghatkesar Medchal District, Hyderabad, Telangana, India -500088  9492064511  balramcse@anurag.edu.in
<b>04-Jan-2022/700/2</b>	Mr. G.Balram	ENNAI	07/0	1 / 2 0 2	22 12:15

	Ms. J V S Arundathi	Indian	India	Address	Lecturer, Department of Computer Science Engineering, , SR&BGNR Govt. Arts and Science Degree and PG College(Autonomous), Khammam-507002			
				Mobile	9848881973			
	·			E-mail	jvs.arundathi@gmail.com			
	Ms. Maduri Madhavi	Indian	India	Address	Assistant professor, Department of Artificial Intelligence, Anurag University, Venkatapur, Ghatkesar Medchal District, Hyderabad, Telangana, India - 500088			
				E-mail	madurimadhavi@gmail.com			
	Mr. R. Partheepan	Indian	India	Address	Assistant professor, Department of Electronics and Communication Engineering, J.N.N Institute of Engineering, No:90,Usha Garden, Chennai-Periyapalayam Highway, Kannigaipair, Tamil Nadu- 601102			
				Mobile	9965303553			
				E-mail	rpartheepanphd@gmail.com			
	Mr. Kishore Abishek	Indian	India	Address	Chief Technical Associate, Knowledge Xchange Community, No: 131/2, Emerald Flats, Thirumangalam, Anna Nagar West, Chennai – 600040 Tamil Nadu India			
٦				Mobile	7868849598			
orr				E-mail	mando.kishoreabishck86@gmail.com			
3/F	3B. CATEGORY OF APPLICAN	T [Please tick	( <b>✓</b> ) at th	ne appropr	iate category]			
35	Natural Person (✔)		an Natura					
000		Small En	tity()	Startup	() Others ( )			
410	4. INVENTOR(S) [Please tick ( ✓ ) at the appropriate category]							
00/2022	Are all the inventor(s) same as the applicant(s) named above?	Yes ( 🗸	)		No ()			
04-Jan-2022/700/202241000353/For	NT OFFICE CH	ENNAI	07/0	)1/20	22 12:15			



10. IN CASE OF DIVISIONAL APPLICAT	TION 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) Signature:

(b) Name: Dr. S. Selvakanmani

(a) Signature:

(b) Name: Dr. S. Prabakeran

(a) Signature:

(b) Name: Mr. Vijay M

(a) Signature:

GE Die Brook

(b) Name: Mr. Mohankumar C E



(a) Signature:

(b) Name: Ms. Priyadharshini G



(a) Signature: क्रिकेट

(b) Name: Mr. Balram G



Allar

(a) Signature:

(b) Name: Ms. JVS Arundathi

(a) Signature:

(b) Name: Ms. Maduri Madhavi

(a) Signature:

Q-mm

(b) Name: Mr. R. Partheepan

(a) Signature:

(b) Name: Mr. Kishore Abishek

#### (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.

(i) Declaration by the applicant(s)

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

- (a) ✓I am/ We are in possession of the above-mentioned invention.
- (b) ✓ The provisional/complete specification relating to the invention is filed with this application.
- (c) ✓ 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.
- (d) ✓ There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- (e) ✓ I am/we are the true & first inventor(s).
- (f) I am/we are the assignee or legal representative of true & first inventor(s).
- (g) 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).
- (h) 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.
- (i) My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9.
- (j) 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.
- (k) 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) **Y** Form 2

Item	Details	Fee	Remarks
Complete/	No. of pages		
provisional			
specification)#			
No. of Claim(s)	No. of claims and		
	No. of pages		
Abstract	No. of pages		
No. of Drawing(s)	No. of drawings and	•	
	No. of pages		

- (a) 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)

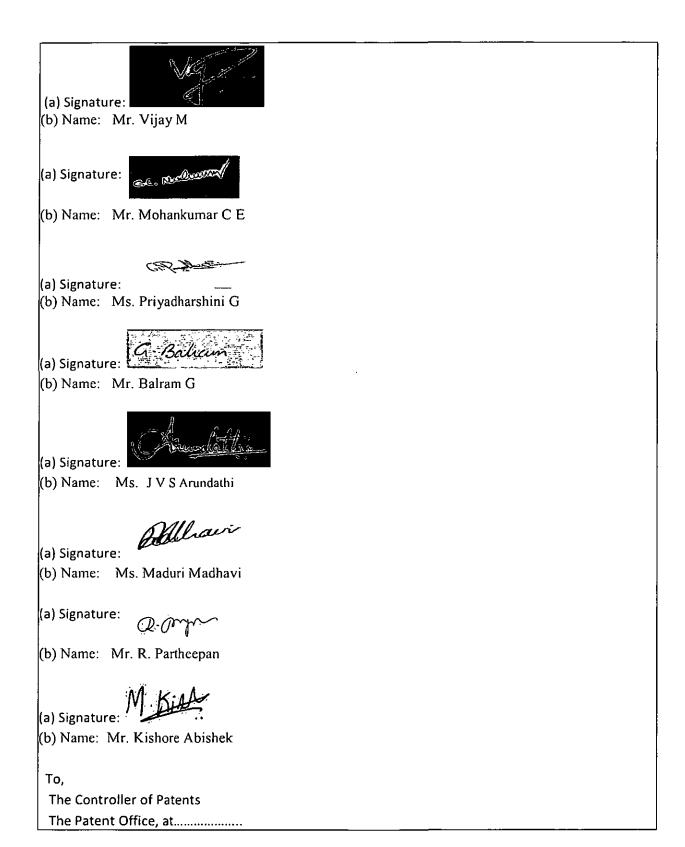
I/We hereby declare that to the best of my/our knowledge, information and belief the fact and matters slated herein are correct and I/We request that a patent may be granted to me/us for the said invention.

(a) Signature:

(b) Name: Dr. S. Selvakanmani

(a) Signature:

(b) Name: Dr. S. Prabakeran



#### 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

(19) INDIA

(22) Date of filing of Application :04/01/2022

(51) International classification B64C0039020000, A01N0065080000

:NA

: NA

·NA

:NA

:NA

(86) International Application

(87) International Publication

(62) Divisional to Application

(61) Patent of Addition to

Filing Date

Application Number

Filing Date

Filing Date

Number

(21) Application No.202241000353 A

(43) Publication Date: 21/01/2022

#### (54) Title of the invention: MACHINE VISION BASED IOT ENABLED PEST IDENTIFICATION DRONE WITH CLOUD COMPUTING DATA ANALYTICS

:A01M0007000000, G06K0009620000, G06T0007000000,

(71)Name of Applicant:

1)Dr. S. SELVAKANMANI Address of Applicant : ASSOCIATE PROFESSOR & HOD, DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE, VELAMMAL INSTITUTE OF TECHNOLOGY, VELAMMAL GARDENS, PANCHETTI, CHENNAI - 601204. --

2)Dr. S. PRABAKERAN 3)Mr. VIJAY M 4)Mr. MOHANKUMAR C E 5)Ms. PRIYADHARSHINI G 6)Mr. G. BALRAM 7)Ms. J V S ARUNDATHI 8)Ms. MADURI MADHAVI 9)Mr. R. PARTHEEPAN

10)Mr. KISHORE ABISHEK

Name of Applicant : NA Address of Applicant : NA

(72)Name of Inventor:
1) Dr. S. SELVAKANMANI

Address of Applicant : ASSOCIATE PROFESSOR & HOD, DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE, VELAMMAL INSTITUTE OF TECHNOLOGY, VELAMMAL GARDENS, PANCHETTI, CHENNAI - 601204. -

2)Dr. S. PRABAKERAN

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF NETWORKING AND COMMUNICATIONS, SRM INSTITUTE OF SCIENCE & TECHNOLOGY (SRMIST) KATTANKULATHUR, CHENGALPATTU DISTRICT-603 203, TAMIL NADU,

3)Mr. VIJAY M

Address of Applicant : ASSISTANT PROFESSOR, DEPARTMENT OF ECE, VELAMMAL INSTITUTE OF TECHNOLOGY, VELAMMAL KNOWLEDGE PARK, CHENNAI-KOLKATA HIGH WAY, PANCHETTI, THIRUVALLUR DISTRICT, PINCODE-601 204 --

4)Mr. MOHANKUMAR C E

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ECE, GRT INSTITUTE OF ENGINEERING AND TECHNOLOGY, GRT MAHALAKSHMI NAGAR. CHENNAI-TIRUPATHI HIGHWAY TIRUTTANI-631209 --

5)Ms. PRIYADHARSHINI G

Address of Applicant :LECTURER, DEPARTMENT OF COMPUTER ENGINEERING, SRI RANGANATHAR INSTITUTE OF POLYTECHNIC COLLEGE, ATHIPALAYAM, COIMBATORE-641110.

6)Mr. G. BALRAM

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, ANURAG UNIVERSITY, VENKATAPUR, GHATKESAR MEDCHAL DISTRICT, HYDERABAD, TELANGANA, INDIA-500088 -----

7)Ms. J V S ARUNDATHI

Address of Applicant :LECTURER, DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING, SR &BGNR GOVT. ARTS AND SCIENCE DEGREE AND PG COLLEGE(AUTONOMOUS)KHAMMAM 507002 -

8)Ms. MADURI MADHAVI

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ARTIFICIAL INTELLIGENCE, ANURAG UNIVERSITY, VENKATAPUR, GHATKESAR MEDCHAL DISTRICT, HYDERABAD, TELANGANA, INDIA, 500088

9)Mr. R. PARTHEEPAN

Address of Applicant :ASSISTANT PROFESSOR, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING, J.N.N INSTITUTE OF ENGINEERING, NO:90, USHA GARDEN, CHENNAI-PERIYAPALAYAM HIGHWAY, KANNIGAIPAIR, TAMIL NADU-601102

10)Mr. KISHORE ABISHEK

Address of Applicant : CHIEF TECHNICAL ASSOCIATE, KNOWLEDGE X CHANGE COMMUNITY NO:131/2, EMERALD FLATS, THIRUMANGALAM, ANNA NAGAR WEST, CHENNAI-600040, TAMIL NADU, INDIA -

This invention is an image processing product with hardware and software components for identification of pests on crops and sending an alert message to the farmer. Pests and insects are one of the most common problems in agriculture. As a generic solution, pesticides and insecticides are sprayed over the plants which affect the food grains. There is always a certain level of residue insecticide or pesticide on the food grains which has a certain level of toxicity. In this invention, an image processing based drone system is made to scan or comb through the field identifying the insects or pests. An early identification system can give enable a solution where these insects or pests are eliminated without chemical spraying. The on-board electronic computing unit on the drone sends the image or the processed information to the server. The server sends the notification to the farmer's mobile application on identification of the pest or insect. Conventional tested image processing algorithms like CNN and SVM are employed integrated with standard machine vision data analysing techniques.

No. of Pages: 7 No. of Claims: 5