

(12) PATENT APPLICATION PUBLICATION

(21) Application No.201941019966 A

(19) INDIA

(22) Date of filing of Application :20/05/2019

(43) Publication Date : 27/11/2020

(54) Title of the invention : FLOW FIELD DESIGN FOR PROTON EXCHANGE MEMBRANE FUEL CELL

(51) International classification :H01M0008101800,
H01M0008041190,
H01M0008021300,
H01M0008026500,
H01M0008025800

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(32) Priority Date :NA
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Filing Date :NA
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(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)Andhra University College of Engineering (A)
Address of Applicant :Andhra University College of
Engineering (A), Andhra University, Visakhapatnam- 530003,
Andhra Pradesh, India. Andhra Pradesh India

(72)Name of Inventor :
1)Kuchipudi Satish Raj
2)Shaik Shadulla
3)Dr.S.V.Naidu

(57) Abstract :

Title: A Flow Field Design for Proton Exchange Membrane Fuel Cell The proposed disclosure provides a partially blocked serpentine flow field structure which was conceptualized and fabricated with rib and channel for a proton exchange membrane fuel cell. The flow field design comprises of a graphite , plurality of ribs, plurality of baffles and plurality of inlets and outlets. The flow field design improves the output performance of a proton exchange membrane fuel cell (PEMFC) and offer better water management inside the cell. The flow field design having a partial blockage with baffles aid in reducing pressure drop and minimizing gas crossover effect. The new flow field design incorporated in a proton exchange membrane fuel cell (PEMFC) stack is useful for commercial applications like public transportation and stationery power.

No. of Pages : 18 No. of Claims : 10



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 Ministry of Commerce & Industry,
 Government of India

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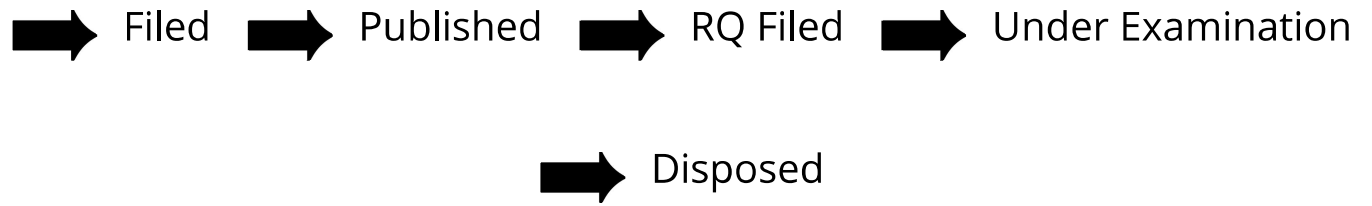
Application Details

APPLICATION NUMBER	201941019966
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	20/05/2019
APPLICANT NAME	Andhra University College of Engineering (A)
TITLE OF INVENTION	FLOW FIELD DESIGN FOR PROTON EXCHANGE MEMBRANE FUEL CELL
FIELD OF INVENTION	ELECTRICAL
E-MAIL (As Per Record)	ganapathi@novelpatent.com
ADDITIONAL-EMAIL (As Per Record)	ganapathi@novelpatent.com
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	27/11/2020

Application Status

APPLICATION STATUS	Awaiting Request for Examination
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Document Name	Created Date/Uploaded Date
Correspondence by Agent_Form1-Form3-Form5-POA_29-05-2019.pdf	29/05/2019
201941019966-COMplete SPECIFICATION [20-05-2019(online)].pdf	20/05/2019
201941019966-DECLARATION OF INVENTORSHIP (FORM 5) [20-05-2019(online)].pdf	20/05/2019
201941019966-DRAWINGS [20-05-2019(online)].pdf	20/05/2019
201941019966-FORM 1 [20-05-2019(online)].pdf	20/05/2019
201941019966-POWER OF AUTHORITY [20-05-2019(online)].pdf	20/05/2019
201941019966-STATEMENT OF UNDERTAKING (FORM 3) [20-05-2019(online)].pdf	20/05/2019

"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 (<input checked="" type="checkbox"/>)		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	
AU College of Engineering (A), Andhra University		INDIAN	INDIA	House No.	AU College of Engineering (A), Andhra University
				Street	Andhra University
				City	Visakhapatnam
				State	Andhra Pradesh
				Country	India
				Pin code	530 003
3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]					
Natural Person ()		Other than Natural Person			
		Small Entity ()	Startup ()	Others (<input checked="" type="checkbox"/>)	
4. INVENTOR(S) [Please tick (✓) at the appropriate category]					
Are all the inventor(s)		Yes ()		No (<input checked="" type="checkbox"/>)	
same as the applicant(s) Named above?					
If "No", furnish the details of the inventor(s)					

Name in Full	Nationality	Country of Residence	Address of the Inventor	
			House	
Kuchipudi Satish Raj	Indian	India	House	Research Scholar
			Street	Dept. of Chemical Engg, AU College of Engineering (A), Andhra University
			City	Visakhapatnam
			State	Andhra Pradesh
			Country	India
			Pin code	530 003
Shaik Shadulla	Indian	India	House	Research Scholar
			Street	Dept. of Chemical Engg, AU College of Engineering (A), Andhra University
			City	Visakhapatnam
			State	Andhra Pradesh
			Country	India
			Pin code	530 003
Dr.S.V.Naidu	Indian	India	House	Professor
			Street	Dept. of Chemical Engg, AU College of Engineering (A), Andhra University
			City	Visakhapatnam
			State	Andhra Pradesh
			Country	India
			Pin code	530 003
5. TITLE OF THE INVENTION				
Flow Field Design for Proton Exchange Membrane Fuel Cell				
6. AUTHORISED REGISTERED PATENT AGENT(S)		IN/PA No.	2312	
		Name	K.Ganapathi S Naidu	
		Mobile No.	+91 9000111656	
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA		Name	AU College of Engineering (A) Andhra University	
		Postal Address	Novel Patent Services Pvt.Ltd., HIG-421, MANSITA, Above Punjab National Bank, Midhilapuri VUDA Colony, P.M.Palem, Visakhapatnam-41, Andhra Pradesh, India	
		Telephone No.	0891-2538757	
		Mobile No.	+91 9000111656	
		Fax No.		
		E-mail ID	ganapathi@novelpatent.com	

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

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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, the above named inventor is the true & first inventor(s) for this Invention and declare that the applicant herein is my assignee or legal representative.

(a) Date: 04-05-2019

(b) Signature: 1. 

Name: 1. Kuchipudi Satish Raj

Signature: 2. 

Name: 2. Shaik Shadulla

Signature: 3. 

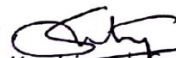
Name: 3. Dr.S.V.Naidu

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

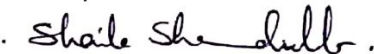
(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for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

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

(a) Date: 05-04-2019

(b) Signature: 1. 

Name: 1. Kuchipudi Satish Raj

Signature: 2. 

Name: 2. Shaik Shadulla

Signature: 3. 

Name: 3. Dr.S.V.Naidu

(iii) Declaration by the applicant(s)

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

- I am in possession of the above-mentioned invention.
- 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.
- There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- I am the true & first inventor.
- I am the assignee or legal representative of true & first inventor.
 - 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 12		
No. of Claim(s)	No. of claims and 10 No. of pages 02		
Abstract	No. of pages 01		
No. of Drawing(s)	No. of drawings and 05 No. of pages 03		

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

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.

Dated this 04th day of May, 2019

Signature:



Name: K Ganapathi S Naidu

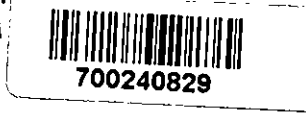
To,

The Controller of Patents
The Patent Office, at Chennai

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";

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 [Sec Rule 22(1)]
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Docket No 42292

Date/Time 2019/05/20 19:36:42

Ganapathi S Naidu Konathala HIG-421,
 Manshita, 2nd Floor, Above Punjab National
 Bank, MIDHILAPURI VUDA COLONY,
 MADHURAWADA Email:
 udaytej@gmail.com

Sr. No.	Ref. No./Application No.	App. Number	Amount Paid	C.B.R. No.	Form Name	Fee Payment	Remarks
1	201941019966	TEMP/E-1/20827/2019-CHE	8000	16055	FORM 1	Full	Flow Field Design for Proton Exchange Membrane Fuel Cell

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0000509598	Online Bank Transfer	2005190006636	8000.00	1475001020000001

Total Amount : ₹ 8000

Amount in Words: Rupees Eight Thousand Only

Received from Ganapathi S Naidu Konathala the sum of ₹ 8000 on account of Payment of fee for above mentioned Application/Forms.

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201941019966

20.05.2019



M. Kanya Kumari
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Dabagardens, Visakhapatnam
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FORM 26

THE PATENTS ACT, 1970
(39 of 1970)

&

The Patents Rules, 2003

FORM FOR AUTHORISATION OF A PATENT AGENT/OR ANY PERSON IN A
MATTER OR PROCEEDING UNDER THE ACT
[See sections 127 and 132; and rule 135]

We, Andhra University College of Engineering (A), whose address is AU College of Engineering (A), Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India, hereby authorize Mr. Ganapathi S Naidu Konathala, nationality Indian whose address is NOVEL PATENT SERVICES PRIVATE LIMITED, HIG-421, Above Punjab National Bank, Mansita, Midhilapuri VUDA Colony, Visakhapatnam-530041, to act on our behalf in connection with the registration, prosecution, renewal and maintenance of invention "Flow Field Design for Proton Exchange Membrane Fuel Cell" and request that all notices, requisitions and communication relating thereto may be sent to such person at the above address unless otherwise specified. We hereby revoke all previous authorization, if any made, in respect of same matter or proceeding. We hereby assent to the action already taken by the said person in the above-matter.

Dated this 10th day of May, 2019

For M/s. Novel Patent Services Pvt Ltd

For Andhra University College of Engineering (A)

Digitally Signed by
Ganapathi S Naidu Konathala
Patent Agent

A. Srinivasa Rao
Prof. P. Srinivasa Rao
Principal



To
PATENT OFFICE CHENNAI 30/05/2019 15:23
The Controller of Patents,
The Patent Office, At CHENNAI.

29-May-2019/45198/201941019966/OTHERS

FORM 5

THE PATENTS ACT, 1970
(39 of 1970)


&

The Patents Rules, 2003
DECLARATION AS TO INVENTORSHIP
[See section 10(6); rule 13(6)]

We Kuchipudi Satish Raj, Shaik Shadulla and Dr.S.V.Naidu hereby declare that the true and first inventors of the invention disclosed in the complete specification filed in pursuance of our application dated 04-05-2019 are

Dated this 04th day of May, 2019

Signature



Kuchipudi Satish Raj

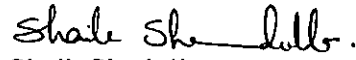
S/o (Late) Dr.K.S.Raju

INDIAN

Research Scholar

Dept. of Chemical Engineering, AU College of Engineering (A),
Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India

Signature



Shaik Shadulla

S/o (Late) Sk. Gani

INDIAN

Research Scholar

Dept. of Chemical Engineering, AU College of Engineering (A),
Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India

Signature



Dr.S.V.Naidu

S/o (Late) S.Radhakrishna Murthy

INDIAN

Professor

Dept. of Chemical Engineering, AU College of Engineering (A),
Andhra University, Visakhapatnam-530 003. Andhra Pradesh, India

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To

The Controller of Patents,
The Patent Office, At CHENNAI.

29-May-2019/45198/201941019966/OTHERS

FORM 3

THE PATENTS ACT, 1970
(39 of 1970)

&

The Patents Rules, 2003

STATEMENT AND UNDERTAKING UNDER SECTION 8
(See section 8, rule 12)

1. We Kuchipudi Satish Raj, Shaik Shadulla and Dr.S.V.Naidu hereby declare that we have not made any application for the same/substantially the same invention outside India
2. That the rights in the application(s) has/have been assigned to AU College of Engineering (A), Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India.
3. That we undertake that upto the date of grant of the patent, by the Controller, we would keep them informed in writing the details regarding corresponding applications for patents filed outside India within three months from the date of filling such application.

Dated this 04th day of May, 2019

Signature

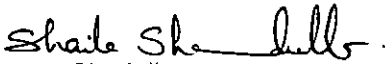


Kuchipudi Satish Raj
S/o (Late) Dr.K.S.Raju
INDIAN

Research Scholar

Dept. of Chemical Engineering, AU College of Engineering (A),
Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India

Signature

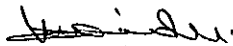


Shaik Shadulla
S/o (Late) Sk. Gani
INDIAN

Research Scholar

Dept. of Chemical Engineering, AU College of Engineering (A),
Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India

Signature



Dr.S.V.Naidu
S/o (Late) S.Radhakrishna Murthy
INDIAN

Professor

Dept. of Chemical Engineering, AU College of Engineering (A),
Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India

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To

The Controller of Patents,
The Patent Office, At CHENNAI.

29-May-2019/45198/201941019966/OTHERS

"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 (<input checked="" type="checkbox"/>)		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	
AU College of Engineering (A), Andhra University		INDIAN	INDIA	House No.	AU College of Engineering (A), Andhra University
				Street	Andhra University
				City	Visakhapatnam
				State	Andhra Pradesh
				Country	India
Pin code	530 003				
3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]					
Natural Person ()		Other than Natural Person			
		Small Entity ()	Startup ()	Others (<input checked="" type="checkbox"/>)	
4. INVENTOR(S) [Please tick (✓) at the appropriate category]					
Are all the inventor(s) same as the applicant(s) Named above?		Yes ()		No (<input checked="" type="checkbox"/>)	
If "No", furnish the details of the inventor(s)					

PATENT OFFICE CHENNAI 30/05/2019 15:23

Name in Full	Nationality	Country of Residence	Address of the Inventor	
			House	
Kuchipudi Satish Raj	Indian	India	House	Research Scholar
			Street	Dept. of Chemical Engg, AU College of Engineering (A), Andhra University
			City	Visakhapatnam
			State	Andhra Pradesh
			Country	India
			Pin code	530 003
Shaik Shadulla	Indian	India	House	Research Scholar
			Street	Dept. of Chemical Engg, AU College of Engineering (A), Andhra University
			City	Visakhapatnam
			State	Andhra Pradesh
			Country	India
			Pin code	530 003
Dr.S.V.Naidu	Indian	India	House	Professor
			Street	Dept. of Chemical Engg, AU College of Engineering (A), Andhra University
			City	Visakhapatnam
			State	Andhra Pradesh
			Country	India
			Pin code	530 003

5. TITLE OF THE INVENTION

Flow Field Design for Proton Exchange Membrane Fuel Cell

6. AUTHORISED REGISTERED PATENT AGENT(S)

IN/PA No.	2312
Name	K.Ganapathi S Naidu
Mobile No.	+91 9000111656

7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA

Name	AU College of Engineering (A) Andhra University
Postal Address	Novel Patent Services Pvt.Ltd., HIG-421, MANSITA, Above Punjab National Bank, Midhilapuri VUDA Colony, P.M.Palem, Visakhapatnam-41, Andhra Pradesh, India
Telephone No.	. 0891-2538757
Mobile No.	+91 9000111656
Fax No.	

29-May-2019/45198/201941019966/OTHERS

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		

29-May-2019/45198/201941019966/OTHERS

PATENT OFFICE CHENNAI 30/05/2019 15:23

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)

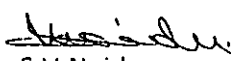
(In case the applicant is an assignee: the inventor(s) may sign herein below or the applicant may upload the assignment or enclose the assignment with this application for patent or send the assignment by post/electronic transmission duly authenticated within the prescribed period).

I, the above named inventor is the true & first inventor(s) for this Invention and declare that the applicant herein is my assignee or legal representative.

(a) Date: 04-05-2019

(b) Signature: 1. 
Name: 1. Kuchipudi Satish Raj

Signature: 2. 
Name: 2. Shaik Shadulla


Signature: 3. 
Name: 3. Dr.S.V.Naidu

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

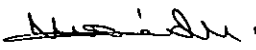
(In case the applicant in India is different than the applicant in the convention country: the applicant in the convention country may sign herein below or applicant in India may upload the assignment from the applicant in the convention country or enclose the said assignment with this application for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

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

(a) Date: 05-04-2019

(b) Signature: 1. 
Name: 1. Kuchipudi Satish Raj

Signature: 2. 
Name: 2. Shaik Shadulla

Signature: 3. 
Name: 3. Dr.S.V.Naidu

(iii) Declaration by the applicant(s)

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

- I am in possession of the above-mentioned invention.
- 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.
- There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- I am the true & first inventor.
- I am the assignee or legal representative of true & first inventor.
 - ┆ 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 12		
No. of Claim(s)	No. of claims and 10 No. of pages 02		
Abstract	No. of pages 01		
No. of Drawing(s)	No. of drawings and 05 No. of pages 03		

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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

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.

Dated this 04th day of May, 2019

Signature:



Name: K Ganapathi S Naidu

To,

The Controller of Patents

The Patent Office, at Chennai

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";

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