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(54) Title of the invention : NANOPARTICLES FOR PRODUCING CERAMIC HEAT SHIELD AND SEAL

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Filing Date :NA
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Filing Date :NA

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(57) Abstract :
The methods used to create multilayer ceramic coatings with porosity in some of the layers are discussed, and the finished coatings. Different layers may be applied at various temperatures by placing a heat-blocking shield regularly between the heat source and either the evaporated or an external heater. Layers that are applied have a Zone I structure, whereas layers that are not are structured in a Zone I or II manner. Zone I structural layers may have their porosity increased with heat treatment.

No. of Pages : 26 No. of Claims : 5

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Application Details	
APPLICATION NUMBER	202141044814
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	03/10/2021
APPLICANT NAME	1 . Dr. Ganganagunta Srinivas 2 . Dr M Sreenivasa Rao 3 . Dr. Kommana Siva Kumar 4 . Dr.S. Srigowri 5 . Mr. Md Ahammad Sharif 6 . Dr M.P. Srinivas Rao 7 . Dr K. Sunil 8 . Mrs. Alpitha Suhasini Juttuka 9 . Dr CA Jyothirmayee 10 . Dr.K. Sreelatha 11 . Mr. Adabala Kumar Sanjay 12 . Mr. Nellore Manoj Kumar
TITLE OF INVENTION	NANOPARTICLES FOR PRODUCING CERAMIC HEAT SHIELD AND SEAL
FIELD OF INVENTION	ELECTRONICS
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E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	--
PUBLICATION DATE (U/S 11A)	15/10/2021

Application Status	
APPLICATION STATUS	**Awaiting Request for Examination**

			View Documents

➡ Filed ➡ Published ➡ RQ Filed ➡ Under Examination ➡ Disposed

In case of any discrepancy in status, kindly contact ipo-helpdesk@nic.in

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Department of Industrial Policy & Promotion,
Ministry of Commerce & Industry,
Government of India

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Document Name	Created Date/Uploaded Date
202141044814-COMPLETE SPECIFICATION [03-10-2021(online)].pdf	03/10/2021
202141044814-DECLARATION OF INVENTORSHIP (FORM 5) [03-10-2021(online)].pdf	03/10/2021
202141044814-DRAWINGS [03-10-2021(online)].pdf	03/10/2021
202141044814-FORM 1 [03-10-2021(online)].pdf	03/10/2021
202141044814-FORM-9 [03-10-2021(online)].pdf	03/10/2021
202141044814-REQUEST FOR EARLY PUBLICATION(FORM-9) [03-10-2021(online)].pdf	03/10/2021
202141044814-STATEMENT OF UNDERTAKING (FORM 3) [03-10-2021(online)].pdf	03/10/2021

FORM 1 THE PATENTS ACT 1970 (39 of 1970) and THE PATENTS RULES, 2003 **APPLICATION FOR GRANT OF PATENT** (See section 7, 54 and 135 and sub-rule (1) of rule 20)	(FOR OFFICE USE ONLY)

	Application No.	
	Filing date:	
	Amount of Fee paid:	
	CBR No:	
	Signature:	
1. APPLICANT'S REFERENCE / IDENTIFICATION NO. (AS ALLOTTED BY OFFICE)		

2. TYPE OF APPLICATION [Please tick (✓) at the appropriate category]

Ordinary (✓)		Convention ( )		PCT-NP ( )	
Divisional ( )	Patent of Addition ( )	Divisional ( )	Patent of Addition ( )	Divisional ( )	Patent of Addition ( )

3A. APPLICANT(S)

Name in Full	Nationality	Country of Residence	Address of the Applicant
1. Dr. Ganganagunta Srinivas	INDIAN	OMAN	Senior Faculty in Physics Engineering department University of Technology and Applied Sciences-IBRA IBRA, North Al Shrqiya Region Oman, Pincode:400
2. Dr M Sreenivasa Rao	INDIAN	India	Professor & Head Department of Mechanical Engineering Godavari Institute of Engineering and Technology (A) Rajahmundry, Andhra Pradesh, India Pincode -533296
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6. Dr M.P. Srinivas Rao	INDIAN	India	Professor Department of Basic Sciences and Humanities GMR Institute of Technology Rajam, Andhra Pradesh, India Pincode:532127
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8. Mrs. Alpitha Suhasini Juttuka	INDIAN	India	Assistant Professor (C), Department of Petroleum Engineering and Petrochemical Engineering University College of Engineering Kakinada (A), JNTUK, Kakinada Andhra Pradesh, India Pincode: 533003
9. Dr CA Jyothirmayee	INDIAN	India	Associate Professor Department of Chemistry Ch.S.D.St.Theresa's College for Women (A), Eluru, West Godavari, Andhra Pradesh, India Pincode-534003
10. Dr.K. Sreelatha	INDIAN	India	Associate Professor in Physics Department of Physics Ch.S.D.St.Theresa's College for Women (A), Eluru, West Godavari, Andhra Pradesh, India

			Pincode-534003
11. Mr. Adabala Kumar Sanjay	INDIAN	India	Assistant Professor Department of Mining Godavari Institute of Engineering and Technology (A) Rajahmundry, Andhra Pradesh, India Pincode: 533296
12. Mr. Nellore Manoj Kumar	INDIAN	India	15-356, Gollapalem, Venkatagiri, SPSR Nellore District, Andhra Pradesh, India Pincode -524132

3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]			
Natural Person (✓)	Other than Natural Person		
	Small Entity ( )	Startup ()	Others ()

4. INVENTOR(S) [Please tick (✓) at the appropriate category]		
Are all the inventor(s) same as the applicant(s) named above?	Yes (✓)	No ()

If "No", furnish the details of the inventor(s)

Name in Full	Nationality	Country of Residence	Address of the Inventor
Same as Applicant			

5. TITLE OF THE INVENTION
Nanoparticles for producing ceramic heat shield and seal

6. AUTHORISED REGISTERED PATENT AGENT(S)	IN/PA No.	
	Name	
	Mobile No.	
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA	Name	Dr M Sreenivasa Rao
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	Telephone No.	
	Mobile No.	9442547353
	Fax No.	
	E-mail ID	mail2patentipr@gmail.co

		m iprsince2014@hotmail.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~~

~~11. IN CASE OF PATENT OF ADDITION FILED UNDER SECTION 54, PARTICULARS OF MAIN~~
~~APPLICATION OR PATENT~~

~~Main application/patent No.~~	~~Date of filing of main application~~

12. DECLARATIONS

(i) Declaration by the inventor(s)

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

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

(a) Date 02/10/2021

(b) Name	(c) Signature
1. Dr. Ganganagunta Srinivas 2. Dr M Sreenivasa Rao 3. Dr. Kommana Siva Kumar 4. Dr.S. Srigowri 5. Mr. Md Ahammad Sharif 6. Dr M.P. Srinivas Rao 7. Dr K. Sunil 8. Mrs. Alpitha Suhasini Juttuka 9 Dr CA Jyothirmayee 10 Dr.K. Sreelatha	

11 12	Mr. Adabala Kumar Sanjay Mr. Nellore Manoj Kumar	A. Kumar Sanjay N. Manoj Kumar

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

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

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

~~(a) Date~~

~~(b) Signature(s)~~

(c) ~~Name(s) of the signatory~~

(iii) Declaration by the applicant(s)

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

- ~~I am/~~ We are in possession of the above-mentioned invention.
- The ~~provisional~~/complete specification relating to the invention is filed with this application.
- ~~The invention as disclosed in the specification uses the biological material from India and the necessary permission from the competent authority shall be submitted by me/us before the grant of patent to me/us.~~
- There is no lawful ground of objection(s) to the grant of the Patent to me/us.
- ~~I am~~/we are the true & first inventor(s).
- ~~I am/we are the assignee or legal representative of true & first inventor(s).~~
- ~~The application or each of the applications, particulars of which are given in Paragraph-8, was the first application in convention country/countries in respect of my/our invention(s).~~
- ~~I/We claim the priority from the above mentioned application(s) filed in convention country/countries and state that no application for protection in respect of the invention had been made in a convention country before that date by me/us or by any person from which I/We derive the title.~~
- ~~My/our application in India is based on international application under Patent Cooperation Treaty (PCT) as mentioned in Paragraph-9.~~
- ~~The application is divided out of my /our application particulars of which is given inParagraph-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 : 23		
No. of Claim(s)	No. of claims : 05 No. of pages: 01		
Abstract	No. of pages: 01		
No. of Drawing(s)	No. of drawings: 01 No. of pages: 01		

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

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

(c) Sequence listing in electronic form

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

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

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

(g) Statement and Undertaking on Form 3

(h) Declaration of Inventorship on Form 5

(i)Power of Authority

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

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

Dated this 02nd day of October, 2021

Signature:

Name: Dr M Sreenivasa Rao et. al.

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";

FORM- 5
THE PATENTS ACT, 1970
(39 of 1970)
&
The Patents Rules, 2003
DECLARATION AS TO INVENTORSHIP
[See Section 10(6) and Rule 13(6)]

1. NAME OF THE APPLICANT(S)

I/We, Dr M Sreenivasa Rao et. al., all are citizen of India, Address of one of the Applicant: Professor & Head Department of Mechanical Engineering Godavari Institute of Engineering and Technology (A) Rajahmundry, Andhra Pradesh, India Pincode -533296

hereby declare that the true and first inventor(s) of the invention disclosed in the complete specification filed in pursuance of ~~my~~ / our application numbered _____ dated 02-10-21 ~~is~~/are

2. INVENTOR(S)

(a) NAME	**(b) NATIONALITY**	**(c) ADDRESS**
1. Dr. Ganganagunta Srinivas	INDIAN	Senior Faculty in Physics Engineering department University of Technology and Applied Sciences-IBRA IBRA, North Al Shrqiya Region Oman, Pincode:400
2. Dr M Sreenivasa Rao	INDIAN	Professor & Head Department of Mechanical Engineering Godavari Institute of Engineering and Technology (A) Rajahmundry, Andhra Pradesh, India Pincode -533296
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9. Dr CA Jyothirmayee	INDIAN	Associate Professor Department of Chemistry Ch.S.D.St.Theresa's College for Women (A), Eluru, West Godavari, Andhra Pradesh, India Pincode-534003
10. Dr.K. Sreelatha	INDIAN	Associate Professor in Physics Department of Physics Ch.S.D.St.Theresa's

		College for Women (A), Eluru, West Godavari, Andhra Pradesh, India Pincode-534003
11. Mr. Adabala Kumar Sanjay	INDIAN	Assistant Professor Department of Mining Godavari Institute of Engineering and Technology (A) Rajahmundry, Andhra Pradesh, India Pincode: 533296
12. Mr. Nellore Manoj Kumar	INDIAN	15-356, Gollapalem, Venkatagiri, SPSR Nellore District, Andhra Pradesh, India Pincode -524132

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

N.A.

~~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 02nd day of October, 2021

Dr M Sreenivasa Rao et. al.

Applicant(s)

To,
The Controller of Patents
The Patent Office, Chennai