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) 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 ($\sqrt{}$) at the appropriate category] PCT-NP (Ordinary $(\sqrt{})$ Convention (Divisional () Patent of Addition (Divisional () Patent of Addition () Divisional () Patent of Addition () 3A. APPLICANT(S) **Country of** Name in Full Nationality **Address of the Applicant** Residence NIT Campus (P.O), Calicut, Kozhikode – National Institute of Indian India 673601, Kerala, India. **Technology Calicut 3B.** CATEGORY OF APPLICANT [Please tick ($\sqrt{}$) at the appropriate category] Other than Natural Person Educational Natural Person () Small Entity () Startup () Others () Institution ($\sqrt{}$) **4.** INVENTOR(S) [Please tick ($\sqrt{}$) at the appropriate category] Are all the inventor(s) same as the Yes() No $(\sqrt{})$ Applicant(s) named above? **If "No"**, furnish the details of the inventor(s) **Country of** Name in Full **Nationality** Address of the inventor Residence Indian India Research Scholar, Mr. S. Sathyaraj Department of Mechanical Engineering, National Institute of Technology Calicut, NIT Campus (P.O), Calicut, Kozhikode – 673601, Kerala, India. Dr. K. Sekar Indian India Associate Professor, Department of Mechanical Engineering, National Institute of Technology Calicut,

(FOR OFFICE USE ONLY)

FORM 1

5. TITLE OF THE INVENTION: A Method for Synthesis of Bio-Sourced Epoxy Vitrimer for Enhanced Toughness and Recyclability

NIT Campus (P.O), Calicut,

Kozhikode – 673601, Kerala, India.

6. AUTHORISED REGISTERED PATENT			IN/PA	3925			
AGENT(S)			Name	Hima Bindu Atti			
				Mobile No.	+91 9000111650	6	
7. ADDRESS FOR SERVICE OF APPLICANT IN			Name	National Institute of Technology Calicut			
INDIA				Postal Address	Novel Patent Services Pvt. Ltd., Plot #47, Sai Priya Layout, Opp. IIM-Vizag Road, Gambheeram, Anandapuram, Visakhapatnam-531163, Andhra Pradesh, India +91 9000111656		
				Mobile No.			
				E-mail ID	iprfilings@novelpatent.com		
PARTICUL	ARS OF CONVE	NTION APPLICA		ne of the	Title of the	IPC (as classified in th	
PARTICUL		NTION APPLICA					
Country		Filing date				`	
	Number		App	olicant	Invention	convention country)	
FILED UND		O-OPERATION T		(PCT)	LARS OF INTERN	ATIONAL APPLICATION	
10. IN CASI	E OF DIVISIONA	L APPLICATION	FILE	O UNDER SEC	FION 16, PARTICU	LARS OF ORIGINAL	
(FIRST) AP	PLICATION						
Original (firs	st) application No.			Date of	Date of filing of original (first) application		
11. IN CASI OR PATEN		F ADDITION FIL	ED UN	DER SECTION	54, PARTICULAR	S OF MAIN APPLICATION	
Main application/patent No.				Date of	Date of filing of main application		

$(i) \ Declaration \ by \ the \ inventor(s)$

(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).

We, the above named inventors are the true & first inventors for this Invention and declare that the applicants herein are our assignee or legal representative.

Dated This on 09th September 2024

a) Signature (s):

b) Name(s) : Mr. S. Sathyaraj

a) Signature (s):

b) Name(s) : Dr. K. Sekar

(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.

NA

(iii) Declaration by the applicant(s)

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

- O I am/ we are in possession of the above-mentioned invention.
- The Complete specification relating to the invention is filled 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.
- o I am/we are the true & first inventor(s).
- o Ham/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).
- o 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

Form 2

Item	Details	Fee	Remarks
Complete specification	No. of pages-		
No. of Claim(s)	No. of claims- and No. of Pages-		
Abstract	No. of pages - 01		
No. of Drawing(s)	No. of drawing- and No. of pages-		

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 Inventor ship on Form 5
- (i) Power of Authority

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

Dated this: 09th September 2024

Hima Bindu Atti
IN/PA-3925
Agent for the Applicant(s)

To

The Controller of Patents

The Patent Office at Chennai.