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[See Rule

22(1)]

RECEIPT

Date/Time 2022/11/17 12:41:14

Docket No 129806

Anuj Raturi Gyananand Bhawan, Kalinka Vihar,
Lane No. 3, Majrimafi, IIP Mohkampur Kala-
248005, Dehradun, Uttarakhand, India Email:
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Sr. No.	Ref. No./Application No.	App. Number	Amount Paid	C.B.R. No.	Form Name	Fee Payment	Remarks
1	E-12/6184/2022/DEL	202211066615	2500	45198	FORM 9	Full	
2	E-106/7388/2022/DEL	202211066615	0	-1	FORM28	Full	
3	202211066615	TEMP/E-1/76017/2022-DEL	1600	45198	FORM 1	Full	A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF

TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
N-0001053745	Online Bank Transfer	1711220008983	4100.00	1475001020000001

Total Amount : ₹ 4100.00

Amount in Words: Rupees Four Thousand One Hundred Only

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(19) INDIA

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(43) Publication Date : 30/12/2022

(54) Title of the invention : A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF

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Filing Date :NA

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Filing Date :NA

(71)Name of Applicant :

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Address of Applicant :Department of Applied Science, J B Institute of Technology, Dehradun. Dehradun -----

(57) Abstract :

A system for trapping soot emission (100) comprising: a filter element (101); a denitrification element (102), wherein said denitrification element (102) made of a denitrification compound to remove NOX compounds from the exhaust emission; and an exhaust element (103) configured to release the treated emission into the air. Wherein the method (101) for trapping soot emission comprising: in a step (201) the removal of particulate matter; in a step (202) eliminating NOX compounds; and in a step (203) releasing treated emission into air.

No. of Pages : 14 No. of Claims : 5

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	
J B INSTITUTE OF TECHNOLOGY		Indian	India	NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India.	
3B. CATEGORY OF APPLICANT [Please tick (✓) at the appropriate category]					
Natural Person ()		Other than Natural Person			
		Small Entity ()	Startup ()	Educational Institution (✓)	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	
Dr. Sandeep Kumar Chaudhary		Indian	India	Department of Applied Science, J B Institute of Technology.	

Dr. Santosh Kumar Joshi	Indian	India	Department of Applied Science, J B Institute of Technology.		
5. TITLE OF THE INVENTION					
"A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF"					
6. AUTHORISED REGISTERED PATENT AGENT(S)			IN/PA No.	IN/PA: 4266	
			Name	Anuj Raturi	
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			Telephone	N/A	
			Mobile No.	+91-9808414112	
			Fax No.	N/A	
			E-mail ID	anuj.mechanical19@gmail.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	IPC (as classified in the convention country)
Nil	Nil	Nil	Nil	Nil	Nil
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		
Nil			Nil		
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		
Nil			Nil		
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					

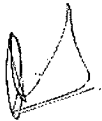

(i) Declaration by the inventor(s)

(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.

Dated this: 16th Day of November, 2022.

Signature(s)
Name(s) of the signatory

	
Dr. Sandeep Kumar Chaudhary	Dr. Santosh Kumar Joshi

(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.

Dated this: (Not applicable)

- a) Signature(s)
- b) 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 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 applications 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 #	No. of pages: 10		(Total 14 pages)
No. of Claim(s)	No. of claims 05 and No. of pages: 01		
Abstract	No. of pages: 01		
No. of Drawing(s)	No. of drawings No. 02 of pages: 02		

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.
- (c) Drawings (in conformation with the international application)/as amended before the International Preliminary Examination Authority (IPEA), as applicable (2 copies).
- (d) Statement and Undertaking on Form 3
- (e) Declaration of Inventorship on Form 5
- (f) Power of Authority Form 26
- (g) Request for Early Publication on Form 9
- (h) Request for Examination on Form 18

**Total fee - in cash/Banker's Cheque/Bank Draft Bearing NO..... Date.....on
..... Bank**

Dated this: 16th Day of November, 2022.

ON BEHALF OF APPLICANT

- a) Signature(s)
- b) Name(s) of the signatory

Signature: 

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

To,
The Controller of Patents
The Patent Office, at New Delhi, Mumbai, Kolkata, 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 2

**THE PATENTS ACT, 1970
(39 of 1970)**

&

The Patents Rules, 2003

COMPLETE SPECIFICATION

(See section 10 and rule 13)

**Title: "A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD
THEREOF"**

Applicant(s):

Name: J B INSTITUTE OF TECHNOLOGY

Nationality: India

Address: 23 Milestone, NH-07, Chakrata Road, Shankarapur, Dehradun,
Uttarakhand, India.

PREAMBLE TO THE DESCRIPTION:

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

FIELD OF THE INVENTION:

The present invention relates to an emission reduction system. Said emission reduction system more particularly relates to a system and method for trapping soot emission from an automobile exhaust system.

5 **BACKGROUND OF THE INVENTION:**

Background description includes information that may be useful in understanding the present invention. It is not an admission that any of the information provided herein is prior art or relevant to the presently claimed invention, or that any publication specifically or implicitly referenced is prior art.

- 10 A number of different type of the assemblies and apparatus for removing pollutants are available in the prior art. For example, the following prior arts are provided for their supportive teachings and are all incorporated by reference:

Prior art document, IN3675/DEL/2012 describes a system for reducing harmful emissions from the exhaust gases of an internal combustion engine. The present
15 invention in particular relates to a system for reducing harmful emissions from an internal combustion engine by using a turbulence generator before the catalytic converter in automobile exhaust pipe.

Another prior art document, FR2829183 describes a depollution device comprising an exhaust gas deflector in the inlet which can be controlled to direct the exhaust
20 gases to a reduced section of the inlet face of the porous body when the exhaust gases are at a low temperature and to an increasing section of the porous body as the temperature of the exhaust gases rises.

Yet another prior art document, EP2123879 describes a manufacturing process to add a deflector in a motor vehicle exhausts line for mixing and homogenizes
25 exhaust flow in front of an exhaust gas converter which comprises a collector, an inlet pipe, an exhaust converter and an outlet pipe connected in series.

Yet another prior art document, US3964875 describes a method and apparatus for deflecting or redistributing the flow of exhaust gases discharged from an exhaust

pipe into a canister or housing containing a coated honeycomb monolith of a catalytic converter of larger cross-sectional area than the exhaust pipe, so as to more evenly distribute such discharge flow through such catalysed honeycomb support member within the container, and thereby optimize the treatment and removal of
5 pollutants from said exhaust gases.

Yet another prior art document, CN201810378 provides a flow-guide energy-saving exhaust tail pipe comprising an interface, a front-mounted detector, a casing, exhaust openings, an inner pipe, a lava nozzle and an air inlet.

Yet another prior art document, US8146708 describes an exhaust muffler with an
10 integrated catalytic converter having a polymeric muffler body.

Yet another prior art document, US20100101219 describes an exhaust system for a vehicle with a diesel engine, having a first insert through which exhaust gas flows, a second insert through which exhaust gas flows and which is arranged downstream of the first insert in the flow direction, and an injection device arranged between the
15 first and second inserts for injecting a fluid. A swirling element is provided in the flow path of the exhaust gas downstream of the first insert in the flow direction.

Yet another prior art document, US20120103719 provides an exhaust muffler comprising an inlet in fluid communication with an outlet via an expansion chamber, the expansion chamber comprising an inner core extending in the
20 longitudinal direction, wherein the muffler is provided with at least one accelerator tube between the inlet and the expansion chamber.

All the above cited prior arts use inbuilt mechanism such as stationary detectors, variable flow deflectors or pinwheel inside the exhaust pipe before the catalytic converter. Wherein, the present invention discloses a system and method for
25 trapping soot emission from an automobile exhaust system which has all the advantages over the prior art and none of the disadvantages.

OBJECTS OF THE INVENTION:

Some of the objects of the present invention, which at least one embodiment herein satisfy are as listed herein below.

5 The main object of the present invention is to diminish air pollution from automobiles.

Another object of the present invention is to provide a system for trapping soot emission from an automobile for reducing air pollution is disclosed. The system comprises a filter element configured to filter out particulate matter from exhaust gases. Further, the system comprises a denitrification element configured to remove
10 NO_x compounds from the exhaust emission. Furthermore, the system comprises an exhaust element configured to release the treated emission into air.

Yet another object of the present invention is to provide a system and method for trapping automobile soot emission.

SUMMARY OF THE INVENTION:

15 As an aspects of the present invention relate to an emission reduction system, and more particularly to a system and method for trapping soot emission from an automobile.

In an aspect, a system for trapping soot emission from an automobile for reducing air pollution is disclosed. The system comprises a filter element configured to filter
20 out particulate matter from exhaust gases. Further, the system comprises a denitrification element configured to remove NO_x compounds from the exhaust emission. Furthermore, the system comprises an exhaust element configured to release the treated emission into air.

In an aspect, a method for trapping soot emission from an automobile for reducing
25 air pollution by vehicular emission is disclosed. The method begins with removing particulate matter from exhaust gases by a filter element. Next, the method removes NO_x compounds from the exhaust gases by a denitrification element. Thereafter, the method ends with releasing treated emission into air by an exhaust element.

Various objects, features, aspects, and advantages of the inventive subject matter will become more apparent from the following detailed description of preferred embodiments, along with the accompanying drawing figures in which like numerals represent like components.

5

BRIEF DESCRIPTION OF THE DRAWINGS:

It is to be noted, however, that the appended drawings illustrate only typical embodiments of this invention and are therefore not to be considered for limiting of its scope, for the invention may admit to other equally effective embodiments.

10 **FIG. 1** depicts an exemplary representation of a soot trapping system (100) as an embodiment of the present invention, and

FIG. 2 depicts an exemplary flow diagram (200) representing method for trapping soot emission from an automobile as an embodiment of the present invention.

15 **DETAILED DESCRIPTION:**

In the following detailed description, reference is made to the accompanying drawings which form a part hereof, and in which is shown by way of illustration specific embodiments in which the invention may be practiced. These embodiments are described in sufficient detail to enable those skilled in the art to practice the invention, and it is to be understood that the embodiments may be combined, or that other embodiments may be utilized and that structural and logical changes may be made without departing from the spirit and scope of the present invention. The following detailed description is, therefore, not to be taken in a limiting sense, and the scope of the present invention is defined by the appended claims and their
20
25 equivalents.

The present invention is described in brief with reference to the accompanying drawings. Now, refer in more detail to the exemplary drawings for the purposes of illustrating non-limiting embodiments of the present invention.

5 As used herein, the term "comprising" and its derivatives including "comprises" and "comprise" include each of the stated integers or elements but does not exclude the inclusion of one or more further integers or elements.

As used herein, the singular forms "a", "an", and "the" include plural referents unless the context clearly dictates otherwise. For example, reference to "a device" encompasses a single device as well as two or more devices, and the like.

10 As used herein, the terms "for example", "like", "such as", or "including" are meant to introduce examples that further clarify more general subject matter. Unless otherwise specified, these examples are provided only as an aid for understanding the applications illustrated in the present disclosure, and are not meant to be limiting in any fashion.

15 As used herein, the terms "may", "can", "could", or "might" be included or have a characteristic, that particular component or feature is not required to be included or have the characteristic.

20 Exemplary embodiments will now be described more fully hereinafter with reference to the accompanying drawings, in which exemplary embodiments are shown. These exemplary embodiments are provided only for illustrative purposes and so that this disclosure will be thorough and complete and will fully convey the scope of the invention to those of ordinary skill in the art. The invention disclosed may, however, be embodied in many different forms and should not be construed as limited to the embodiments set forth herein.

25 Various modifications will be readily apparent to persons skilled in the art. The general principles defined herein may be applied to other embodiments and applications without departing from the spirit and scope of the invention. Moreover, all statements herein reciting embodiments of the invention, as well as specific examples thereof, are intended to encompass both structural and functional

equivalents thereof. Additionally, it is intended that such equivalents include both currently known equivalents as well as equivalents developed in the future (i.e., any elements developed that perform the same function, regardless of structure). Also, the terminology and phraseology used is for the purpose of describing exemplary embodiments and should not be considered limiting. Thus, the present invention is to be accorded the widest scope encompassing numerous alternatives, modifications and equivalents consistent with the principles and features disclosed. For purpose of clarity, details relating to technical material that is known in the technical fields related to the invention have not been described in detail so as not to unnecessarily obscure the present invention.

Thus, for example, it will be appreciated by those of ordinary skill in the art that the diagrams, schematics, illustrations, and the like represent conceptual views or processes illustrating systems and methods embodying this invention. The functions of the various elements shown in the figures may be provided through the use of dedicated hardware as well as hardware capable of executing associated software. Similarly, any switches shown in the figures are conceptual only. Their function may be carried out through the operation of program logic, through dedicated logic, through the interaction of program control and dedicated logic, or even manually, the particular technique being selectable by the entity implementing this invention. Those of ordinary skill in the art further understand that the exemplary hardware, software, processes, methods, and/or operating systems described herein are for illustrative purposes and, thus, are not intended to be limited to any particular named element.

Each of the appended claims defines a separate invention, which for infringement purposes is recognized as including equivalents to the various elements or limitations specified in the claims. Depending on the context, all references below to the "invention" may in some cases refer to certain specific embodiments only. In other cases, it will be recognized that references to the "invention" will refer to subject matter recited in one or more, but not necessarily all, of the claims.

References will now be made in detail to the exemplary embodiment of the present disclosure. Before describing the detailed embodiments that are in accordance with the present disclosure, it should be observed that the embodiments reside primarily in combinations arrangement of the system according to an embodiment herein and
5 as exemplified in FIG. 1 to 2.

In an embodiment of the present invention, a system (100) for trapping soot emission from an automobile is disclosed. The soot trapping system (100) comprises a filter element (101) configured to filter out particulate matter from the exhaust emission. The filter element (101) is composed of porous ceramic fibre that
10 traps particulate matter present in the exhaust emission. Further, the soot trapping system (100) comprises a denitrification element (102) configured to remove NO_x compounds from the filtered exhaust gases. The denitrification element (102) uses denitrification compounds to remove NO_x compounds from exhaust emission. The denitrification element (102) perform a catalytic reduction reaction for
15 denitrification of the exhaust emission. Furthermore, the system (100) comprises an exhaust element (103) configured to release the treated emission into the air. The exhaust element (103) causes reduced pollutant emission into the air.

All methods described herein can be performed in any suitable order unless otherwise indicated herein or otherwise clearly contradicted by context. The use of
20 any and all examples, or exemplary language (e.g., "such as") provided with respect to certain embodiments herein is intended merely to better illuminate the invention and does not pose a limitation on the scope of the invention otherwise claimed. No language in the specification should be construed as indicating any non-claimed element essential to the practice of the invention.

25 Various terms as used herein are shown below. To the extent a term used in a claim is not defined below, it should be given the broadest definition and persons in the pertinent art have given that term as reflected in printed publications and issued patents at the time of filing.

Groupings of alternative elements or embodiments of the invention disclosed herein are not to be construed as limitations. Each group member can be referred to and claimed individually or in any combination with other members of the group or other elements found herein. One or more members of a group can be included in, or deleted from, a group for reasons of convenience and/or patentability. When any such inclusion or deletion occurs, the specification is herein deemed to contain the group as modified thus fulfilling the written description of all groups used in the appended claims.

The order in which the method is described is not intended to be construed as a limitation, and any number of the described method blocks may be combined in any order to implement the method or alternate methods. Additionally, individual blocks may be deleted from the method without departing from the spirit and scope of the subject matter described herein. Furthermore, the method may be implemented in any suitable hardware, software, firmware, or combination thereof. However, for ease of explanation, in the embodiments described below, the method may be considered to be implemented in the above-described system.

The method begins at step 202 with removing particulate matter from the exhaust emission by a filter element (101). Then, the system removes NO_x compounds from the exhaust emission by a denitrification element (102) at step 202. Thereafter, the method ends at step 203 with releasing treated emission into the air by an exhaust element (103).

Although the invention has been described herein with particular embodiments, one skilled in the art will understand that various modifications, changes, and variations may be made in the elements, steps, operation, and details of the method, system, and computer program product described herein without departing the scope thereof. The described invention may be implemented with some components removed or other components added to the method or system without departing from the invention. The different steps illustrated in the figures may not require the particular order shown in the example figures. Additionally, some steps may be eliminated or some steps may be added or the order of some of the steps may be

changed to the described flow of steps. Furthermore, one or more steps illustrated in one figure may be appropriately included in another figure in the implementation of the invention without departing from the scope of the invention. It is intended that the invention described herein is not limited to only the embodiments or examples described. It will be appreciated by those skilled in the art that changes could be made to the exemplary embodiments described above without departing from the broad inventive concept thereof. It is understood, therefore, that this invention is not limited to the particular embodiments disclosed, but it is intended to cover modifications within the spirit and scope of the present invention as defined by the appended claims.

ADVANTAGES OF THE PRESENT INVENTION:

The main advantage of the present invention is to diminish air pollution from automobiles.

Another advantage of the present invention is to provide a system for trapping soot emission from an automobile.

Yet another advantage of the present invention is to provide a system comprises a filter element configured to filter out particulate matter from exhaust emission wherein, a denitrification element configured to remove NO_x compounds from the exhaust emission.

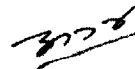
Yet another advantage of the present invention is to provide a system comprises an exhaust element configured to release the treated emission into air.

Yet another advantage of the present invention is to provide a system and method for trapping automobile soot emission.

Dated this: 16th Day of November, 2022.

ON BEHALF OF APPLICANT

Signature:



Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

CLAIM(S)

We Claim:

1. A system for trapping soot emission (100) comprising:
a filter element (101);
5 a denitrification element (102); and
an exhaust element (103).
2. The system of present invention as claimed in claim 1, wherein the filter element (101) is a mesh of ceramic configured to trap the particulate matter present in the exhaust emission.
- 10 3. The system of present invention as claimed in claim 1, wherein the denitrification element (102) uses denitrification compounds to remove NO_x compounds from the exhaust emission.
4. The system as claimed in claim 1, wherein the exhaust element (103) discharges reduced pollutant emission into the air.
- 15 5. A method (200) for trapping soot emission comprising:
in a step (201) removal of particulate matter from exhaust gases by a filter element (101);
in a step (202) eliminating NO_x compounds from the exhaust gases by a denitrification element (102); and
20 in a step (203) releasing treated emission into air by an exhaust element (103).

Dated this: 16th Day of November, 2022.

ON BEHALF OF APPLICANT


Signature:

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

ABSTRACT

Title: "A SYSTEM FOR TRAPPING SOOT, EMISSION AND METHOD THEREOF"

A system for trapping soot emission (100) comprising: a filter element (101); a denitrification element (102), wherein said denitrification element (102) made of a denitrification compound to remove NO_x compounds from the exhaust emission; and an exhaust element (103) configured to release the treated emission into the air. Wherein the method (101) for trapping soot emission comprising: in a step (201) the removal of particulate matter; in a step (202) eliminating NO_x compounds; and in a step (203) releasing treated emission into air.

Dated this: 16th Day of November, 2022.

ON BEHALF OF APPLICANT



Signature:

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

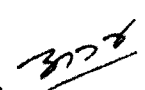
FORM 3
THE PATENTS ACT,
1970 (39 of 1970)
and
THE PATENTS RULES, 2003
STATEMENT AND UNDERTAKING UNDER
SECTION 8
(See section 8; Rule 12)

1. Name & address of the applicant(s).	<p>We, J B INSTITUTE OF TECHNOLOGY of the address NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India hereby declare:</p> <p>(i) that we who have made this Application No. 202211 _____ dated 16/11/2022 alone, made for the same/ substantially same invention, application(s) for patent in the other countries, the particulars of which are given below:</p>
--	--

Name of the Country	Date of Application	Application No.	Status of Application	Date of publication	Date of Grant
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Details attached as ANNEXURE

2. Name of the assignee	<p>(ii) that the rights in the application(s) has/have been assigned to J B INSTITUTE OF TECHNOLOGY that we undertake that up to the date of grant of the patent by the Controller, we would keep him informed in writing the details regarding corresponding applications for patents filed outside India within six months from the date of filing of such application.</p> <p>Dated this: 16th day of November, 2022.</p>
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3. To be signed by the applicant or his authorized registered patent agent.	<p>Signature: </p> <p>Name: Anuj Raturi [IN/PA: 4266] (AGENT FOR THE APPLICANT)</p>
---	---

4. Name of the natural person who has signed.	Anuj Raturi
---	--------------------

	<p>To, The Controller of Patents, The Patent Office, Delhi</p>
--	---

Note.- Strike out whichever is not applicable;

ANNEXURE TO FORM-3

Title of Invention: "A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF"

Application No. 202211_____ **Filed on:** 16/11/2022

Applicant(s): J B INSTITUTE OF TECHNOLOGY

Country	Application date	Application No.	Status of the Application	Date of Pub. / Pub. Number	Date of grant / Grant Number
N/A	N/A	N/A	N/A	N/A	N/A

*N/A (Not applicable)

Dated this: 16th day of November, 2022.

Signature: 

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

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)]

We, **J B INSTITUTE OF TECHNOLOGY** having institution address at **NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, UTTARAKHAND, 248197, INDIA**, hereby declare that the true and first inventors of the invention disclosed in the complete specification filed in pursuance of our Application Titled "**A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF**" are:

Name: Dr. Sandeep Kumar Chaudhary

Nationality: Indian

Address: Department of Applied Science, J B Institute of Technology, Dehradun.

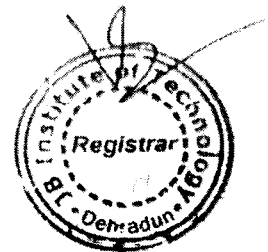
Name: Dr. Santosh Kumar Joshi

Nationality: Indian

Address: Department of Applied Science, J B Institute of Technology, Dehradun.

Dated this: 16th day of November, 2022.

Signature & Name:



Registrar

J B Institute of Technology

To,
The Controller of Patents
The Patent Office at Delhi.

FORM 9


The Patent ACT, 1970 (39 of 1970)

&

The Patents Rule, 2003

Request for Publication

[See section 11A (2), Rule 24A]

1. Name, address and nationality of the applicants:	We, J B INSTITUTE OF TECHNOLOGY Address: NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197 India. Nationality: Indian
2. To be signed by the applicant or his authorized registered patent agent	Hereby request for early publication of our application Titled: "A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD, THEREOF" filed herewith under section 11A(2) of the Act.
3. Name of the natural person who signed. Dated: November 16, 2022.	Signature:  Name: Anuj Raturi [IN/PA: 4266] (AGENT FOR THE APPLICANT)

To,
The Controller of Patents
The Patent Office at, New Delhi.

FORM 28

THE PATENT ACT, 1970 (39 OF 1970)

&

THE PATENTS RULES, 2003

TO BE SUBMITTED BY AN EDUCATIONAL INSTITUTION

[See rules 2 (ca) and 7]

We, **J B INSTITUTE OF TECHNOLOGY** having Nationality of India of the address- **NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India**. Applicant in respect of the patent application titled "A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF" & application no.202211 _____,

hereby declare that we are an educational institution in accordance with rule 2(ca) and submit the following document(s) as proof;

i) Certificate/proof of university recognized under/Central/State government.

The information provided herein is correct to the best of our knowledge and belief.

Dated this: 16th day of November, 2022.

Signature: 

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

To,

The Controller of Patents,

The Patent Office, at Delhi.

FORM 28

THE PATENT ACT, 1970 (39 OF 1970)

**&
THE PATENTS RULES, 2003**

TO BE SUBMITTED BY AN EDUCATIONAL INSTITUTION

[See rules 2 (ca) and 7]

We, **J B INSTITUTE OF TECHNOLOGY** having Nationality of India of the address- **NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India**. Applicant in respect of the patent application titled "A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF" & application no.202211 _____,

hereby declare that we are an educational institution in accordance with rule 2(ca) and submit the following document(s) as proof;

i) Certificate/proof of university recognized under/Central/State government.

The information provided herein is correct to the best of our knowledge and belief.

Dated this: 16th day of November, 2022.

Signature: 

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

To,

The Controller of Patents,

The Patent Office, at Delhi.

All India Council for Technical Education

(A Statutory body under Ministry of Education, Govt. of India)

Nelson Mandela Marg, Vasant Kunj, New Delhi-110070 Website: www.aicte-india.org



APPROVAL PROCESS 2022-23

Extension of Approval (EoA)

F.No. Northern/1-10968838042/2022/EOA

Date: 29-Jul-2022

To,

The Secretary(Technical Education)
Govt. of Uttarakhand, Dehradun Sectt.,
4 Subhash Road, Dehradun-248001

Sub: Extension of Approval for the Academic Year 2022-23

Ref: Application of the Institution for Extension of Approval for the Academic Year 2022-23

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations, 2022 Notified on 4th February, 2022 and amended on 24th February 2022 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Permanent Id	1-8461364	Application Id	1-10968838042
Name of the Institution	J B INSTITUTE OF TECHNOLOGY	Name of the Society/Trust	JAI BHAGWAN EDUCATIONAL SOCIETY
Institution Address	NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, DEHRADUN, Uttarakhand, 248197	Society/Trust Address	17 MANDIR MARG, VASANT VIHAR ENCLAVE DEHRADUN, DEHRADUN, DEHRADUN, Uttarakhand, 248001
Institution Type	Private-Self Financing	Region	Northern
Year of Establishment	2009		

Opted for Introduction of New Program/Level	Yes	Introduction of Program/Level Approved or Not	Approved
--	-----	--	----------

To conduct following Courses with the Intake indicated below for the Academic Year 2022-23

Level	Program	Course	Affiliating Body (University/Body)	Intake Approved for 2021-22	Intake Approved for 2022-23	NRI Approval Status	FN/ Gulf quota/OCI/ Approval Status
DIPLOMA	ENGINEERING AND TECHNOLOGY	CIVIL ENGINEERING	Directorate Of Technical Education, Srinagar(Garhwal)	60	60	No	No
DIPLOMA	ENGINEERING AND TECHNOLOGY	ELECTRICAL ENGINEERING	Directorate Of Technical Education, Srinagar(Garhwal)	60	60	No	No

Level	Program	Course	Affiliating Body (University /Body)	Intake Approved for 2021-22	Intake Approved for 2022-23	NRI Approval Status	FN / Gulf quota/ OCI/ Approval Status
DIPLOMA	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	Directorate Of Technical Education, Srinagar(Garhwal)	60	60	No	No
UNDER GRADUATE	ENGINEERING AND TECHNOLOGY	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	Uttarakhand Technical University, Dehradun	60	30	NA	NA
UNDER GRADUATE	ENGINEERING AND TECHNOLOGY	CIVIL ENGINEERING	Uttarakhand Technical University, Dehradun	60	60	No	No
UNDER GRADUATE	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE & ENGINEERING	Uttarakhand Technical University, Dehradun	60	90	NA	NA
UNDER GRADUATE	ENGINEERING AND TECHNOLOGY	ELECTRICAL ENGINEERING	Uttarakhand Technical University, Dehradun	30	30	No	No
UNDER GRADUATE	ENGINEERING AND TECHNOLOGY	ELECTRONICS & COMMUNICATION ENGG	Uttarakhand Technical University, Dehradun	30	30	No	No
UNDER GRADUATE	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	Uttarakhand Technical University, Dehradun	60	60	No	No
POST GRADUATE	ENGINEERING AND TECHNOLOGY	COMPUTER SCIENCE & ENGINEERING	Uttarakhand Technical University, Dehradun	24	24	No	No
POST GRADUATE	MANAGEMENT	MBA	Uttarakhand Technical University, Dehradun	0	60##	No	No

Approved New Course(s)

It is mandatory to comply with all the essential requirements as given in APH 2022-23 (Appendix 6)

Important Instructions

1. The State Government/ UT/ Directorate of Technical Education/ Directorate of Medical Education shall ensure that 10% of reservation for Economically Weaker Section (EWS) as per the reservation policy for admission, operational from the Academic year 2019-20 is implemented without affecting the reservation percentages of SC/ ST/ OBC (NCL)/ General. However, this would not be applicable in the case of Minority Institutions referred to the Clause (1) of Article 30 of Constitution of India. Such Institution shall be permitted to increase in annual permitted strength over a maximum period of two years.
2. The Institution offering courses earlier in the Regular Shift, First Shift, Second Shift/Part Time are now amalgamated as total intake and shall have to fulfil all facilities such as Infrastructure, Faculty and other requirements as per the norms specified in the Approval Process Handbook 2022-23 for the Total Approved Intake. Further, the Institutions Deemed to be Universities/ Institutions having Accreditation/ Autonomy status shall have to maintain the Faculty: Student ratio as specified in the Approval Process Handbook. All such Institutions/ Universities shall have to create the necessary Faculty, Infrastructure and other facilities WITHIN 2 YEARS to fulfil the norms based on the Affidavit submitted to AICTE beginning with the Academic Year 2022-23
3. Strict compliance of Anti-Ragging Regulation, Establishment of Committee for SC/ ST, Establishment of Internal Complaint Committee (ICC), Establishment of Online Grievance Redressal Mechanism, Barrier Free Built Environment for disabled and elderly persons, Fire and Safety Certificate should be maintained as Approval Process Handbook and provisions made in AICTE Regulation notified from time to time.
4. In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Pharmacy Institute: In compliance with the order dated 05.03.2020 passed by the Hon'ble Supreme Court of India in Transferred Petitions (CIVIL) No 87-101 of 2014, for the existing institutions offering courses in Pharmacy Programme, approval of Pharmacy Council of India (PCI) is mandatory and AICTE approval is NOT required. The requirements for running the Programme (Diploma / UG / PG) such as Land & Build-up Area, Student-faculty ratio, Intake etc. will be as per the respective regulatory body (PCI). In case of any inconsistency in the course name and intake for EoA issued by AICTE and the approval by PCI, the approval of PCI shall prevail.

Architecture Institute: In compliance with the order dated 08.11.2019 passed by the Hon'ble Supreme Court of Indian CA No.364/ 2005, for the existing Institutions offering Courses in Architecture Programme, approval by the Council of Architecture (CoA) is mandatory and AICTE approval is NOT required. The requirements for running the Programme (Diploma / UG / PG) such as Land & Build-up Area, Student-faculty ratio, Intake etc. will be as per respective regulatory body (CoA). In case of any inconsistency in the course name and intake for EoA issued by AICTE and the approval by CoA, the approval of CoA shall prevail.

Deemed to be University: Institutions Deemed to be Universities (Running Technical Education Programmes), it is mandatory to have AICTE approval from the Academic Year 2018-19 in compliance of the Hon'ble Supreme Court Order dated 03-11-2017 passed in CA No.17869- 17870 /2017.

**Prof.Rajive Kumar
Member Secretary, AICTE**

Copy to:

1. **The Director Of Technical Education**, Uttarakhand**
2. **The Registrar**,
Directorate Of Technical Education, Srinagar(Garhwal)**
3. **The Principal / Director,
J B INSTITUTE OF TECHNOLOGY
Nh-72, Village Shankarpur, Chakrata Road, Dehradun,
Dehradun,Dehradun,
Uttarakhand,248197**
4. **The Secretary / Chairman,
17 MANDIR MARG, VASANT VIHAR ENCLAVE
DEHARDUN
DEHRADUN,DEHRADUN**

Uttarakhand,248001

5. **The Regional Officer,**
All India Council for Technical Education
Govt. Polytechnic Campus
Adjoining Directorate of Technical Education
Vikas Nagar, Kanpur-208 002, Uttar Pradesh

6. **Guard File(AICTE)**

Note: Validity of the Course details may be verified at <http://www.aicte-india.org/>

** Individual Approval letter copy will not be communicated through Post/Email. However, consolidated list of Approved Institutions(bulk) will be shared through official Email Address to the concerned Authorities mentioned above.

This is a computer generated Statement. No signature Required



प्रेषक,

डा० रंजीत कुमार सिन्हा
सचिव श्री राज्यापाल/कुलाधिपति।

सेवा में,

कुलपति,
वीर माधो सिंह भण्डारी उत्तराखण्ड प्रौद्योगिकी विश्वविद्यालय,
सुन्दोचाला, देहरादून।

राज्यापाल/कुलाधिपति सचिवालय उत्तराखण्ड : देहरादून : दिनांक : 3 अक्टूबर, 2022

महोदय,

कृपया विश्वविद्यालय के पत्र सं०-2052 व 2055, दिनांक 07-01-2022 का सन्दर्भ ग्रहण करने का कष्ट करें।

2. उपरोक्त सन्दर्भ के सम्बन्ध में मुझे यह कहने का निदेश हुआ है कि नियामक संस्था, निरीक्षण मण्डल, कुलपति व कुलसचिव, जी०एच०(शिक्षा) उत्तराखण्ड प्रौद्योगिकी विश्वविद्यालय द्वारा प्रदत्त सस्तुति के दृष्टिगत विश्वविद्यालय अधिनियम, 2005 (यथा अद्यतन संशोधित) की धारा-24(2) के अधीन निम्नवत् संस्थान को उसके सामुख वर्धित पाठ्यक्रम, सीटों एवं अग्रि की अस्थाई सम्बद्धता विस्तारण हेतु छात्रहित में मा० कुलाधिपति द्वारा पूर्वानुमोदन निम्नवत् उपबन्धों के साथ प्रदान किया गया है :-

संस्थान का नाम	पाठ्यक्रम	सीट संख्या प्रति सत्र	शैक्षिक सत्र
1	2	3	4
जे०बी० इंस्टीट्यूट ऑफ टेक्नोलॉजी, ग्राम-शंकरपुर, चकराता रोड, देहरादून	बी०टेक० :- 1. Civil Engg. 2. Computer Science & Engg. 3. Electrical Engg. 4. Electronics & Communication Engg. 5. Mechanical Engg. 6. Artificial Intelligence and Machine Learning (New Course-1st Affiliation)	60 60 30 30 60 60	2021-22
	एम०टेक० :- 1. Computer Science & Engg.	24	

(1) विश्वविद्यालय द्वारा संस्थान की Annual Balance Sheet सम्बन्धी साक्ष्य की सत्यापित प्रति प्राप्त कर इस सचिवालय को उपलब्ध कराई जायेगी।

(2) प्राभूति राशि अपूर्ण है। अतः उत्तराखण्ड शासन द्वारा शासनादेश दिनांक 14 दिसम्बर, 2016 द्वारा तथा व्यवसायिक पाठ्यक्रमों हेतु प्राभूति राशि के सम्बन्ध में शासन स्तर पर लिये गये निर्णय का पूर्ण रूप से अनुपालन विश्वविद्यालय व संस्थान द्वारा किया जायेगा, उसके अनुपालन की सूचना से इस सचिवालय को भी अवगत कराया जायेगा।

(3) विश्वविद्यालय द्वारा छात्र/छात्राओं की गुणवत्ता और व्यवहारिक शिक्षा में सुधार के लिए क्या कदम उठाए गये हैं, इसकी सूचना व संस्थानों द्वारा छात्रों की प्रायोगिक शिक्षा और इंटर्नशिप/विजिट के लिए किन समूहों, विभागों एवं कंपनियों के साथ समझौता (Tie-up or MoU) किया गया है, तत्सम्बन्धी अभिलेख एक माह के भीतर अनिवार्य रूप से इस सचिवालय को प्रेषित करना सुनिश्चित करें। अन्यथा की स्थिति में संस्थान की सम्बद्धता निरस्त कर दी जाएगी साथ ही अग्रततर सत्रों की सम्बद्धता के सम्बन्ध में कोई विचार नहीं किया जायेगा।

(4) विश्वविद्यालय संस्थान द्वारा सोसाइटी/ट्रस्ट फंक्शनरिंग अधिनियम के अन्तर्गत निर्धारित Legal Obligation पूर्ण किये जाने के सम्बन्ध में राश्या सशित आख्या एक माह के भीतर राज्यपाल सचिवालय को उपलब्ध कराया जाना सुनिश्चित किया जायेगा।

(5) यदि संस्थान द्वारा एक या एक से अधिक विश्वविद्यालय से पाठ्यक्रम की सम्यद्धता प्राप्त की गई हो तो संस्थान समस्त पाठ्यक्रमों की सम्यद्धता को एक साथ रखकर पाठ्यक्रमवार मानक पूर्ण किये जाने के सम्बन्ध में आख्या संस्थान द्वारा विश्वविद्यालय को उपलब्ध कराई जायेगी तथा संस्थान से प्राप्त आख्या का परीक्षण करते हुए विश्वविद्यालय द्वारा राज्यपाल सचिवालय को उपलब्ध कराई जायेगी।

(6) अग्रतार सचों के सम्यद्धता प्रस्ताव नियामक संस्था, विश्वविद्यालय एवं शासन द्वारा निर्धारित मानकों के अनुरूप पूर्ण होने की दशा में ही स्वीकार किये जायेंगे अन्यथा की स्थिति में अपूर्ण प्रस्तावों पर विचार नहीं किया जायेगा, जिसका पूर्ण उत्तरदायित्व विश्वविद्यालय का होगा।

(7) विश्वविद्यालय, नियामक संस्था, विश्वविद्यालय व राज्य सरकार द्वारा निर्धारित सभी मानकों के पूर्ण होने की दशा में ही कार्यपरिषद के अनुमोदन से विहित शर्तों/उपबन्धों के अधीन अस्थाई सम्यद्धता विस्तारण के आदेश निर्गत करे व तत्सम्बन्धी कार्यवाही की सूचना मा० कुलाधिपति महोदय के अवगतार्थ उपलब्ध कराये।

तदनुसार अग्रतार कार्यवाही सुनिश्चित करें।

भवदीय,

(डा० रंजीत कुमार सिन्हा)
सचिव श्री राज्यपाल/कुलाधिपति।

संख्या 2852(1)/जी०एस०(शिक्षा)/A4-48(P-II)/2019 तददिनांकित।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित :-

1. सचिव, तकनीकी शिक्षा विभाग, उत्तराखण्ड शासन।
2. प्राचार्य/निदेशक, संबंधित संस्थान।
3. कम्प्यूटर प्रकोष्ठ/गार्ड फाईल हेतु।

आज्ञा से

(स्वाति एस० मदीरिया)
अपर सचिव श्री राज्यपाल/कुलाधिपति।



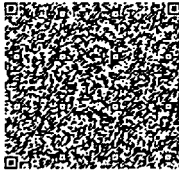
सत्यमेव जयते

INDIA NON JUDICIAL

Government of Uttarakhand

e-Stamp

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Certificate Issued Date : 05-Nov-2022 04:11 PM
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First Party : J B INSTITUTE OF TECHNOLOGY
Second Party : NA
Stamp Duty Paid By : J B INSTITUTE OF TECHNOLOGY
Stamp Duty Amount(Rs.) : 100
(One Hundred only)



धीरज कुमार सिंघल
(ई-स्टाम्प विक्रेता)
विकासनगर (देहरादून)

Please write or type below this line

FORM 26
THE PATENTS ACT, 1970
(39 OF 1970)
&
The Patent Rules, 2003

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

Power of Attorney by J B INSTITUTE OF TECHNOLOGY, of the address- NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India; hereby authorize- Mr. Anuj Raturi [Registered Indian Patent Agent, (IN/PA:4266)] & Adv. Ram Chandra Joshi [Reg. No.: U.A. 2638/04, U.P. 2763/94 (Advocate & Notary)] having office address, as Gyananand Bhawan, Kalinka Vihar, Majrimafi, Lane No.3, IIP Mohkampur Kala-248005, Dehradun, Uttarakhand, India.

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.ohjeestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

FORM 26
THE PATENTS ACT 1970
(39 OF 1970)

&

The Patent Rules, 2003

**Form for Authorization of Patent Agent/ or Any Person in a matter or Proceeding under
the Act**

[See Section 127; and Rule 135]

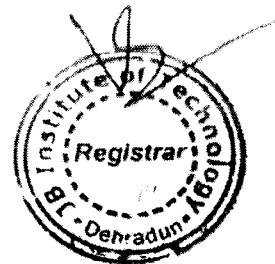
We, **J B INSTITUTE OF TECHNOLOGY** having address at NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India, do hereby authorize **Mr. Anuj Raturi [Registered Indian Patent Agent, (IN/PA:4266)] & Adv. Ram Chandra Joshi [Reg. No.: U.A. 2638/04, U.P. 2763/94 (Advocate & Notary)]** having office address, as Gyananand Bhawan, Kalinka Vihar, Majrimafi, Lane No.3, IIP Mohkampur Kala-248005, Dehradun, Uttarakhand, India, to act on our behalf in connection with the filing and pre & post grant prosecution for the invention titled **“A SYSTEM FOR TRAPPING SOOT EMISSION AND METHOD THEREOF”** filed in our name and request that all notices, requisitions and communication relating thereto may be sent to such person(s) at the above address unless otherwise specified.

This authorization includes the right to appoint substitutes.

We hereby revoke all previous authorizations, if any made, in respect of the same matter or proceeding.

We hereby assent to the action already taken by the said person in the above matter.

Dated this: November 15, 2022.



Signature & Name:

Registrar
J B Institute of Technology

To be stamped under the Indian Stamp Act, 1899 (2 of 1899)

To,
The Controller of Patents
The Patent Office, at Delhi.

To be stamped under the Indian Stamp Act, 1899 (2 of 1899)

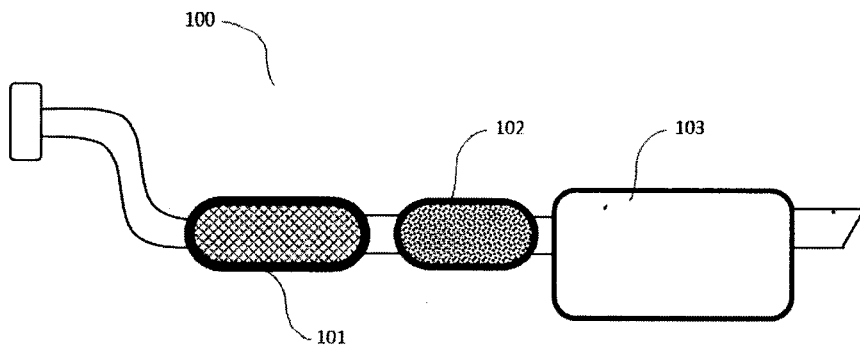


FIG. 1

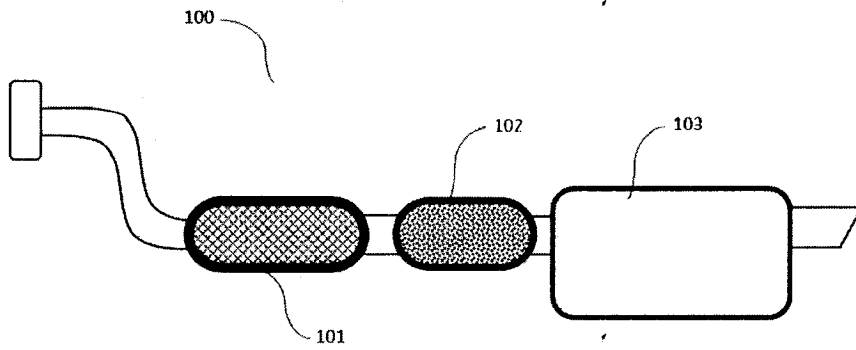


FIG. 1

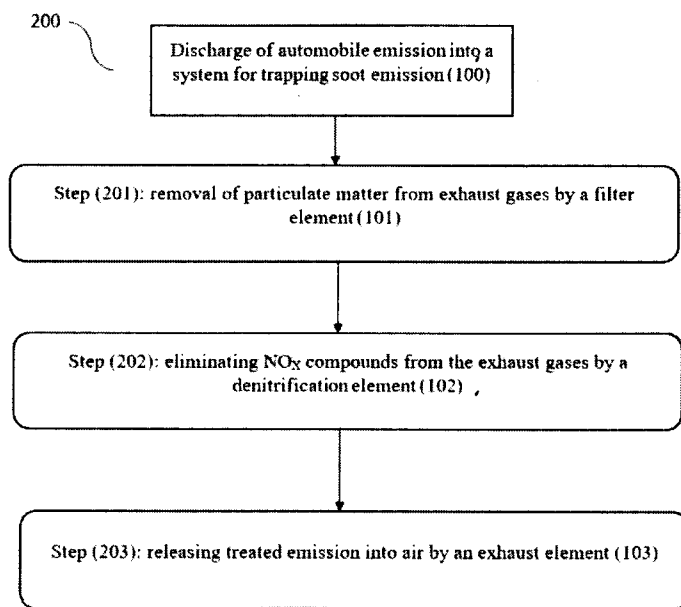
Dated: 16th Day of November, 2022

ON BEHALF OF APPLICANT

Signature:

Name: Anuj Raturi [IN/PA: 4266]


(AGENT FOR THE APPLICANT)



Dated: 16th Day of Novembe

FIG. 2

ON BEHALF OF APPLICANT

Signature: 
Name: Anuj Raturi [IN/PA: 4266]
(AGENT FOR THE APPLICANT)

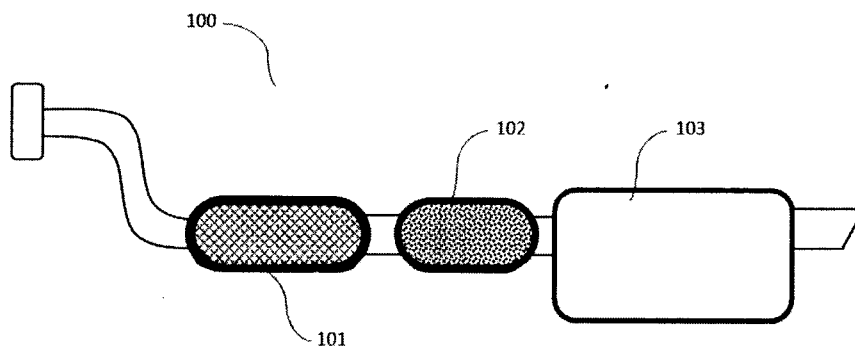


FIG. 1

ON BEHALF OF APPLICANT

Signature:

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

Dated: 16th Day of November, 2022