Welcome Anuj Raturi Sign out

Controller General of Patents, Designs & Trade Plot No. 32, Sector 14, Dwarka, New Delhi-110075 Tel No. (091)(011) 28034304-06 Fax No. 011 28034301,02 E-mail: delhi-patent@nic.in Web Site: www.ipindia.gov.in

header



G.A.R.6 [See Rule 22(1)] RECEIPT

Docket No 127844

Date/Time 2022/11/15 21:31:30

To Anuj Raturi

Userid: Anuj001

Gyananand Bhawan, Kalinka Vihar, Lane No. 3, Majrimafi, IIP Mohkampur Kala-248005, Dehradun, Uttarakhand, India

#### **CBR** Detail:

95 No.	Ref. No/Application No.	App. Number	Amount Paid	C.B.R. No.	Form Name	Remarks
1	E- 12/6042/2022/DEL	202211065509	2500	44384	FORM 9	
2	202211065509	TEMP/E- 1/75573/2022-DEL	1600	44384	FORM 1	AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM
3	E- 106/7294/2022/DEL	202211065509	0		FORM28	

	TransactionID	Payment Mode	Challan Identification Number	Amount Paid	Head of A/C No
L	N-0001052952	Online Bank Transfer	1511220032991	4100.00	1475001020000001

Total Amount : ₹ 4100.00

Amount in Words: Rupees Four Thousand One Hundred Only

Received from Anuj Raturi the sum of ₹ 4100.00 on account of Payment of fee for above mentioned Application/Forms.

\* This is a computer generated receipt, hecnce no signature required.

Print

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(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application: 15/11/2022

(21) Application No.202211065509 A

(43) Publication Date: 25/11/2022

### (54) Title of the invention: AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM

(51) International classification	:H02J0003380000, H02S0050000000, H02S0020230000, H04W0012060000, G06Q0050100000	(71)Name of Applicant:  1)J B INSTITUTE OF TECHNOLOGY Address of Applicant: NH-72, VILLAGE SHANKARPUR,
(86) International Application No Filing Date	:NA :NA	CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India. Dehradun Name of Applicant: NA
(87) International Publication No	: NA	Address of Applicant: NA (72)Name of Inventor:
(61) Patent of Addition to Application Number Filing Date	:NA :NA	1)Dr. Vishant Kumar Address of Applicant: Department of Computer Science, J B Institute of Technology, Dehradun Dehradun
Application Number	:NA :NA	2)Dr. Jogender Singh Chauhan Address of Applicant :Department of Computer Science, J B Institute of Technology, Dehradun Dehradun

(57) Abstract:

The present invention relates to an integrated solar and wind energy power generation system using application of IoT. The integrated IoT based energy generation system of present invention comprises of a pillar branch structure; a plurality ellipsoid solar panel; and an IoT based sensor. Said plurality ellipsoid solar panel is configured to rotate 2400 to trace the right direction of solar irradiance and said IoT sensor configured to trace such right direction.

No. of Pages: 11 No. of Claims: 4

THE PATENT APPLICATION	S RULES, 200 ON FOR GRA	9 of 1970) and 3 NT OF PATENT d sub-rule (1) of rule	e 20)	(FO	R OFFICE USE	ONLY)
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()	Patent of Addition ( )	Divisional ( )	Patent Additi		Divisional ( )	Patent of Addition ( )
3A. APPLICA	ANT(S)		_ <u>l:</u> ,		d:	I
Name in Fu	ll.	Nationality	Counti Reside	•	Address of the	e Applicant
J B INSTIT TECHNOL		Indian	India	uce	ROAD, DEH	UR, CHAKRATA
3B. CATEGO	RY OF APPL	ICANT [Please ticl	k (✓ ) at	the app	ropriate categor	y
3F . LD		Other than Natu	ral Perso	n		
Natural Person ()		Small Entity ()	Sta	rtup ()	Educationa Institution	
4. INVENTO	R(S) [Please t	ick (✓) at the app	ropriate	category	1	
Are all the inventor(s) same as the applicant(s) named above?		Yes ()		,	No (🗸)	
<b>If "No".</b> furni	sh the details o	f the inventor(s)				
Name in Fu		Nationality	Count Reside	- +	Address of th	ne Inventor
Dr. Vishant Kur	mar	Indian	India	De	epartment of Constitute of Technol	nputer Science, J B

	r. Jogender Singh Chauhan Indian		India	India Department of Computer Science, J B Institute of Technology, Dehradun				
5. TITI	LE OF THE IN	VENT	TION					
	"AN INTE	GRA	TED IO	T BASED	ENERG	GY GE	NERATION SYSTEM"	
6. AUT	THORISED RE	GISTI	ERED		IN/P	A No.	IN/PA: 4266	
PATE	NT AGENT(S)				Name		Anuj Raturi	
					2.1003.11	ile No.	+91-9808414112	
					Name	2	Anuj Raturi	
7. ADDRESS FOR SERVICE OF APPLICANT IN INDIA					T Posta	1	Command Discours K P L VI	
					Addre		Gyananand Bhawan, Kalinka Viha	
							Lane No. 3, Majrimafi, IIP Mohkampu	
							Kala-248005, Dehradun, Uttarakhand	
							India.	
					Telep		N/A +91-9808414112 N/A anuj.mechanical19@gmail.com	
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8. IN C	CASE OF APP ENTION COU	LICAT NTRY	FION C	LAIMING CULARS	PRIOR OF CON	ITY O	F APPLICATION FILED IN ION APPLICATION	
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,

### (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: 15th Day of November 2022.

Signature(s)
Name(s) of the signatory

Dr. Vishant Kumar

Dr. Jogender Singh Chauhan

### (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: 08		(Total 11 pages)	
No. of Claim(s)	No. of claims 04 and No. of pages 01			7
Abstract	No. of pages: 01			
No. of Drawing(s)	No. of drawings No. 01 of pages 01	<b>.</b>		

# 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

Dated this: 15th 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 ( $\checkmark$ )/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 ::

# THE PATENTS ACT, 19(107)0 (39 of 19(107)0) & The Patents Rules, 2003

## COMPLETE SPECIFICATION (See section 10 and rule 13)

**Title:** AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM

Applicant(s):

Name: J B Institute of Technology

Nationality: Indian

Address: NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD,

DEHRADUN, Uttarakhand, 248197

### PREAMBLE TO THE DESCRIPTION:

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

#### FIELD OF INVENTION:

The present invention relates to an electricity generation system, and in particular, relates to an integrated solar and wind energy power generation system using application of IoT.

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### BACKGROUND OF THE INVENTION:

Wind energy, form of solar energy that is produced by the movement of air relative to Earth's surface. This form of energy is generated by the uneven heating of Earth's surface by the Sun and is modified by Earth's rotation and surface topography.

Wind is technically a form of solar energy. When the sun's radiation heats Earth's uneven surface, hot air rises and cool air settles. This difference in atmospheric pressure creates wind, a kinetic (motion-based) form of energy.

Wind turbines capture that kinetic energy. When wind blows over the turbine's blades, its generator converts the energy of the rotating blade into mechanical power — which can then be converted into power to pump water, grind grain, or provide electricity to homes, businesses, and schools.

Solar energy is the sun's radiation that reaches Earth. When sunlight hits the photovoltaic (PV) cells inside solar panels, these cells transform the sun's radiation into electricity.

Which sustainable power source makes more sense for local and state economig question. Following explanation showing the good and bad of wind and solar energy.

Wind is a more efficient power source than solar. Compared to solar panels, wind turbines release less CO2 to the atmosphere, consume less energy, and produce more energy overall. Wind turbines convert around 50% of captured wind into energy, whereas the conversion rate of sunlight by solar panels stands at

approximately 23%. Looking at this, we can conclude that wind energy is twice as efficient as solar panels.

For suburban or urban regions, solar panels are a more practical option. Solar panels can be installed on the rooftops of buildings, schools, and businesses. They can be bought or leased at an affordable rate. They might even be used to generate power for future high-speed transit systems. Plus, transparent solar panels are being developed to retrofit roofs, windows and even your phone, laptop, or tablet.

Despite the advantages of green energy, there's still the question of its economic sustainability. Both wind and solar power have grown rapidly in the last decade but they only account for a small percentage of the world's energy generation capacity. For wind and solar to compete with oil, coal, and natural gas, researchers will have to find a practical, cost-efficient way to store their power when the sun isn't shining and the wind isn't blowing.

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Further, the costs of producing, installing, and maintaining solar panels and wind turbines will have to continue to fall in order to convince consumers to make the switch from non-renewable energy sources.

Solar and wind both have their advantages and disadvantages. To minimise the disadvantages of solar and wind based systems, an integrated system can be developed which would be capable of producing more power. In the present invention an integrated solar and wind energy power generation system using application of IoT has been disclosed.

Prior art document, US20160065115A1 disclosing an apparatus, system, and method are disclosed for power generation. A wind turbine is configured to drive an electrical generator. One or more solar panels are electrically coupled to the electrical generator to provide power from the electrical generator and/or the one or more solar panels. A base is configured for mounting the wind turbine to a structure. The wind turbine may be pivotally coupled to the base such that an angle of the wind turbine is adjustable relative to the structure.

Another prior art document, US20130106193A1 disclosing a hybrid wind-solar energy device comprising: a) a wind-capture assembly comprising: i) one or more wind sails evenly distributed circumferentially around a central axis thereof; and ii) a solar-energy capture means on an outer surface of the wind-capture assembly; and c) a turbine assembly comprising an anchoring base, an electrical generator and an output shaft; the wind-capture assembly rotatably mounted on the output shaft and coupled thereto; the hybrid wind-solar energy device configured to convert energy harnessed by the wind capture assembly to electrical energy, wherein: interaction of the one or more wind sails with wind induces rotation of the wind-capture assembly and turbine assembly around the central axis; and the outer surface of the wind capture assembly is directly exposed to sunlight throughout daylight hours.

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Yet another prior art document, US4103493A disclosing a method and apparatus for use of solar energy. The method and apparatus has the advantage and benefit of providing for use of all collected solar energy, whether or not there is an immediate need in the home for heating. Solar energy is also used for cooling a home or existing building structure via utilization of a heat pump system. The apparatus comprises in combination a direct boil solar collector which boils a refrigerant therein, a Rankine cycle engine for converting heat energy transferred to said refrigerant to kinetic energy, a generator, a heat pump system, and means connected to the Rankine cycle to selectively transfer said kinetic energy from the Rankine engine to the generator or the heat pump. Excess energy not utilized for heating or cooling the home system is returned to a utility power grid for a credit for the home owner and immediate redistribution by the utility to other users.

However, above mentioned references and many other similar references has one or more of the following shortcomings: (a) expensive; (b) complex; (c) difficult to maintain; (d) no use of IoT system; and (e) upward deflection.

The present application addresses the above-mentioned concerns and short comings with regard to providing a novel integrated IoT based energy generation system.

#### SUMMARY OF THE INVENTION:

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The present relates to an integrated solar and wind energy power generation system using application of IoT. The system for generation of electrical energy comprises the plurality of ellipsoid solar panels that are mounted on a pillar having branches to generate solar energy. The ellipsoid solar panels are configured to rotate in 240° about its own axis, also it rotates angularly and horizontally to generate wind energy. Further, this solar and wind energy is converted into electrical energy and can be stored in the invertors or can be supplied directly to the grids. The solar invertor is fitted below the pillar and is configured to store electricity generated. An IoT based solar and wind sensing sensor is installed on the top of the axis of pillar and branch structure to monitor the solar irradiation and wind flow. The data received from the IoT sensors can be used to track the integrated solar and wind energy generation system.

In this respect, before explaining at least one object of the invention in detail, it is to be understood that the invention is not limited in its application to the details of set of rules and to the arrangements of the various models set forth in the following description or illustrated in the drawings. The invention is capable of other objects and of being practiced and carried out in various ways, according to the need of that industry. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting. These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the disclosure. For a better understanding of the invention, its operating advantages and the specific objects attained by its uses, reference should be made to the accompanying drawings and descriptive matter in which there are illustrated preferred embodiments of the invention.

The main object of the invention is to provide an integrated solar and wind energy power generation system using application of IoT.

Another object of the invention is to provide a plurality of ellipsoid solar panels that are mounted on a pillar having branches to generate solar energy.

Yet another object of the invention is to provide an integrated IoT based energy generation system wherein, the ellipsoid solar panels are configured to rotate in 240° about its own axis, also it rotates angularly and horizontally.

Yet another object of the invention is to provide an integrated IoT based energy generation system which is cost effective and efficient.

### **BRIEF DESCRIPTION OF THE DRAWINGS:**

The invention will be better understood and objects other than those set forth above will become apparent when consideration is given to the following detailed description thereof. Such description makes reference to the annexed drawings wherein:

**FIG. 1** depicts an exemplary integrated IoT based energy generation system, according to one of the embodiment of present invention.

### DETAILED DESCRIPTION OF THE INVENTION:

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In the following detailed description, reference is made to the accompanying drawings which form a part thereof, 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 equivalents.

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The present invention relates to an integrated solar and wind energy power generation system using application of IoT.

Now referring to FIG. 1 in accordance with an embodiment of the present invention, the system for electricity generation through combination of solar and wind energy is disclosed. The system comprises a pillar having branches (102). The plurality of ellipsoid solar panels are configured to be mounted on the pillar having branches to generate solar energy. The ellipsoid solar panels are configured to rotate in 240° about its own axis, also it rotates angularly and horizontally to generate wind energy.

An IoT based solar and wind sensing sensor is installed on the top of the axis of pillar and branch structure to monitor the solar irradiation and wind flow.

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The solar invertor is fitted at the bottom of pillar and is configured to store electricity generated. (106) is pillar that holds Solar cells sharped in leaf. (107) is pillar base. (108) is wire that is used to connect rechargeable battery (109) and (110) is outer safety. As the sunrays incident on solar panel, it absorbs solar energy and converts into electrical energy in the form of direct current (DC). Further, this electrical energy is stored in the solar invertor. This converts the direct current (DC) into alternating current (AC) electricity. The AC current is then used to power the streets lights or domestic use. The moving air rotates the solar panels that spins a rotor connected to a generator to create electric energy. With the help of wind energy generated by the rotating and moving solar panels, IoT sensors will be able to monitor air quality index at that time. No pollution will be emitted while generating electricity using present invention. It is to be understood that the above description is intended to be illustrative, and not restrictive.

For example, the above-discussed embodiments may be used in combination with each other. Many other embodiments will be apparent to those of skill in the art upon reviewing the above description. The benefits and advantages which may be provided by the present invention have been described above with regard to specific embodiments. These benefits and advantages, and any elements or limitations that

may cause them to occur or to become more pronounced are not to be construed as critical, required, or essential features of any or all of the embodiments. While the present invention has been described with reference to particular embodiments, it should be understood that the embodiments are illustrative and that the scope of the invention is not limited to these embodiments. Many variations, modifications, additions and improvements to the embodiments described above are possible. It is contemplated that these variations, modifications, additions and improvements fall within the scope of the invention.

Dated: 15th Day of November, 2022

ON BEHALF OF APPLICANT

Signature:

Name: Anuj Raturi [IN/PA: 4266]

CLAIM(S):

We Claim:

- 1. An integrated IoT based energy generation system (100) comprising:
  - a pillar branch structure;
- 5 a plurality ellipsoid solar panels (102); and
  - an IoT based sensor (101);
  - 2. The integrated IoT based energy generation system as claimed in claim 1, wherein the ellipsoid solar panels are configured to rotate in 240° about its own axis, also it rotates angularly and horizontally to generate wind energy.
- 3. The integrated IoT based energy generation system as claimed in claim 1, wherein the ellipsoid solar panels are integrated on a pillar branch structure.
  - **4.** The integrated IoT based energy generation system as claimed in claim 1, wherein IoT sensors are configured to trace the location of solar irradiance and wind.

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Dated: 15th Day of November, 2022

ON BEHALF OF APPLICANT

Signature:

Name: Anuj Raturi [IN/PA: 4266]

### **ABSTRACT**

Title: AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM

The present invention relates to an integrated solar and wind energy power generation system using application of IoT. The integrated IoT based energy generation system of present invention comprises of a pillar branch structure; a plurality ellipsoid solar panel; and an IoT based sensor. Said plurality ellipsoid solar panel is configured to rotate 240° to trace the right direction of solar irradiance and said IoT sensor configured to trace such right direction.

Dated: 15th Day of November, 2022

ON BEHALF OF APPLICANT

Signature:

Name: Anuj Raturi [IN/PA: 4266]

THE PATENTS ACT, 1970 (39 of 1970)

and

THE PATENTS RULES, 2003

## STATEMENT AND UNDERTAKING UNDER SECTION 8

		(See section 8; R	ule 12)				
1. Name & ac	ddress of the applicant(s).	We, J B INSTITUTE OF TECHNOLOGY of the address NH-72, VILLAGE SHANKARPUR, CHAKRATA ROAD, DEHRADUN, Uttarakhand, 248197, India hereby declare:  (i) that we who have made this Application No. 202211 dated 15/11/2022 alone, made for the same/ substantially same invention, application(s) for patent in the other countries, the particulars of which are given below:					
Name of the Country	Date of Application	Application No.	Status of Application	Date of publication	Date of Grant		
	I	Details attached as ANI	NEXURE	1441			
	e assignee  ed by the applicant or registered patent		by the Controll garding corresponding corresponding six months  November, 202	that we undertake ler, we would kee onding application from the date of the conding application and the date of the conding application application application and the conding application applicatio	that up to the date p him informed in as for patents filed		
4. Name of the signed.	e natural person who has	To, The Controller of Patents, The Patent Office, <b>Delhi</b>					
Note Strike	out whichever is not appli-	cable;					

### **ANNEXURE TO FORM-3**

Title of Invention: AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM

Application No. 202211\_\_\_\_\_Filed on: 15/11/2022

### 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)

Signature:

Name: Anuj Raturi [IN/PA: 4266]

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

&

### THE PATENT RULES, 2003 DECLARATION AS TO INVENTORSHIP

[See Section 10(6) and Rule 13(6)]

I/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 "AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM" are:

Name: Dr. Vishant Kumar

Nationality: Indian

Address: Department of Computer Science, J B Institute of Technology, Dehradun

Name: Dr. Jogender Singh Chauhan

Nationality: Indian

Address: Department of Computer Science, J B Institute of Technology, Dehradun

Dated this: 15th Day of November, 2022.

Signature & Name:

Registrar

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

J B Institute of Technology

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: "AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM" filed herewith under section 11A(2) of the Act.
3.	Name of the natural person who signed.	Signature:
	Dated: November 15, 2022.	Name: Anuj Raturi [IN/PA: 4266] (AGENT FOR THE APPLICANT)

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

### 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 "Al
INTEGRATED IOT BASED ENERGY GENERATION SYSTEM" & applicatio
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 10 <sup>th</sup> Day of November, 2022.

Signature: 373

Name: Anuj Raturi [IN/PA: 4266]

(AGENT FOR THE APPLICANT)

To,

The Controller of Patents,

The Patent Office, at Delhi.

### 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 "AN
INTEGRATED IOT BASED ENERGY GENERATION SYSTEM" & application
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Dated this 10 <sup>th</sup> Day of November, 2022.
Signature: 373

(AGENT FOR THE APPLICANT)

Name: Anuj Raturi [IN/PA: 4266]

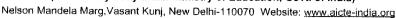
To,

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)





### 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 ld	1-8461364	Application its	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, DEHRADUN, Uttarakhand, 248197	Society/Trust Address	17 MANDIR MARG, VASANT VIHAR ENCLAVE DEHARDUN,DEHRADUN,DEHRA DUN,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

### 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 2027-22	Intake Approved for 2022-23	NRI Approvat Status	Fit // Guif quata/ QCI/ Approval Status
DIPLOMA	ENGINEERI NG AND TECHNOLO GY	CIVIL ENGINEERING	Directorate Of Technical Education, Srinagar(Garhwal)	60 ,	60	No	No
DIPLOMA	ENGINEERI NG AND TECHNOLO GY	ELECTRICAL ENGINEERING	Directorate Of Technical Education, Srinagar(Garhwal)	60	60	No	No

Level	Programi	- Course	Affiliating Body (University (Body)	intake Approved for 2021-22	Intake Approved for 2022-23	NRT VIA Approval Status	FN / Gulf quota/ OCI/ Approval Status
DIPLOMA	ENGINEERI NG AND TECHNOLO GY	MECHANICAL ENGINEERING	Directorate Of Technical Education, Srinagar(Garhwal)	60	60	No	No
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	Uttarakhand Technical University, Dehradun	60	30	NA	NA
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	CIVIL ENGINEERING	Uttarakhand Technical University, Dehradun	60	60	No	No
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	COMPUTER SCIENCE & ENGINEERING	Uttarakhand Technical University, Dehradun	60	90	NA	NA
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	ELECTRICAL ENGINEERING	Uttarakhand Technical University, Dehradun	30	30	No	No:
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	ELECTRONICS & COMMUNICATIO N ENGG	Uttarakhand Technical University, Dehradun	30	30	No	No
UNDER GRADUATE	ENGINEERI NG AND TECHNOLO GY	MECHANICAL ENGINEERING	Uttarakhand Technical University, Dehradun	60	60	No:	No
POST GRADUATE	ENGINEERI NG AND TECHNOLO GY	COMPUTER SCIENCE & ENGINEERING	Uttarakhand Technical University, Dehradun	24	24	No	No
POST GRADUATE  ## Approved New	MANAGEM ENT	МВА	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
- 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.
- 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 AIGTE 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
- 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 <a href="http://www.aicte-india.org/">http://www.aicte-india.org/</a>

This is a computer generated Statement. No signature Required

<sup>\*\*</sup> 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.



प्रेषक.

डा॰ रंजीत कुमार सिन्हा सचिव श्री राज्यपाल / फ्लाधिपति।

संवा में.

कुलपति, वीर माधो सिंह भण्डारी उत्तराखण्ड प्रौद्योगिकी विस्वविद्यालय, स्द्रोवाला, देहरादून।

राज्यपाल / कुलाधिपति सिववालय उत्तराखण्ड :

देहरादून : दिनांक : 🕓 अक्टूबर, 2022

महोदय.

कृपया विश्वविद्यालय के पत्र सं0-2052 व 2055, दिनांक 07-01-2022 का सन्दर्भ ग्रहण करने का कष्ट करें।

उपरोक्त सन्दर्भ के सम्बन्ध में मुझे यह कहने का निदेश हुआ है कि नियामक संस्था. निरीक्षण मण्डल, कुलपित व कुलसचिव, वी०मा०सिं०म० उत्तरखण्ड प्रोद्योगिकी विश्वविद्यालय द्वारा प्रदल्त सस्तुति के दृष्टिगत विश्वविद्यालय अधिनियम, 2005 (यथा अद्यतन संसोधित) की धारा-24(2) के अधीन निम्नवत संस्थान को उसके सम्मुख वर्णित पाट्यक्रम, सीटों एवं अविध की अस्थाई सम्बद्धता विस्तारण हेतु छाजहित में माठ कुलाधिपित द्वारा पूर्वानुमोदन निम्नवत् उपवन्धों के साथ प्रदान किया गया है :--

संस्थान का नाम	पाठ्यक्रम	सीट संख्या प्रति सत्र	शैक्षिक सत्र
1	2	3	4
जेववीव इंस्टीट्यूट ऑफ टैक्नोलॉजी, ग्राम—शंकरपुर, चकराता रोड, देहरादून		60 60 30 30 60 60	2021–22

- (1) विश्वविद्यालय द्वारा संस्थान की Annual Balance Sheet सम्बन्धी साक्ष्य की सत्यापित प्रति प्राप्त कर इस सचिवालय को उपलब्ध कराई जायेगी।
- (2) प्राभृति राशि अपूर्ण है। अतः उत्तराखण्ड शासन द्वारा शासनादेश दिनांक 14 दिसम्बर. 2016 द्वारा तथा व्यवसायिक पाठ्यक्रमों हेतु प्राभृति 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 सिबंबालय को भी अवगत कराया जायेगा।
- (3) विश्वविद्यालय द्वारा छात्र/छात्राओं की गुणवत्ता और व्यवहारिक शिक्षा में सुधार के लिए वया कदम उठाए गये हैं, इसकी सूचना व संस्थानों द्वारा छात्रों की प्रायोगिक शिक्षा और इंटर्निशिप/विजिट के लिए किन समूहों, विभागों एवं कंपनियों के साथ समझौता (Tie-up or MoU) किया गया है, तत्सम्बन्धी अभिलेख एक गाह के भीतर अनिवार्य रूप से इस सविवालय को प्रेषित करना सुनिश्चित करें। अन्यथा की रिथित में संस्थान की सम्बद्धता निरस्त कर दी जाएगी साथ ही अग्रेत्तर सत्रों की सम्बद्धता के सम्बद्धता के सम्बन्ध में कोई विचार नहीं किया जायेगा।

- (4) विश्वविद्यालय संस्थान द्वारा सोसाइटी / द्वस्ट प्रजीकरण अधिनियम के अन्तर्गत निर्धारित Legal Obligation पूर्ण किये जाने के सम्बन्ध में साहम स्वित आख्या एक माह के भीतर राज्यपाल सचिवालय को उपलब्ध कराया जाना सुनिश्चित किया जायेगा।
- (5) यदि संस्थान द्वारा एक या एक से अधिक विक्वविद्यालय से पाठ्यक्रम की सम्बद्धता प्राप्त की गई हो तो संस्थान समस्त पाल्यक्रमों की सम्बद्धता को एक साथ रखकर पाठ्यक्रमवार मानक पूर्ण किये जाने के सम्बन्ध में आख्या संस्थान द्वारा विक्वविद्यालय को उपलब्ध क्याई जायेगी तथा संस्थान से प्राप्त आख्या का परीक्षण करते हुए विक्वविद्यालय द्वारा राज्यपाल सविवालय को उपलब्ध कराई जायेगी।
- कराई जायेगी।
  (ह) अनेत्तर सत्रों के सम्बद्धता प्रस्ताव नियामक संस्था, विश्वविद्यालय एवं शासन द्वारा
  (ह) अनेत्तर सत्रों के सम्बद्धता प्रस्ताव नियामक क्षेत्रे जायेंगे अन्यथा की स्थिति में अपूर्ण
  निर्धारित मानकों के अनुरूप पूर्ण होने की दशा में ही स्वीकार किये जायेंगे अन्यथा की स्थिति में अपूर्ण
  प्रस्तावों पर विचार नही किया जायेगा, जिसका पूर्ण उत्तरदायित्व विश्वविद्यालय का होगा।
- (7) विश्वविद्यालय, नियामक संस्था, विश्वविद्यालय व राज्य संस्कार द्वारा निर्धारित सभी मानकों के पूर्ण होने की दशा में ही कार्यपरिषद के अनुमोदन से विहित शर्ता / उपवन्धों के अबीन अस्थाई सम्बद्धता विस्तारण के आदेश निर्मत करें व तत्सम्बन्धी कार्यवाही की सूबना मा० कुलाधिपति महोदय के अवगतार्थ उपलब्ध कराये।

तदनुसार अग्रेतार कार्यवाही सुनिश्चित करें।

भवदीय,

(डा॰ रंजीत कुमार सिन्हा) राचिव श्री राज्यपाल / कुलाधिपति।

## संख्या—28 52-(1)/जी०एस०(शिक्षा)/A4-48(P-II)/2019 तद्दिनांकित।

प्रतिलिपि निम्नलिखित को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेगित --

- सचिव तकनीकी शिक्षा विभाग, उत्तराखण्ड शासन।
- प्राचार्च / निदेशक, संबंधित संस्थान ।
- कम्प्यूटर प्रकोप्ट / गार्ड फाईल हेतु ।

आजा र

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



### INDIA NON JUDICIAL

### Government of Uttarakhand

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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 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.

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 "AN INTEGRATED IOT BASED ENERGY GENERATION SYSTEM" 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 10, 2022.

Signature & Name:

**Registrar** J B Institute of Technology

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

### Applicant: J B INSTITUTE OF TECHNOLOGY

Dated: 15th Day of November, 2022

FIG. 1

Total Sheets 01 Sheet no. 1

ON BEHALF OF APPLICANT

Signature:

Name: Anuj Raturi [JN/PA: 4266]

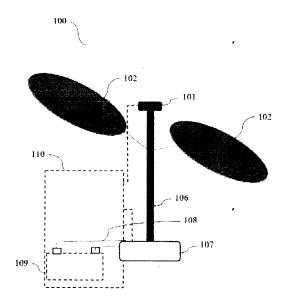


FIG. 1