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## Patent Search

Invention Title	ARTIFICIAL INTELLIGENCE AND DEEP LEARNING BASED TECHNIQUE FOR UNDERSTANDING THE VARIOUS THERMOELECTRIC MATERIALS
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### Inventor

Name	Address	Country
Rajib Guhathakurta	Assistant professor, Department of Computer Science and Application (CSA), REVA University, Rukmini Knowledge Park, Kattigenahelli, Yelahanka, Bangalore - 560064	India
Dr. Ramesh Babu M.	Professor, EEE, St. Joseph's College of Engineering, OMR Chennai - 600119	India
C. Venkatesh kumar	Assistant Professor, EEE, St. Joseph's College of Engineering, OMR, Chennai - 600119	India
Dr. Shikha Kumari pandey	Assistant Professor, Department of environmental science, Institute of Aeronautical Engineering, Hyderabad	India
Dr. Kailash Patidar	Assistant Professor, Bansal Institute of Science and Technology, Bhopal	India
Dr. Suveg Moudgil	Associate professor, IMS Engineering College, Ghaziabad (AKTU), Uttar Pradesh	India

### Applicant

Name	Address	Country
Rajib Guhathakurta	Assistant professor, Department of Computer Science and Application (CSA), REVA University, Rukmini Knowledge Park, Kattigenahelli, Yelahanka, Bangalore - 560064	India
Dr. Ramesh Babu M.	Professor, EEE, St. Joseph's College of Engineering, OMR Chennai - 600119	India
C. Venkatesh kumar	Assistant Professor, EEE, St. Joseph's College of Engineering, OMR, Chennai - 600119	India
Dr. Shikha Kumari pandey	Assistant Professor, Department of environmental science, Institute of Aeronautical Engineering, Hyderabad	India
Dr. Kailash Patidar	Assistant Professor, Bansal Institute of Science and Technology, Bhopal	India
Dr. Suveg Moudgil	Associate professor, IMS Engineering College, Ghaziabad (AKTU), Uttar Pradesh	India

### Abstract:

The present invention relates artificial intelligence and deep learning-based technique for understanding the various thermoelectric materials. The proposed system comprises a database, cloud storage, clustered thermoelectric material, comparative unit. The database which includes data regarding various thermoelectric materials. The artificial intelligence and deep learning unit will cluster the thermoelectric materials using the k-means clustering unit. The data is stored on cloud storage.

## Complete Specification

Description: Technical field of invention:

The present invention relates artificial intelligence and deep learning-based technique for understanding the various thermoelectric materials.

Background:

Thermoelectric materials are a class of materials in which conversion between thermal energy and electrical energy can be realized. This conversion process involve charge and heat transport, with electrons and photons mainly being the carriers. Thermoelectric materials are used in niche cooling applications. They are also used in space exploration to convert heat from a radioactive material into electricity.

A number of different types of thermoelectric material systems that are known in the prior art. For example, the following patents are provided for their supportive teachings and are all incorporated by reference.

Recent advances and applications of deep learning methods in materials science Deep learning (DL) is one of the fastest-growing topics in materials data science, with rapidly emerging applications spanning atomistic, image based, spectral, and textual data modalities. DL allows analysis of unstructured data and automated identi-

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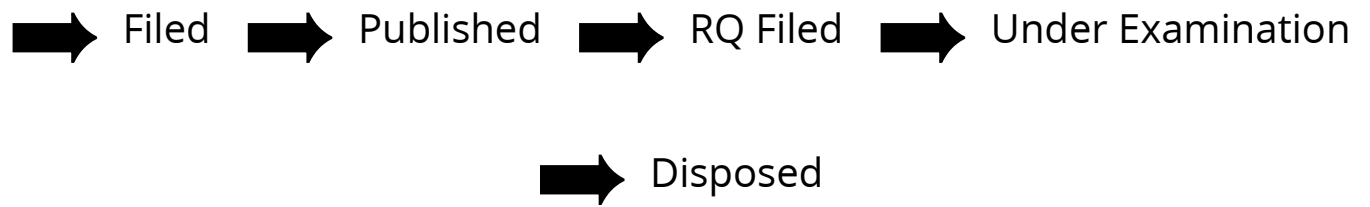
#### Application Details

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APPLICANT NAME	1 . Rajib Guhathakurta 2 . Dr. Ramesh Babu M. 3 . C. Venkatesh kumar 4 . Dr. Shikha Kumari pandey 5 . Dr. Kailash Patidar 6 . Dr. Suveg Moudgil
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E-MAIL (As Per Record)	soni.mukesh15@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
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APPLICATION STATUS	<b>Awaiting Request for Examination</b>
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