

पेटेंट कार्यालय
शासकीय जर्नल

**OFFICIAL JOURNAL
OF
THE PATENT OFFICE**

निर्गमन सं. 06/2024
ISSUE NO. 06/2024

शुक्रवार
FRIDAY

दिनांक: 09/02/2024
DATE: 09/02/2024

पेटेंट कार्यालय का एक प्रकाशन
PUBLICATION OF THE PATENT OFFICE

(12) PATENT APPLICATION PUBLICATION

(21) Application No.202441004153 A

(19) INDIA

(22) Date of filing of Application :20/01/2024

(43) Publication Date : 09/02/2024

(54) Title of the invention : METHOD AND SYSTEM FOR UNDERSTANDING DYNAMICS OF PROPERTIES USING QUANTUM COMPUTING

<p>(51) International classification :G06N0010000000, G06N0020000000, G06F0011360000, G06N0005000000, E21B0044020000</p> <p>(86) International Application No :NA Filing Date :NA</p> <p>(87) International Publication No : NA</p> <p>(61) Patent of Addition to Application Number :NA Filing Date :NA</p> <p>(62) Divisional to Application Number :NA Filing Date :NA</p>	<p>(71)Name of Applicant : 1)CMR COLLEGE OF ENGINEERING & TECHNOLOGY Address of Applicant :KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401. Hyderabad ----- -----</p> <p>Name of Applicant : NA Address of Applicant : NA</p> <p>(72)Name of Inventor : 1)Dr. M. CHANDRA SHEKHAR REDDY Address of Applicant :Associate Professor Dept. of H&S (Physics) CMR COLLEGE OF ENGINEERING & TECHNOLOGY KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401 Hyderabad -----</p> <p>2)Dr. D. NEELIMA PATNAIK Address of Applicant :Associate Professor Dept. of H&S (Physics) CMR COLLEGE OF ENGINEERING & TECHNOLOGY KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401 Hyderabad -----</p> <p>3)Mr. K. JAYA PRAKASH REDDY Address of Applicant :Assistant Professor Dept. of H&S (Physics) CMR COLLEGE OF ENGINEERING & TECHNOLOGY KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401 Hyderabad -----</p> <p>4)Dr. P. MADHUKAR Address of Applicant :Assistant Professor Dept. of H&S (Physics) CMR COLLEGE OF ENGINEERING & TECHNOLOGY KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401 Hyderabad -----</p> <p>5)Dr. G. PRATHIBHA Address of Applicant :Assistant Professor Dept. of H&S (Physics) CMR COLLEGE OF ENGINEERING & TECHNOLOGY KANDLAKOYA, MEDCHAL ROAD, HYDERABAD, TELANGANA, INDIA, 501401 Hyderabad -----</p>
---	---

(57) Abstract :
METHOD AND SYSTEM FOR UNDERSTANDING DYNAMICS OF PROPERTIES USING QUANTUM COMPUTING ABSTRACT The invention relates to a method and system for understanding the dynamics of properties using quantum computing. The system comprises a quantum computing device with a quantum processor, quantum gates, and memory storage. Input means provide data related to system properties, while quantum algorithms executed by the quantum processor analyze this data to generate quantum states representing property dynamics. An output interface presents insights derived from the quantum states, offering a clear understanding of the system's behavior. The invention leverages machine learning algorithms for predictive modeling and incorporates visual representations for user-friendly interpretation. With the ability to receive real-time data and adaptive adjustment features, the system ensures accurate and dynamic analyses of property dynamics. This innovation finds applications in diverse fields, including physics, chemistry, biology, and materials science, heralding a new era in quantum-enhanced property understanding.

No. of Pages : 17 No. of Claims : 8